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## USA Bulletin Disclaimer

University of South Alabama  
Mobile, Alabama 36688-0002  
<https://www.southalabama.edu>

The University of South Alabama reserves the right to make changes in course offerings, curricula, academic policies, tuition and fee schedules and other rules and regulations affecting students in order to correct errors, omissions, inconsistencies or changes required by regulatory, accrediting and/or other governing bodies as necessary. Date of effectiveness and interpretation of said rules, regulations and policies are within the sole discretion of the University. These changes will apply to students who are enrolled at the time of the change, as well as those who will become enrolled in the future.

The University of South Alabama is an EO/AA employer and does not discriminate on the basis of race, color, national origin, sex, pregnancy, sexual orientation, gender identity and gender expression, religion, age, genetic information, disability, protected veteran status or any other applicable legally protected basis.

# ACADEMIC CALENDAR

## Academic Calendar 2024-2025

### Fall Semester 2024

#### Dates related to student finance and the Payment Plan:

<https://www.southalabama.edu/departments/financialaffairs/studentaccounting/payment-plan.html>

#### Dates for orientation for domestic students:

<https://www.southalabama.edu/orientation> (<https://www.southalabama.edu/orientation/>)

#### Dates for orientation for international students:

<https://www.southalabama.edu/departments/international/orientation.html>

Event	Date	Day
Registration begins for continuing students	Apr 1	Monday
Registration begins for new undergraduate students	Apr 23	Tuesday
Registration begins for new graduate students	May 15	Wednesday
Financial Aid/Scholarship Bookstore charges begin	Jul 22	Monday
100% of fall balance <sup>1</sup> due	Aug 14	Wednesday
All registration schedules released if 100% of balance <sup>1</sup> is not paid or student is not participating in the payment plan (Avoid the Void)	Aug 15	Thursday
Residence halls open	Aug 17	Saturday
Convocation	Aug 19	Monday
<b>Classes begin</b>	<b>Aug 20</b>	<b>Tuesday</b>
Add/Drop Period Begins	Aug 20	Tuesday
Late registration begins	Aug 20	Tuesday
100% refund period begins for dropped classes and students withdrawing from the University	Aug 20	Tuesday
Last day to add	Aug 26	Monday
Late registration ends at 10:00 pm	Aug 26	Monday
Late registration 100% of balance <sup>1</sup> due	Aug 26	Monday
Add/Drop Period Ends	Aug 27	Tuesday
Last day to drop without a WD	Aug 27	Tuesday
Last day to opt out of JagPack	Aug 27	Tuesday

100% refund period ends at 10:00 pm for dropped classes and students withdrawing from the University.

All late registration schedules released if 100% of balance<sup>1</sup> is not paid or student is not participating in the payment plan (Avoid the Void)

Financial Aid/Scholarship Bookstore charges end

Withdrawal Period Begins

50% refund period begins for dropped classes and students withdrawing from the University

Begin disbursement of financial aid refunds

50% refund period ends. No course withdrawal refunds after this date

**Labor Day Holiday for students, faculty, staff and administration**

Census date

Mid-term grading opens

Incomplete grades deadline for Spring and Summer

Last day for Spring graduation applications

Mid-term grades due by 10:00 am

Mid-term grades posted

**Fall Break for students (Includes weekend classes)**

Time tickets posted for Spring

First submission deadline: Theses/dissertations due in the Office of Graduate Dean by 5:00 pm

Spring registration begins for continuing students

Withdrawal Period Ends. No course withdrawals after 11:59 pm.

Spring registration begins for new undergraduate students	Nov 12	Tuesday
Final deadline: Theses/ dissertations due in the Office of Graduate Dean by 5:00 pm	Nov 18	Monday
<b>Thanksgiving Holiday for students begins 5:00 pm (Includes weekend classes)</b>	<b>Nov 26-Dec 1</b>	<b>Tuesday-Sunday</b>
<b>Thanksgiving Holiday begins at noon on Wednesday for faculty, staff, and administration</b>	<b>Nov 27-29</b>	<b>Wednesday-Friday</b>
Spring registration begins for new graduate students	Dec 2	Monday
Financial Aid/ Scholarship Bookstore charges begin	Dec 2	Monday
Last day of classes	Dec 6	Friday
Final examinations	Dec 9-12	Monday-Thursday
Final grading opens	Dec 9	Monday
Residence halls close	Dec 13	Friday
<b>Commencement, 10:00 am</b>	<b>Dec 13</b>	<b>Friday</b>
Final grades due by 10:00 am	Dec 16	Monday
Final grades posted	Dec 17	Tuesday
<b>Holidays begin for staff and administration</b>	<b>Dec 23-Jan 3</b>	<b>Monday-Friday</b>
<b>Annual Campus Wide Power Outage for Electrical Maintenance (6:00 am to 7:00 pm)</b>	<b>TBD</b>	<b>TBD</b>
<b>Back-up Date for Annual Campus Wide Power Outage for Electrical Maintenance (6:00 am to 7:00 pm)</b>	<b>TBD</b>	<b>TBD</b>

<sup>1</sup> Balance includes all current term charges for tuition, fees, housing, and dining.

## Spring Semester 2025

### Dates related to student finance and the Payment Plan:

<https://www.southalabama.edu/departments/financialaffairs/studentaccounting/payment-plan.html>

**Dates for orientation for domestic students:** <https://www.southalabama.edu/orientation/> (<https://www.southalabama.edu/orientation/>)

**Dates for orientation for international students:** <https://www.southalabama.edu/departments/international/orientation.html>

Event	Date	Day
Spring registration begins for continuing students	Oct 28	Monday
Spring registration begins for new undergraduate students	Nov 12	Tuesday
Spring registration begins for new graduate students	Dec 2	Monday
Financial Aid/ Scholarship Bookstore charges begin	Dec 2	Monday
<b>Faculty, staff, and administration return to work</b>	<b>Jan 6</b>	<b>Monday</b>
100% of spring balance <sup>1</sup> due	Jan 8	Wednesday
All registration schedules released if 100% of balance <sup>1</sup> is not paid or student is not participating in the payment plan (Avoid the Void)	Jan 9	Thursday
Residence halls open	Jan 10	Friday
<b>Classes begin</b>	<b>Jan 13</b>	<b>Monday</b>
Add/Drop Period Begins	Jan 13	Monday
Late registration begins	Jan 13	Monday
100% refund period begins on dropped classes and students withdrawing from the University	Jan 13	Monday
Late registration ends at 11:59 pm	Jan 17	Friday
Late registration 100% of balance <sup>1</sup> due	Jan 17	Friday
<b>Martin Luther King Holiday for faculty, staff, and administration</b>	<b>Jan 20</b>	<b>Monday</b>
Add/Drop Period Ends	Jan 20	Monday
Last day to drop without a WD	Jan 20	Monday
Last day to opt out of JagPack	Jan 20	Monday
100% refund period ends at 10:00 pm for dropped classes and students withdrawing from the University	Jan 20	Monday
Withdrawal Period Begins	Jan 21	Tuesday

50% refund period begins on dropped classes and students withdrawing from the University	Jan 21	Tuesday
All late registration schedules released if 100% of balance <sup>1</sup> is not paid or student is not participating in the payment plan (Avoid the Void)	Jan 21	Tuesday
Financial Aid/Scholarship Bookstore charges end	Jan 21	Tuesday
Begin disbursement of financial aid refunds	Jan 24	Friday
50% refund period ends. No course withdrawal refunds after this date	Jan 26	Sunday
Census Date	Jan 28	Tuesday
Mid-term grading opens	Feb 24	Monday
Incomplete grades deadline for Fall	Feb 28	Friday
<b>Spring break for students (includes weekend classes)</b>	<b>Mar 3-9</b>	<b>Monday-Sunday</b>
Mid-term grades due by 10:00 am	Mar 3	Monday
<b>Mardi Gras Holiday for students, faculty, staff and administration</b>	<b>Mar 3-4</b>	<b>Monday-Tuesday</b>
Mid-term grades posted	Mar 5	Wednesday
Last day for Summer graduation applications	Mar 7	Friday
Time tickets for Summer and Fall	Mar 10	Monday
First submission deadline: Theses/dissertations due in the Office of Graduate Dean by 5:00 pm	Mar 24	Monday
Summer registration begins for continuing students (includes May term)	Apr 7	Monday
Fall registration begins for continuing students	Apr 7	Monday
Withdrawal Period Ends. No course withdrawals after 11:59 pm	Apr 11	Friday
Final submission deadline: Theses/dissertations due in Office of Graduate Dean by 5:00 pm	Apr 14	Monday

Fall registration begins for new undergraduate students	Apr 22	Tuesday
Summer registration begins for new graduate students (includes May term)	Apr 28	Monday
Fall registration begins for new graduate students	Apr 28	Monday
Last day of classes	May 2	Friday
Final grading opens	May 5	Monday
Final examinations	May 5-8	Monday-Thursday
Residence halls close	May 9	Friday
<b>Commencement Weekend</b>	<b>May 9-10</b>	<b>Friday-Saturday</b>
Final grades due by 10:00 am	May 12	Monday
Final grades posted	May 13	Tuesday

<sup>1</sup> Balance includes all current term charges for tuition, fees, housing, and dining.

## May Term 2025

### Dates related to student finance and the Payment Plan:

<https://www.southalabama.edu/departments/financialaffairs/studentaccounting/payment-plan.html>

**Dates for orientation for domestic students:** <https://www.southalabama.edu/orientation> (<https://www.southalabama.edu/orientation/>)

**Dates for orientation for international students:** <https://www.southalabama.edu/departments/international/orientation.html>

Event	Date	Day
Last day for Summer graduation applications	Mar 7	Friday
Time tickets posted for Summer and Fall	Mar 10	Monday
Summer registration begins for continuing students (includes May term)	Apr 7	Monday
Summer registration begins for new graduate students (includes May term)	Apr 28	Monday
100% of balance <sup>1</sup>	May 7	Wednesday
All registration schedules released if 100% of balance <sup>1</sup> is not paid or student is not participating in the payment plan (Avoid the Void)	May 8	Thursday

Late registration and drop/add for May term ends at 5:00 pm (in person)	May 9	Friday
<b>Classes begin</b>	<b>May 12</b>	<b>Monday</b>
100% refunds on dropped courses ends at 11:59 pm (May term)	May 12	Monday
<b>Memorial Day Holiday for students, faculty, staff, and administration</b>	<b>May 26</b>	<b>Monday</b>
Last Day for May term classes	Jun 2	Monday
Final grading opens for May term classes	Jun 2	Monday
Final grades due by 10:00 am (May term)	Jun 3	Tuesday
Final grades posted (May term)	Jun 4	Wednesday

<sup>1</sup> Balance includes all current term charges for tuition, fees, housing, and dining.

## First, Full, and Second Summer Terms 2025

### Dates related to student finance and the Payment Plan:

<https://www.southalabama.edu/departments/financialaffairs/studentaccounting/payment-plan.html>

**Dates for orientation for domestic students:** <https://www.southalabama.edu/orientation> (<https://www.southalabama.edu/orientation/>)

**Dates for orientation for international students:** <https://www.southalabama.edu/departments/international/orientation.html>

Event	Date	Day
Last day for Summer graduation applications	Mar 7	Friday
Time tickets posted for summer and fall	Mar 10	Monday
Summer registration begins for continuing students (includes May term)	Apr 7	Monday
Summer registration begins for new graduate students (includes May term)	Apr 28	Monday
(All Terms) Financial Aid/Scholarship Bookstore charges begin	May 19	Monday
<b>Memorial Day Holiday for students, faculty, staff, and administration</b>	<b>May 26</b>	<b>Monday</b>
(All Terms) 100% of summer balance <sup>1</sup> due	May 30	Friday

(All Terms) All registration schedules released if 100% of balance <sup>1</sup> is not paid or student is not participating in the payment plan (Avoid the Void)	Jun 2	Monday
(Full and First Term) Registration ends	Jun 3	Tuesday
Residence halls open	Jun 3	Tuesday
(Full and First Term) <b>Classes begin.</b> Add/Drop period begins.	<b>Jun 4</b>	<b>Wednesday</b>
(All Terms) Late registration begins.	Jun 4	Wednesday
(All Terms) 100% refund period begins on dropped classes and complete withdrawals from the University	Jun 4	Wednesday
(First Term) Add/Drop ends. 100% refund period ends.	Jun 6	Friday
(All Terms) Last day to opt out of JagPack	Jun 6	Friday
(First Term) Withdrawal period begins. 50% refund period begins.	Jun 7	Saturday
(All Terms) Late registration ends at 10:00 pm	Jun 10	Tuesday
(All Terms) Late registration 100% of balance <sup>1</sup> due	Jun 10	Tuesday
(First Term) Last day to drop a class (11:59 pm)	Jun 11	Wednesday
(First Term) Withdrawal period ends. No course withdrawals after 11:59 pm.	Jun 11	Wednesday
(Full Term) 100% refund period ends	Jun 11	Wednesday
(First Term) 50% refund period ends. No course withdrawal refunds after this date	Jun 11	Wednesday
(Full Term) Withdrawal period begins. 50% refund period begins.	Jun 12	Thursday
(All Terms) Late registrations for summer released if 100% of balance* not paid or student is not participating in the payment plan (Avoid the Void)	Jun 12	Thursday

(All Terms) Financial Aid/Scholarship Bookstore charges end	Jun 13	Friday
(All Terms) Begin disbursement of financial aid refunds	Jun 16	Monday
(Full Term) 50% refund period ends. No course withdrawal refunds after this date.	Jun 17	Tuesday
Census Date	Jun 18	Wednesday
<b>Juneteenth Holiday for students, faculty, staff, and administration</b>	<b>Jun 19</b>	<b>Thursday</b>
(Second Term) Registration begins	Jun 20	Friday
First submission deadline: Theses/ dissertations due in the Office of the Graduate Dean by 5:00 pm	Jun 23	Monday
(First Term) Last day of classes	<b>Jul 1</b>	<b>Tuesday</b>
(First Term) Final examinations	Jul 1	Tuesday
(First Term) Final grading opens	Jul 1	Tuesday
(Second Term) <b>Classes begin</b>	<b>Jul 2</b>	<b>Wednesday</b>
(Second Term) Add/ Drop period begins. 100% refund period begins on course withdrawal	Jul 2	Wednesday
(Second Term) Late registration	Jul 2	Wednesday
(First Term) Final grades due by 10:00 am	Jul 2	Wednesday
<b>Fourth of July Holiday for students, faculty, staff, and administration</b>	<b>Jul 4</b>	<b>Friday</b>
(First Term) Final grades posted	Jul 7	Monday
(Full Term) Last day to drop a class (11:59 pm)	Jul 7	Monday
(Full Term) Withdrawal period ends. No course withdrawals after 11:59 pm.	Jul 7	Monday
(Second Term) Withdrawal period begins. 50% refund period begins on withdrawals	Jul 7	Monday

(Second Term) 50% refund period ends. No course withdrawal refunds after this date.	Jul 10	Thursday
(Second Term) Last day to drop a class	Jul 11	Friday
(Second Term) Withdrawal period ends. No course withdrawals after 11:59 pm.	Jul 11	Friday
Last day for Fall graduation applications	Jul 11	Friday
Final submission deadline: Theses/ dissertations due in the Office of the Graduate Dean by 5:00 pm	Jul 14	Monday
Final grading opens	Jul 28	Monday
(Full and Second Term) Last day of classes	Jul 29	Tuesday
(Full and Second Term) Final examinations	Jul 30-Aug 1	Wednesday-Friday
Residence halls close	Aug 2	Saturday
(Full and Second Term) Final grades due by 10:00 am	Aug 4	Monday
(Full and Second Term) Final grades posted	Aug 6	Wednesday

<sup>1</sup> Balance includes all current term charges for tuition, fees, housing, and dining.

## UNIVERSITY INFORMATION

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- Admissions / Enrollment Services (p. 19)
- Tuition and Fees (p. 31)
- Financial Aid (p. 36)
- Academic Services (p. 46)
- Student Affairs & Services (p. 47)
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- Global USA (p. 44)

### About USA

We're the University of South Alabama. South, for short. Home to nearly 14,000 students and more than 125 academic programs, South is a dynamic community of leaders and learners who support and challenge one another to be actively engaged citizens who advance the Gulf Coast region (<https://www.southalabama.edu/aboutusa/gulfcoast/>) and the world. Founded in 1963, South's vision is to foster an environment that couples engaging learning experiences with high-level research, enabling our faculty and students to be leaders in their disciplines.

The unique and beautiful Gulf Coast region (<https://www.southalabama.edu/aboutusa/gulfcoast/>) is a catalyst for discovery and innovation, and South's 1,200-acre campus has been transformed over the past decade with new facilities and resources for teaching, housing and recreation, health sciences, the arts, engineering, computer science and athletics.

Jaguar athletes compete in 17 NCAA Division I sports, including baseball, basketball, cross country, football, golf, soccer, softball, tennis, track and field, and volleyball.

The coastal region is healthier because of the USA Health system. Through its five components — Children's & Women's Hospital, University Hospital, Mitchell Cancer Institute, USA Health Physicians Group and the Frederick P. Whiddon College of Medicine — and supported by the College of Nursing and the Pat Capps Covey College of Allied Health Professions — USA Health provides care to hundreds of thousands of people, and is a training ground for future physicians and healthcare professionals.

The University has implemented a strategic plan that is organized around five major priorities: Student Access and Success, Enhancement of Research and Graduate Education, Global Engagement, Excellence in Health Care, and University-Community Engagement. These priorities are the guiding influence in developing a strong, consistent vision for the future of the University.

USA is a place where students discover and strengthen their career passions, and form connections that result in lifelong relationships. At South, we look at the world and see things that we have the power to change, affect and shape — together. So that's exactly what we do, every single day.

To learn more about USA, visit our website at [www.southalabama.edu](http://www.southalabama.edu) (<http://www.southalabama.edu>) or schedule a campus visit by calling (251) 460-6141 or (800) USA-JAGS.

## General Information

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## University of South Alabama Bulletin

### University of South Alabama

The University of South Alabama, the only major public institution of higher learning on the upper Gulf Coast, was created by act of the Alabama State Legislature in May, 1963. With Alabama's two older universities more than 200 miles distant, the University is strategically located in the greater Mobile area, which has a population of more than a million within a 100-mile radius.

### The Gulf Coast Region

Exploration in the Mobile River area began in 1519 when the Spanish Admiral Alonzo Alvarez de Pineda entered and charted the area now known as Mobile Bay. The old fort, now known as Fort Morgan, guarding Mobile Bay, was first fortified by the Spanish in 1559. Settled in 1711 by the French, the bay area has had a tradition rich in culture and vital in the affairs of the nation from its formative years to the present.

Trade and shipping are vital to the economy of the area. Millions of tons of shipping are handled annually through the Port of Mobile, which is rated among the top ports in the country. More than fifteen million tons of shipping are carried yearly on the Tombigbee-Black Warrior waterway system with its modern locks and dams. The intracoastal waterway, crossing the southern end of the state, is connected at Mobile Bay with both inland and ocean shipping. Railroads and airlines serve the Bay area. Diversified farming, woodland crops, and seafood and fisheries are major factors in the area's economy.

### Mission Statement

The University of South Alabama, with a global reach and special focus on the Gulf Coast, strives to make a difference in the lives of those it serves through promoting discovery, health, and learning.

### Vision Statement

The University of South Alabama will be a leading comprehensive public university internationally recognized for educational, research, and health care excellence as well as for its positive intellectual, cultural, and economic impact on those it serves.

## Institution Philosophies and Purposes

The University of South Alabama is dedicated in purpose to the creation of an environment of intellectual excitement and an educational climate that will stimulate both faculty and students. A forum of free thought and discussion is provided which is intended to help develop an independent spirit undergirded by the moral and ethical values essential for effective participation in a free society.

The University strives for fresh approaches to courses and programs. Emphasis is placed on the traditional dedication to the advancement and dissemination of knowledge, as a center of learning concerned with the arts and humanities, study of human nature, phenomena of the physical world, processes of human relationships, and the knowledge and skills necessary for participation in professional vocational endeavors.

The University actively encourages the students to take responsibility for their own welfare and that of the community, thus stimulating them to become vitally involved in the pursuit of knowledge and the continuing use of their intellectual capabilities as responsible and effective individuals. Students are encouraged to participate in University decisions involving their own welfare, impressing upon them the responsibility inherent in this participation. The University is conscious of its obligation to the local, state, and national communities to assist students to attain the fullest possible knowledge of themselves in relation to society and to become enlightened participants in civic affairs. An ever-present concern with the problems of a changing society causes recognition of the University's responsibility to cooperate with local, civic, professional, and governmental organizations. It inculcates an awareness of the necessity for effective leadership in the social, political, and economic affairs of our society.

The University intends to extend its academic and professional programs to the highest level by introducing graduate programs and forming new schools and colleges when appropriate. New programs will be instituted only after necessary facilities, library resources, and faculty are acquired.

The University reaches outward to the international community and encourages a wide exchange of knowledge and cultural relationships with other peoples. Relations are maintained with other colleges and universities for the purpose of sharing resources and responsibilities in teaching, research, and service in this country and abroad, as well as with the secondary schools and community colleges in this vicinity. The need for continuing adult education accounts for the public being offered an opportunity to profit from these intellectual and technical resources.

By contributing to the advancement of knowledge, by involving faculty and students in teaching, learning and research, and by offering its services to society commensurate with its resources, the University will achieve its maximum effectiveness.

## Institutional Effectiveness

### The University of South Alabama Statement on Institutional Effectiveness

To ensure continued excellence as an educational institution, the University of South Alabama is committed to evaluating its effectiveness. The institution has carefully developed strategic priorities which are used as the basis for planning and evaluation. A variety of assessment methods are employed to determine the extent to which the University

is progressing on its strategic priorities, and the results of such assessments are used to improve both educational and support activities.

## Athletic Department Mission/Philosophy

**Mission Statement:** The mission of the University of South Alabama Department of Athletics is to complement and support the University's overall institutional mission while developing leaders who achieve academic and athletic excellence.

**Vision:** The Department of Athletics will be a model intercollegiate athletics program recognized for its academic and competitive excellence. Our operations and culture will be student-centered and managed with sound educational and business practices. Sport programs will provide a source of pride and unity among students, alumni, faculty, staff, and the community we serve.

**Core Values/Guiding Principles:** The Department of Athletics affirms the following core values and guiding principles as essential to the accomplishment of its mission:

Core Values:

- Work ethic; Selflessness; Respect; Diversity; Fairness; Integrity; and Transparency.

Guiding Principles:

- Commitment to Graduation
- Commitment to Citizenship
- Commitment to Championships

## Organization

The University of South Alabama, operating as a state institution of higher learning and financed in large part by public funds, is governed by a Board of Trustees.

The Board of Trustees has sixteen members who are appointed by the Governor, with the advice and consent of the Senate, with the exception of ex officio members:

- Twelve are from south Alabama including three from Mobile County and one from each of the nine southern senatorial districts as they were designated at the time the University was organized;
- Three are from the State at large;
- The Governor of Alabama serves as President, ex officio.

The administrative organization of the University has been designed to provide the greatest possible efficiency in operation for a multiplex, yet young, institution. The framework is sufficiently flexible, involving three primary areas of operation: academic, administrative, and student personnel. The three primary areas of institutional operation are supplemented and supported by programs in development and university relations. The organization includes:

- The President, appointed by the Board of Trustees;
- Other chief administrative officers who report directly to the President include the Executive Vice President and Provost; Executive Vice Provost for Academic Affairs; Vice President for Development and Alumni Relations; Vice President for Finance and Administration;

Vice President for Medical Affairs; Chief Executive Officer and Sr. Associate Vice President for Medical Affairs for USA Health; Chief Economic Development Officer and Associate Vice President for Research; and Vice President for Student Affairs.

Each college within the University listed below is headed by an academic officer:

- The Pat Capps Covey College of Allied Health Professions
- College of Arts and Sciences
- Mitchell College of Business
- College of Education and Professional Studies
- College of Engineering
- Whiddon College of Medicine
- College of Nursing
- School of Computing
- Graduate School
- Honors College

The Executive Director of University Libraries operates in cooperation with the faculty and reports directly to the Executive Vice President and Provost.

Within Colleges, departments operate under the direction of departmental chairs who report directly to the deans of the colleges.

## Accreditations

The University of South Alabama is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award bachelor's, master's, specialist, and doctoral degrees. Degree-granting institutions also may offer credentials such as certificates and diplomas at approved degree levels. Questions about the accreditation of the University of South Alabama may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097, by calling (404) 679-4500, or by using information available on SACSCOC's website (<https://www.sacscoc.org/>).

## Policy of Non-Discrimination

The University of South Alabama reserves the right to make changes in course offerings, curricula, academic policies, tuition and fee schedules and other rules and regulations affecting students in order to correct errors, omissions, inconsistencies or changes required by regulatory, accrediting and/or other governing bodies as necessary. Date of effectiveness and interpretation of said rules, regulations and policies are within the sole discretion of the University. These changes will apply to students who are enrolled at the time of the change, as well as those who will become enrolled in the future.

The University of South Alabama is an EO/AA employer and does not discriminate on the basis of race, color, national origin, sex, pregnancy, sexual orientation, gender identity and gender expression, religion, age, genetic information, disability, protected veteran status or any other applicable legally protected basis.

## Compliance with Rehabilitation Act and ADA

The University of South Alabama complies with Section 504 of the Rehabilitation ACT of 1973 and the ADA of 1990 as amended. Any questions relating to disability accommodations should be directed to the Center for Educational Accessibility and Disability Resources, Educational Services Building, Suite 19, (251) 460-7212.

## University Libraries

The University Libraries provide the resources and services necessary to obtain, understand, and think critically about information, whether it is located physically in one of the libraries, or available electronically. Licensed full-text article services, periodical indexes and abstracts, eBooks, audiovisual resources and electronic reference materials are accessible online via the Libraries' web pages. The Libraries' book, journal, microform, and audiovisual collections provide students with physical information not available electronically. Individual and group study rooms and comfortable seating is available throughout the libraries. University librarians hold Master of Library Science degrees, specialize in particular fields of study, and are available to provide instructional classes at the request of faculty, as well as individualized reference and research services for students.

The Libraries of the University of South Alabama consist of the:

- Marx Library, the general library on the main campus
- Doy Leale McCall Rare Book and Manuscript Library, located in Marx Library
- Mitchell College of Business Joseph & Rebecca Mitchell Learning Resource Center
- Charles M. Baugh Biomedical Library, main campus adjacent to the College of Medicine

The Marx Library houses a Learning Commons offering reconfigurable table and lounge seating, whiteboards and technology for individual and group project development; group study rooms, photocopiers, networked printers; an auditorium and meeting rooms available for reservation; a Graduate Lounge and Reading Room; galleries featuring shows by student, faculty and regional artists, traveling exhibits, and special displays from the university collections. A full-service Starbucks is located at the west entrance to Marx Library. Reference, interlibrary loan, printing, photocopying, and other services are also available. USA's Student Academic Success JagSuccess tutoring services and its Writing Center are located within Marx Library. Marx Library houses the university's U.S. Documents collection. Marx Library faculty provide instructional services at the USA Baldwin County Campus.

The Doy Leale McCall Rare Book and Manuscript Library, located on the third floor of Marx Library, holds collections of local, regional, and national importance focused on the history of Mobile, the Alabama Black Belt, and southwest Alabama. These unique collections highlight the civil rights, cultural, economic, educational, environmental, legal, literary, military, political, and social history of the region from the early nineteenth century to the present. Of particular note are the McCall Library's photographic collections, which include over 3.4 million images, negatives, slides, and glass plates.

Located in the Mitchell College of Business, the Joseph & Rebecca Mitchell Learning Resource Center houses a business library, featuring

a reading room and group study rooms, a computer lab, and the John B. Saint Financial Analysis Center.

The Charles M. Baugh Biomedical Library features library materials, study rooms, collaboration areas, instructional space, the ArtSpace@Biomed gallery, and the John F. Gray Student Veterans Resource Room, and provides reference and interlibrary loan services. The Biomedical Library oversees hospital-based library services, as well as an extensive program of instruction to support the Colleges of Medicine,

Nursing, and Allied Health. Biomedical Library faculty work closely with clinical and teaching faculty to support student learning and information services for USA Health System personnel and patients.

The University Libraries manage JagWorks@USA, the online Institutional Repository serving the university and USA Health.

See the following websites for more information:

- [Biomedcallibrary.southalabama.edu/library](https://www.southalabama.edu/departments/biomedcallibrary/) (<https://www.southalabama.edu/departments/biomedcallibrary/>)
- [Southalabama.edu/departments/library](https://www.southalabama.edu/departments/library/) (<https://www.southalabama.edu/departments/library/>)
- [Southalabama.edu/univlib/mcob](https://www.southalabama.edu/univlib/mcob/) (<https://www.southalabama.edu/univlib/mcob/>)
- [Southalabama.edu/mccallarchives](https://www.southalabama.edu/libraries/mccallarchives/) (<https://www.southalabama.edu/libraries/mccallarchives/>)
- <https://jagworks.southalabama.edu/>

## Admissions / Enrollment Services

The University of South Alabama welcomes applications from all individuals whose preparations and abilities give them reasonable chance of success in its programs. Admission recognizes both the university's commitment to excellence and its role as an urban institution. The University of South Alabama does not discriminate on the basis of age, sex, race, color, religion or national origin. These provisions also apply to disabled individuals pursuant to current federal and state regulations subject to reasonable standards of admission and employment.

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- Admission Types (p. 20)
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## Admission to the University

The Office of Admissions processes all applications for admission to undergraduate and graduate programs at the University. Inquiries about admission should be addressed to the Director of Admissions, Meisler Hall Suite 2500, University of South Alabama, Mobile, Alabama 36688-0002, or telephoned to (251)460-6141, toll-free number at (800)872-5247, or e-mail at [admiss@southalabama.edu](mailto:admiss@southalabama.edu). Information is

also available via a link on the University's Home Page on the World Wide Web: <https://www.southalabama.edu/departments/admissions/>.

## Application for Admission

Students applying for admission to the University of South Alabama are required to file an application for admission with the \$35 nonrefundable processing fee by the deadlines noted. The application is available on the Admissions website via a link from <https://www.southalabama.edu/departments/admissions/applytousa.html>.

Note: The University reserves the right to change fees without prior notice, as deemed necessary by the Board of Trustees (<https://www.southalabama.edu/departments/trustees/>).

## Deadlines, Transcripts, and Test Scores

Students are urged to apply for admission well before their intended semester of entry. Scholarships and other financial aid and housing are more likely to be available to the qualified student who applies early. All undergraduate applications, including the required official documents, must be received no later than July 15 for fall semester, December 1 for spring semester, and May 1 for summer semester. Deadlines for applications and supporting documents for international students are earlier than the deadlines for U.S. Citizens. Refer to the "International Students" section for details. Scholarship deadlines are significantly earlier and published in the "Financial Aid" section of the Bulletin.

All documents required for admission review (transcripts, test scores, or letters of recommendation) must be official, i.e., mailed or sent electronically from the home institution or testing agency directly to the Office of Admissions by the deadline. These documents become the property of the University of South Alabama. The applicant is responsible for making certain that the admission application, processing fee, and all required documents are received by the University by the appropriate deadline.

First Time Freshmen must submit an official high school transcript showing grades earned and courses pursued. (A final official high school transcript showing the date of graduation is required for those who apply before the end of their senior year.) In addition, First-Time Freshmen applicants, who are not applying test-optional, must submit official college entrance examination scores-either the result of the ACT or the Scholastic Assessment Test (SAT).

High school students are encouraged to take the test in the spring of the junior year or early in their senior year so test results will reach the University in ample time for admission review. Applicants must have the scores sent directly to the University from the testing agency by listing the University's code number as a recipient when registering for the examination (ACT code is 0059; SAT code is 1880) or by requesting an additional score report from the testing agency.

High school graduates, who are not applying as a college transfer student and are not applying test-optional, must submit test scores if their semester of matriculation is within five years of high school graduation or if they have not reached the age of 23. If applying for admission five years after graduation, applicants who have not taken the ACT or SAT need not sit for the examination and may apply under the Special Freshman Admissions category.

(See "Special Freshmen Admission (<http://bulletin.southalabama.edu/admissions-enrollment-services/admission-types/#specialfreshman>)" under Admission Types).

# Admission Types

## Requirements for First Time Freshmen Admission

### 16 hours of required academic core courses

Curriculum Area	Units	Courses
English	4	
Mathematics	3	Must include Algebra I and two higher level math courses (For example: Algebra II, Algebra w/ Finance, Algebraic Connections, Geometry, Trigonometry, Analytical Geometry, Pre-calculus, or other higher level math courses will be considered).
Science	3	At least 2 of the sciences must include labs.
Social Science	3	
Advanced Electives	3	Courses chosen from any of the four core areas above and foreign language.
<b>Total Core Units</b>	<b>16</b>	

## GPA and Test Scores

USA generally admits students with:

- a minimum ACT score of 19 or SAT score of 900 (critical reading and math only) if taken before March 2016, or New SAT score of at least 980 (Evidence Based Reading/Writing and math only) with a minimum GPA of 2.50.

Students who do not meet the standards for regular admission may be considered through committee review. Students who have completed and satisfied academic certification requirements for the National Collegiate Athletic Association under Division I guidelines may be considered for admission. (This option is available to all freshmen applicants.)

It is recommended that students submit the following items for committee review:

1. Letter of recommendation from your high school counselor or a teacher in a college preparatory course.
2. Personal essay on your reason for attending USA and your career plans.

The Alabama High School Diploma with Advanced Endorsement meets all University of South Alabama core requirements. The Credit Based Diploma awarded by Alabama High Schools is accepted; however, students must meet all high school core requirements listed above.

Students will be permitted to enroll in mathematics classes based on either a prerequisite course, their Math-ACT score, their Math-SAT score,

or the Mathematics Placement test. Mathematics placement can be found at <https://www.southalabama.edu/colleges/artsandsci/mathstat/placementinfo.html>. Students may also be required to take reading or English courses based upon their ACT-English, ACT-Reading or SAT-Critical Reading score.

Applicants are now eligible to select test-optional as a path for admission to USA. Students who take this route could be asked to supply additional materials. Test optional students are also eligible for scholarship consideration.

**Permanent Residents** will need to meet the above requirements and those who have not attended a US institution, whose native language is not English, must demonstrate English proficiency by submitting one of the following:

- Test of English as a Foreign Language (TOEFL) – composite of 61
- International English Language Testing System (IELTS) – composite of 5.5
- International Test of English Proficiency (iTEP) – composite of 3.6
- Pearson Test of English (PTE) – composite of 44
- Duolingo - composite 95
- ACT English – 19
- SAT Reading – 26
- Advanced Level English examinations from the United Kingdom with a score of “A”, “B”, or “C/A-E”

Applicants who hold a baccalaureate or graduate degree from a regionally accredited United States institution are exempt. Students transferring from postsecondary institutions within the United States are exempt, subject to the following conditions:

1. Transfer credits total at least 24 semester hours; **and**
2. Completion of English Composition I with a grade of “C” or better.

Admission Appeal Procedure

Applicants who fail to meet admission requirements as listed above and who believe that they have extenuating circumstances that might justify a different decision may contact the Admissions Office for procedures to seek additional consideration. You can reach out to the admissions office at [admiss@southalabama.edu](mailto:admiss@southalabama.edu).

## Special Freshman Admission

Special Freshman Admission are students who graduated from high school at least five years prior to the semester of entry or who have reached the age of 23, and did not sit for the college entrance examinations (ACT or SAT).

**Academic Requirements:** Applicants who do not satisfy the requirements for traditional admission may be admitted if satisfactory evidence is provided that they have the ability to successfully pursue the courses in which they wish to enroll.

**Documents Required:** Adult Special Freshman Admission applicants must submit an official high school transcript for admission consideration. Applicants for admission as Adult Special Freshman students should be high school graduates whose semester of entry to the university is at least five years since high school graduation or are at least 23 years of age.

**Permanent Residents** will need to meet the above requirements and those who have not attended a US institution, whose native language is not English, must demonstrate English proficiency by submitting one of the following:

- Test of English as a Foreign Language (TOEFL) – composite of 61
- International English Language Testing System (IELTS) – composite of 5.5
- International Test of English Proficiency (iTEP) – composite of 3.6
- Pearson Test of English (PTE) – composite of 44
- Duolingo - composite 95
- ACT English – 19
- SAT Reading – 26
- Advanced Level English examinations from the United Kingdom with a score of “A”, “B”, or “C/A-E”

Applicants who hold a baccalaureate or graduate degree from a regionally accredited United States institution are exempt. Students transferring from postsecondary institutions within the United States are exempt, subject to the following conditions:

1. Transfer credits total at least 24 semester hours; **and**
2. Completion of English Composition I with a grade of “C” or better.

GED First Time Freshmen Admission

GED First Time Freshmen Admission are students at least 17 years of age who took the General Education Development (GED) test and did not graduate from high school.

**Academic Requirements:** Applicants are granted admission based on adequate performance on high school level General Education Development (GED) test. Students taking the test prior to January 2014, must score an average of at least a 500 or a 50, if taken before January 2002. Students taking the GED beginning January 2014 must score at least a 170 in each subject area.

**Documents Required:** GED First Time Freshman applicants must submit an official copy of their General Educational Development (high school level) test results.

Both Adult Special Freshman Admission and GED First Time Freshman students are considered degree-seeking students and are subject to all academic regulations.

**Permanent Residents** will need to meet the above requirements and those who have not attended a US institution, whose native language is not English, must demonstrate English proficiency by submitting one of the following:

- Test of English as a Foreign Language (TOEFL) – composite of 61
- International English Language Testing System (IELTS) – composite of 5.5
- International Test of English Proficiency (iTEP) – composite of 3.6
- Pearson Test of English (PTE) – composite of 44
- Duolingo - composite 95
- ACT English – 19
- SAT Reading – 26
- Advanced Level English examinations from the United Kingdom with a score of “A”, “B”, or “C/A-E”

Applicants who hold a baccalaureate or graduate degree from a regionally accredited United States institution are exempt. Students transferring from postsecondary institutions within the United States are exempt, subject to the following conditions:

1. Transfer credits total at least 24 semester hours; **and**
2. Completion of English Composition I with a grade of “C” or better.

## Freshmen with Previous Credits

Freshmen with Previous Credits are students who attended another college prior to high school graduation. Note: A student who also attended another college during the Summer directly after high school graduation, with no more than 11 credit hours earned, will be considered as a Freshman with Previous Credits. If a student earns 12 or more hours during the Summer after graduation or earns college credits in subsequent terms prior to enrolling at USA, the student will be considered as a Transfer student.

**Academic Requirements:** Applicants must satisfy the requirements for First-Time Freshmen applicants and must have earned at least a “C” (2.0) average on all previous collegiate work attempted. The grade-point average used is that computed by the Office of Admissions.

**Documents Required:** Freshmen with Previous Credits applicants must submit all the documents required for First-Time Freshmen as well as an official transcript from each college attended prior to enrolling at USA.

**Permanent Residents** will need to meet the above requirements and those who have not attended a US institution, whose native language is not English, must demonstrate English proficiency by submitting one of the following:

- Test of English as a Foreign Language (TOEFL) – composite of 61
- International English Language Testing System (IELTS) – composite of 5.5
- International Test of English Proficiency (iTEP) – composite of 3.66
- Pearson Test of English (PTE) – composite of 44
- Duolingo - composite 95
- ACT English – 19
- SAT Reading – 26
- Advanced Level English examinations from the United Kingdom with a score of “A”, “B”, or “C/A-E”

Applicants who hold a baccalaureate or graduate degree from a regionally accredited United States institution are exempt. Students transferring from postsecondary institutions within the United States are exempt, subject to the following conditions:

1. Transfer credits total at least 24 semester hours; **and**
2. Completion of English Composition I with a grade of “C” or better.

## Early Admission Applicants

Early Admission applicants are students who have completed the junior year of high school and wish to enroll full-time at the University.

**Academic Requirements:** Applicants must be recommended by the high school counselor, have:

1. a 3.5 minimum high school GPA, as computed by the USA Office of Admissions;
2. scored at least a 28 composite on the ACT (or 1250 SAT scores);

3. completed the junior year of high school;
4. completed the Core High School Requirements listed above under Regular Admission.
5. and be approved by the Director of Admissions.

**Documents Required:** Early Admission applicants must submit an official high school transcript showing grades through the junior year, official ACT or SAT scores and a letter of recommendation from the school guidance counselor.

**Permanent Residents** will need to meet the above requirements and those who have not attended a US institution, whose native language is not English, must demonstrate English proficiency by submitting one of the following:

- Test of English as a Foreign Language (TOEFL) – composite of 61
- International English Language Testing System (IELTS) – composite of 5.5
- International Test of English Proficiency (iTEP) – composite of 3.6
- Pearson Test of English (PTE) – composite of 44
- Duolingo - composite 95
- ACT English – 19
- SAT Reading – 26
- Advanced Level English examinations from the United Kingdom with a score of “A”, “B”, or “C/A-E”

Applicants who hold a baccalaureate or graduate degree from a regionally accredited United States institution are exempt. Students transferring from postsecondary institutions within the United States are exempt, subject to the following conditions:

1. Transfer credits total at least 24 semester hours; **and**
2. Completion of English Composition I with a grade of “C” or better.

## Special Programs

### Start South Dual Enrollment/Early College Program

Start South is the dual enrollment/early college program. It is open to high school sophomores, juniors, and seniors who meet the program's academic requirements. Courses can be used to satisfy degree requirements at USA, or they can be transferred to other institutions. Coursework is offered online, on campus, and on the high school campus when available.

#### Academic Requirements

Applicants must have authorization from their high school for dual enrollment or a transcript for early college. Students must have earned at least a “B” (3.0 on a 4.0 scale) average in academic subjects. Tests scores are not needed for admission but may be needed for math and English placement.

Alabama residents participating in Start South can qualify for automatic admission to USA if they complete 9 or more credit hours of USA coursework listed by August 15 of senior year and earn a minimum cumulative 3.0 USA GPA. Start South students also receive priority housing for entering freshmen upon earning 9 or more credit hours with a minimum 3.0 GPA by December of the senior year of high school.

### College of Medicine Early Acceptance Program (EAP)

Qualified high school seniors are selected for acceptance to the University and to the University of South Alabama College of Medicine. Candidates selected for the program enter the Health Pre-Professions Program at USA; their curriculum will include core requirements for the selected baccalaureate program and prerequisites for matriculation in medical school. Students participating in the College of Medicine Early Acceptance Program must meet program requirements during their tenure as undergraduates to continue in the program. Upon successful completion of the baccalaureate degree and EAP requirements, students enter the University of South Alabama College of Medicine.

Go to the Early Acceptance (<https://www.southalabama.edu/departments/admissions/earlyacceptance/>) page for more detail.

### Physical Therapy Early Acceptance Program (PTEAP)

The Department of Physical Therapy Early Acceptance Program offers a select number of talented high school seniors a position in the University of South Alabama Department of Physical Therapy first year class after completion of the pre-requisite requirements of the program and their USA undergraduate degree.

Go to our Early Acceptance (<https://www.southalabama.edu/departments/admissions/earlyacceptance/>) page for more detail.

### College of Nursing Early Acceptance Program

Highly qualified high school seniors selected for the College of Nursing Early Acceptance Program and fulfilling all program requirement are guaranteed admission to the upper division professional component of the nursing curriculum. Students are admitted to the College of Nursing and must complete all Pre-Professional Nursing courses at USA; their curriculum includes core requirements and prerequisites for the upper division nursing program.

Go to our Early Acceptance (<https://www.southalabama.edu/departments/admissions/earlyacceptance/>) page for more details

### The Honors College

See "Honors College (p. 743)".

### Department of Psychology Early Acceptance Program

The Department of Psychology offers highly qualified high school students a position in the Master's Program in Experimental Psychology (Behavior and Brain Sciences) upon successful completion of pre-requisite requirements and their USA undergraduate degree.

Go to our Early Acceptance (<https://www.southalabama.edu/departments/admissions/earlyacceptance/>) page for more details.

# Undergraduate Transfer Admissions

## Transfer Students

Transfer students have attended a regionally accredited college or university after high school graduation.

**Academic Requirements:** Applicants are granted unconditional admission if they have earned a cumulative average of at least "C" (2.00) on all work attempted. (Note: The grade-point average used is that computed by the University of South Alabama Office of Admission.) Applicants must be eligible to attend the institution in which they were last enrolled. Applicants that have earned college credits, but fewer than 30 semester hours, must also satisfy freshman admission requirements.

Students graduating with an AA or AS Degree from a regionally accredited institution will be granted admission if this is their last school attended and they have earned a cumulative average GPA of at least a "C" (2.00); as calculated by the AA or AS Degree granting institution and documented on their college transcript.

**Documents Required:** Transfer student applicants must make certain that official transcripts of all courses for which they have been registered at other colleges or universities are sent directly to the University from each home institution. Students must report colleges where registration was completed even though no credit was earned. **Prior enrollment information will be verified by the National Student Clearinghouse.**

Applicants who have attempted fewer than 30 semester hours or 40 quarter hours of college work must submit college transcripts and high school transcripts and ACT or SAT scores. (Test Scores are not required in applying test-optional)

**Permanent Residents** will need to meet the above requirements and those who have not attended a US institution, whose native language is not English, must demonstrate English proficiency by submitting one of the following:

- Test of English as a Foreign Language (TOEFL) – composite of 61
- International English Language Testing System (IELTS) – composite of 5.5
- International Test of English Proficiency (iTEP) – composite of 3.6
- Pearson Test of English (PTE) – composite of 44
- Duolingo - composite 95
- ACT English – 19
- SAT Reading – 26
- Advanced Level English examinations from the United Kingdom with a score of "A", "B", or "C/A-E"

Applicants who hold a baccalaureate or graduate degree from a regionally accredited United States institution are exempt. Students transferring from postsecondary institutions within the United States are exempt, subject to the following conditions:

1. Transfer credits total at least 24 semester hours; **and**
2. Completion of English Composition I with a grade of "C" or better.

## Admission Appeal Procedure

Applicants who fail to meet admission requirements as listed above and who believe that they have extenuating circumstances that might justify a different decision may contact the Admissions Office for procedures

to seek additional consideration. You can reach out to the admissions office at [admiss@southalabama.edu](mailto:admiss@southalabama.edu).

**Transfer of Credit:** The University Registrar's Office evaluates all credits to determine the number transferable to the University of South Alabama. (Note: transfer credit will only be evaluated from official transcripts or documents). Such transferred credit will be applied, after evaluation, to the specific program of the student. The final program evaluation requires approval by the Dean of the College in which the student is accepted or by the Dean's designated representative. Credits transferable to the University may or may not be applicable, in whole or in part, to a specific program. Transfer students are urged to review all the requirements for a degree as specified in the Academic Policies and Procedures section of the Bulletin.

No credit is given for college-level General Education Development tests or courses evaluated as non-credit or remedial at this institution. No more than a combined total of 25% of the total credits required for the degree will be allowed for credit received through the College Level Examination Program (CLEP), Advanced Placement Program (AP), credit by examination, correspondence courses, military service school courses, and other approved non-collegiate-sponsored programs as recommended by the American Council on Education.

Only one-half of the credit hours required for a degree may be transferred from a community college. While the total number of transfer hours will appear on the transcript, the academic department offering the major will determine how they may apply to the degree.

A transfer student from a collegiate institution not accredited by the appropriate regional association may request an evaluation of transfer credits from the student's academic dean after completing one year (30 semester hours) of work at the University of South Alabama. Students must provide syllabi for each course to their academic dean. Syllabi will be sent to the appropriate colleges for approval. No degree credit will be accepted by the College of Education and Professional Studies from any collegiate institution unless that institution has regional accreditation.

**Transfer Credit for English Composition:** No credit is given for coursework in English Composition in which the grade is below a "C".

## Transfer Credit from Community/Junior Colleges

The University evaluates and includes all community college/junior college transfer credits on the transcript. Although transferable to the University, credits may or may not apply to a specific degree program. The final program evaluation of transfer credit requires the approval of the Dean. In no case will transfer credit applied to a degree program exceed 50% of the total number of hours in the program (up to a maximum of 64 hours).

No credit will be awarded for remedial, vocational, and technical courses. Courses not generally accepted from a junior/community college may be considered for transfer credit on a selective basis. Such courses must be approved for degree credit by the student's academic dean based upon the recommendation of the appropriate department chair.

University of South Alabama students at any level of progress toward a degree are restricted, in terms of junior college transfer credit, only by the first and second items above.

## Alabama Articulation Program (Alabama Transfers)

The Alabama Articulation Program (Alabama Transfers (<https://alabamatransfers.com/>), formerly called STARS - Statewide Articulation Reporting System) is a web-based articulation and transfer planning system designed to inform students who attend Alabama Community Colleges about degree requirements, course equivalents, and other transfer information on specific majors at each state-funded four-year institution. Alabama Transfers provides students, counselors, and educators with accurate information upon which transfer decisions can be made. Alabama Transfers is the information link between the state's public two-year and four-year institutions and can prevent the loss of course credit hours, can provide direction for the scheduling of coursework, and can ease the transition from one institution to another. Students who are interested in obtaining a "Transfer Guide" should visit the University of South Alabama Transfer Assistance website at <https://www.southalabama.edu/departments/admissions/transfer.html>.

## Transfer Credit from Military Service Schools

Military service-school courses will be evaluated with reference to the recommendation of the American Council on Education (ACE) when official credentials have been presented by the student to the Registrar's Office. Such recommendations, however, are not binding upon the University. In no instance, however, may any of the hours of credit be substituted for specific courses, but they may be substituted for electives.

Students who have successfully completed basic training in the armed forces may receive four semester hours of elective credit and exemption from P.E. by presenting a DD214, DD295, a copy of a Community College of the Air Force transcript, or a certificate of training to the Office of the Registrar for currently enrolled or former students, or to the Office of Admissions for new students. Army, Coast Guard, Marine Corps, and Navy (Active Duty, Reserve, and Veterans) may request an official Joint Services Transcript by visiting: <https://jst.doded.mil/official.html>

The Office of Veterans Affairs is located in the Academic Support Center, Suite 1345 on the main campus of the University to facilitate veterans' programs and to provide counseling and other veterans' services. (See "Student Activities Section.")

## Undergraduate Credit from Foreign Institutions

See "International Student (<http://bulletin.southalabama.edu/admissions-enrollment-services/international-student-admissions/>)" section.

## Special Category Students

### Transient Students

Transient Students are visiting students from other colleges/universities and who wish to attend the University for one term and return to the home institution.

**Academic Requirements:** Students must be in good standing at the current institution and have the approval of their registrar or dean to enroll at USA.

A transient student must accept full responsibility in meeting course prerequisites and having the necessary preparation to take the course or courses desired.

Enrollment as a transient student in no way implies future admission as a regular student to the University of South Alabama.

**Documents Required:** Transient applicants must request the registrar or dean of the college or university in which they are currently enrolled to complete the University's Transient Form or write a letter of good standing for the applicant and mail it directly to the University.

If the student should decide to remain in transient status for more than one term the student must submit the University's Transient Student Form and a Readmission Application by the specified deadline (see "How to Apply for Readmission" section of the Bulletin) each semester. Should a transient student decide to transfer to the University of South Alabama, the student would be required to complete a Readmission Application, submit complete transcripts from each college or university attended and meet transfer admission requirements.

### Audit Students

Audit students wish to take courses, but not receive credit.

**Academic Requirements:** Students are admissible if a completed application for admission and the \$35 nonrefundable processing on-line fee are submitted to the Office of Admissions by the published deadlines. No other documentation is required. Audit students pay the same tuition and fees as credit students.

**Note:** Transient, Unclassified and Audit students are not eligible to be considered for financial aid since they are not enrolled in degree-seeking programs.

### Unclassified Applicants

Unclassified applicants are students who have earned at least a baccalaureate degree and wish to take additional undergraduate courses, but not for degree purposes.

**Academic Requirements:** Applicants are admissible if an official transcript showing evidence of the baccalaureate, master's or doctoral degree is received. Note that unclassified students are eligible to enroll in undergraduate courses only and are not working toward a degree. Students seeking a second undergraduate degree should apply as Transfer students.

**Documents Required:** Unclassified students submit an official transcript showing their earned baccalaureate, master's, or doctoral degree.

## International Student Admissions Requirements for International Admission

The Office of International Admissions and Student Programs at the University of South Alabama provides special services and programs for non-U.S. Citizens and is responsible for the processing of applications for admission submitted by non-citizens. The following are the specific requirements needed by the applicants.

### Application Deadlines

All necessary documents must be received by the established deadline as indicated below for the semester the student wishes to enter.

Applications completed after the deadline will be considered for the following term, unless otherwise requested by the student.

#### Deadlines Outside the United States Deadlines Inside the United States

Fall - April 1	Fall - July 15
Spring - October 1	Spring - December 1
Summer - March 1	Summer - May 1

## International Application for Admission

- I. Non-citizen Application for Admission - The Non-citizen Application for Admission must be completed and signed by the applicant. A nonrefundable \$35.00 application fee, payable through a U.S. bank, must accompany the application. Applications received without the \$35.00 processing fee will not be processed.
- II. Academic Records - Complete and certified academic records of all secondary and/or postsecondary education attempted must be submitted. Whenever possible, the records must be forwarded directly from the issuing institution to the University of South Alabama. Copies must be certified by an official of the government or school (e.g., Registrar or Dean). Unofficial copies may be accepted on a temporary basis. Any applicant who submits unofficial documents for admissions consideration must submit official copies no later than the student's first semester check-in and orientation. Failure to do so may result in revocation of admissions and cancellation of the immigration document issued by the University. If an applicant submits documentation that is deemed fraudulent, the University will immediately revoke admission and terminate/cancel immigration documents issued by USA. If already a student, OIASP will also send notification to the Dean of Students of student misconduct.
- III. English Proficiency
  - A. New Freshman/Transfer  
Nonimmigrant applicants, whose native language is not English, must demonstrate English proficiency by submitting one of the following:
    1. Tests of English Proficiency (minimum overall score posted below)
      - a. TOEFL - 61
      - b. IELTS - 5.5
      - c. ITEP - 3.6
      - d. PTE - 44
      - e. Duolingo - 95
      - f. Advanced Level English examination from the United Kingdom with a score of 'A', 'B', or 'C/A-E'
  - B. Transfer Students  
Applicants transferring from a United States regionally accredited institution will be exempt, subject to the following conditions:
    1. Transfer credits total at least 24 semester hours; **and**
    2. Completion of English Composition I with a grade of "C" or above
  - C. Exemptions  
Applicants may be exempt from the English proficiency requirement, under the following conditions:
    1. Completion of a baccalaureate or graduate degree from a regionally accredited United State institution
    2. From a native English speaking country
- IV. Other Test Options

- a. ACT Composite - 19
- b. SAT Evidence Based Reading/Writing & Math - 980, with Reading Test score of 26

Students not meeting EH 101-English Composition prerequisites will be required enroll in a supported section of the course based upon their English proficiency Reading and Writing subscores, their ACT-English, SAT-Critical Reading, or SAT-Reading Test score. Students will be permitted to enroll in mathematics classes based on either a prerequisite course, their Math- ACT score, their Math-SAT score, or the Mathematics Placement test. Mathematics placement can be found at <https://www.southalabama.edu/colleges/artsandsci/mathstat/placementinfo.html>.

Unofficial test scores may be accepted on a temporary basis. Any applicant who submits unofficial test scores for admissions review must submit official score reports no later than the student's first semester.

**Notification:** Students are notified of admissions decisions as soon as all required documents are received. The I-20 or DS-2019 is emailed to students after additional documentation is received by the Office of Immigration.

Transfer Credit from Foreign Institutions - Students transferring to the University from foreign postsecondary institutions must submit a detailed course syllabus from which to evaluate transfer credit. Advanced Placement credit is available from a number of worldwide sources. Contact the Registrar's Office for details. Students may secure a professional evaluation of academic credentials at their own expense. Course-by-course professional evaluation is required of transfer students accepted into the College of Education and Professional Studies and students applying to the professional component of any program in the Pat Capps Covey College of Allied Health Professions.

(See the section below entitled "Additional information for all International Students.")

## Graduate Applicants

- I. Non-citizen Application for Admission - A non-refundable \$60 application fee, payable through a U.S. Bank must accompany the application. Applications received without the \$60.00 application fee will not be processed.
- II. Academic Records - Complete and certified academic records of all secondary and postsecondary education attempted must be submitted. Whenever possible, the records must be forwarded directly from the issuing institution to the University of South Alabama. Copies must be certified by an official of the government or school (e.g., Registrar or Dean). Unofficial copies may be accepted on a temporary basis. Any applicant who submits unofficial documents for admissions consideration must submit official copies no later than the student's first semester check-in and orientation. Failure to do so may result in revocation of admissions and cancellation of the immigration document issued by the University. If an applicant submits documentation that is deemed fraudulent, the University will immediately revoke admission and terminate/cancel immigration documents issued by USA. If already a student, OIIA will also send notification to the Dean of Students of student misconduct.
- III. English Proficiency  
Minimum TOEFL score of 71 **or**  
Minimum IELTS score of 6 **or**  
Minimum iTEP score 3.7 **or**

Minimum Pearsons (PTE Academic) score 48  
Minimum Duolingo score of 100

Please note that some programs may require higher scores to prove English proficiency.

Students with Graduate degrees from regionally accredited United States postsecondary institutions are exempt.

Additional exemptions are at the admitting department's discretion.

- IV. Standardized Tests - Standardized test requirements for the various academic programs are listed in the appropriate sections of the Bulletin. All test scores must be official and sent directly from the testing service which administered the examination to the University. Unofficial test scores may be accepted on a temporary basis. Any applicant who submits unofficial test scores for admissions review must submit official score reports no later than the student's first semester.
- V. Recommendation Letters - Three recommendations may be required by the department. Applicants will enter each recommender's information during the application process. The recommender should be a person familiar with the applicant's academic qualifications and ability to undertake the proposed course of study.
- VI. Statement of Purpose - A Statement of Purpose written by applicant may be required by the department and must be uploaded to application portal.

**Notification:** Students are notified of the admissions decision from the Graduate Dean as soon as all required documents are received and the Graduate Dean has received a recommendation from the appropriate graduate program. The I-20 or DS-2019 is emailed to students after additional documentation is received by the Office of Immigration.

Students wishing to postpone their arrival to a later semester must notify the Office of Immigration and International Admissions in writing. Students who have previously attended USA and wish to re-enroll should contact the Office of Immigration and International Admissions to see what steps need to be taken to be reviewed for readmission or re-entry.

Address inquires and questions to:  
University of South Alabama  
Office of International Admissions and Student Programs  
390 Alumni Circle  
Meisler Hall Suite 2200  
University of South Alabama  
Mobile, Alabama 36688-0002  
(251) 460-6050

internationaladmissions@southalabama.edu

<https://www.southalabama.edu/departments/international> (<https://www.southalabama.edu/departments/international/>)

## Nonimmigrant International Students Deposits

A non-refundable admissions deposit of \$500 USD will be required of an international student before an I-20 or DS-2019 is issued.

## International Student Nonimmigrant and International Student Fees

All international students with nonimmigrant visas are considered nonresidents for tuition purposes and will be assessed a nonresident fee and an international student fee each semester.

### Orientation

New international students are required to participate in an orientation program prior to their first semester at the University. The orientation program welcomes students to the University, introduces them to staff and students, and familiarizes them with immigration regulations, academic procedures and the community. Readmitted and matriculated international students will be required to attend all or parts of the orientation program the first semester they return to or begin a new program at the University.

### Medical Insurance

The University requires all international students on nonimmigrant visas to maintain medical insurance coverage. Students must purchase the University's international student health insurance policy at registration or apply for a waiver of the University health insurance plan. Proof of adequate health insurance must be submitted with the waiver application. Sponsored students may request to waive the health insurance requirement if they receive health insurance from their home country government or Embassy.

## Readmissions

Students who have been previously enrolled in the University of South Alabama and have been absent for at least three consecutive terms or have been required to sit out a term due to academic suspension or dismissal should comply with the following:

### How to Apply for Readmission

An applicant should complete the electronic readmission application found here: [https://www.southalabama.edu/departments/admissions/under\\_readmissions.html](https://www.southalabama.edu/departments/admissions/under_readmissions.html). The readmission application, including all required credentials, should be submitted to the Office of Admissions.

Readmission applications do not have to pay another processing fee.

### Requirements for Readmission

An applicant must be eligible to return to the University of South Alabama on the basis of a previous academic record at this institution. If the student has attended any college or university subsequent to last enrollment at the University of South Alabama, the student must also have the required transfer average or higher (2.0 or higher as computed by the University of South Alabama, Office of Admissions) on work attempted, and must be in good standing and eligible to return to the last institution attended.

The University of South Alabama supports its students who are called into active military service or its members of a US military reserve unit. Students who have been admitted to or enrolled at the University of South Alabama may request a withdrawal to fulfill a US military obligation by contacting the Registrar's Office. These students will be readmitted in accordance with readmission provisions in the Higher Education Opportunity Act of 2008 (Section 484C of the HEA) and implementing regulations in 34 CFR Section 668.18. Students needing readmission

should contact the Office of Admissions to provide notification of intent to return and would need to provide documentation of military service.

Applicants who fail to meet admission requirements and who believe they have extenuating circumstances that might justify a different decision may appeal for further consideration. The following items are required for the admissions appeal process:

1. A personal essay describing why you want to attend USA and your career goals.
2. Letter/s of recommendation
3. Optional : Additional supporting documents to substantiate an appeal (including any documents from USA departments or personnel)

Please send all supporting documents by e-mail to the Office of Admissions at [admiss@southalabama.edu](mailto:admiss@southalabama.edu).

## Prospective Student Programs and New Student Orientation

Southbound Orientation (<https://www.southalabama.edu/departments/orientation/index.html/>) provides an introduction to the academic, service, and social areas of the University of South Alabama. This mandatory program is offered at the beginning of each semester and prior to class registration. Details are sent to all new students prior to registration. Further information may be obtained from:

The Office of Prospective Student Programs and New Student Orientation

5910 USA South Drive  
Mobile, AL 36688-0002  
telephone (251) 460-7093

Re-admits do not need to attend New Student Orientation.

## Nonresident and Residency Reclassification

Students enrolling at the University of South Alabama who come to the state of Alabama from another state [with the exception of the Service Area in Florida (Escambia and Santa Rosa counties) and Mississippi (George, Greene, Harrison, Jackson, Perry, and Stone counties)] for the purpose of attending school will be considered a "non-resident student" for tuition purposes. The Office of Admissions determines a student's residency status at the time of admission. This determination is based on the application information, transcripts, and other documents required for admission and will default to "non-resident" status if any out-of-state information is received. After the initial determination of a student's residency status, the status shall continue unchanged through all registrations at the University until and unless:

1. a non-resident student provides satisfactory evidence that he or she is a resident of Alabama as defined by this policy, or
2. a student classified as a resident is absent from Alabama with the intent to become a resident in another state. Residency status is also reviewed at the time of readmission to the University after any absence of one year (three semesters) or more. At the discretion of the institution, residency status can be reviewed at any time.

A person or, if the person is a minor or dependent, the person's supporting person(s) who moves to Alabama or to the Service Area for the primary purpose of attending college shall not be considered to have

demonstrated intent to establish domicile in the Alabama or the Service Area and will not generally be considered eligible for classification as a resident student. A person or, if the person is a minor or dependent, the person's supporting person(s) who establishes domicile in Alabama or the Service Area for the sole purpose of avoiding Alabama non-resident tuition will be subject to non-resident tuition. An individual under the age of 24 is presumed to be a dependent of his or her supporting person(s) if he or she:

1. has been primarily involved in educational pursuits as evidenced by being enrolled as a full-time student at any point during the last year, or
2. cannot prove financial self-sufficiency for at least one calendar year (12 consecutive months) prior to enrollment at the University.

All students under the age of 24 are presumed to be dependent students unless proven otherwise through appropriate documentation.

A student considered a "covered individual" under Section 702 of the Veterans Choice Act who has established domicile in the State of Alabama or Service Area must provide a minimum of two proofs of residence from the acceptable documents listed on Form D that demonstrate residence or evidence of intent to establish residence.

The rules regarding residency for tuition purposes at the University of South Alabama are governed by the Code of Alabama 1975, Title 16, Chapter 64 (<http://alisondb.legislature.state.al.us/alison/codeofalabama/1975/coatoc.htm>), and institutional policy.

## USA Employees and Spouse/Dependent Information

The residency application is not required for students who meet the eligibility requirements for the USA educational benefit certification.

If you are a full-time USA employee or a spouse/dependent of a full-time USA employee, complete the HCA Educational Benefit Form (<https://www.southalabama.edu/departments/financialaffairs/hr/resources/hcaeducationalbenefitcertificationform.pdf>) or the USA/HCM Educational Benefit Form (<https://www.southalabama.edu/departments/financialaffairs/hr/resources/univhcmeducationalbenefit.pdf>) and submit it to Human Resources by the applicable deadline.

For deadlines and additional information related to educational benefit certification, please contact Human Resources, [hmaincampus@southalabama.edu](mailto:hmaincampus@southalabama.edu), 251-460-6133, or visit the Human Resources Website (<https://www.southalabama.edu/departments/financialaffairs/hr/>) for full eligibility requirements.

## Military and Qualifying Federal Service

The residency application is not required for students who meet the eligibility requirements for the Veteran and Military Affairs Student Resident Rate benefit certification.

For deadlines and additional information related to Veteran and Military Affairs Student Resident Rate benefit certification, please contact the Office of Veteran and Military Affairs, [vets@southalabama.edu](mailto:vets@southalabama.edu), 251-460-6230, or visit the Veteran and Military Affairs website (<https://www.southalabama.edu/departments/veteransaffairs/>) for full eligibility requirements.

## Who is a "Resident Student"?

A "resident student" for **tuition purposes is one who**, at the time of admission to the University:

- Is not a "minor" and is a resident of the state of Alabama or Service Area and has been a resident of the state for a least one year (12 consecutive months) immediately preceding the date of registration; or
- Is a "minor or dependent" whose "supporting person(s)" is a resident of the state of Alabama or Service Area and has been a resident of the state for at least one year immediately preceding the date of registration; or
- One who, at the time of registration, is not a "minor" and:
  - Is a full-time (not temporary) employee of the University of South Alabama or is the spouse of such an employee; or
  - Is employed as a graduate assistant or fellow at the University of South Alabama; or
  - Is able to verify full-time permanent employment within the state of Alabama and shall commence said employment not more than 90 days after registration (first day of classes) with the institution, or is the spouse of such an employee; or
  - Is a member or the spouse of a member of the United States military on full-time active duty stationed in Alabama under orders for duties other than attending school; or
  - Is a resident of any county within the University of South Alabama's Service Area (Florida: Escambia and Santa Rosa counties; and Mississippi: George, Greene, Harrison, Jackson, Perry, and Stone counties) and has been a resident of that county for at least one year immediately preceding the date of registration; or
  - Has been a member of the Alabama National Guard for a period of at least two years immediately preceding the student qualifying for resident tuition and continues to be a member of the Alabama National Guard while enrolled at the University of South Alabama; or
  - Is a veteran of the Armed Forces of the United States, provided that the veteran has become a resident of Alabama and satisfies one of the following conditions:
    - i. The veteran has served on active duty for a continuous period of time, not less than two years, and has received an honorable discharge as verified by a United States Department of Defense Form 214 within five years of enrolling at the University of South Alabama.
    - ii. The veteran is currently serving in a reserve component of the Armed Forces of the United States as verified by a memorandum from the commanding officer of the veteran student.
    - iii. The veteran has been assigned a service-connected disability by the United States Department of Veterans Affairs; or
  - Is a member of the U.S. Foreign Service or the spouse or child of a U.S. Foreign Service employee, provided that the employee satisfies one of the following conditions:
    - i. The employee is assigned to a permanent duty station in the state of Alabama.
    - ii. The employee can document domicile in the state of Alabama via an Official Form 126 "Foreign Service Residence and Dependency Report".
- Is in a program or takes courses within an interstate consortium of colleges or universities that either offers reciprocal resident student tuition to residents of Alabama in the program or courses offered by colleges or universities not within Alabama, or is enrolled in a program or courses through an interstate consortium of colleges or universities that assesses tuition at a uniform rate for all students enrolled in that course or program; or
- Is an accredited member of or the spouse of an accredited member of a consular staff assigned to duties in Alabama; or
- One who, at the time of registration, is a "minor or dependent" and whose "supporting person(s)":
  - Is a full-time employee (not temporary) of the University of South Alabama; or
  - Is able to verify full-time permanent employment within the state of Alabama and shall commence said employment not more than 90 days after registration (first day of classes) with the institution; or
  - Is a member of the United States military on full-time active duty stationed in Alabama under orders for duties other than attending school; or
  - Is an accredited member of a consular staff assigned to duties in Alabama; or
  - Is a resident of any county within University of South Alabama's Service Area and has been a resident of that county for at least one year immediately preceding the date of registration.

A non-resident student is one who does not meet the criteria for a "resident student" as specified in the preceding section.

The ultimate determination of residency status shall be made by the institution. In determining whether the student is in fact a resident of Alabama or a resident of the Service Area for the purposes of assessing a student non-resident fee, the burden of proof is on the student. A student can change their status from non-resident to resident student only by establishing a physical presence and place in Alabama or in the predefined Service Area and by providing clear and convincing evidence that, for 12 consecutive months prior to the semester of registration, this presence and place has been the student's or, if the student is a minor or dependent, the student's supporting person's single location at which they reside with the intent of remaining in that location indefinitely as evidenced by more substantial connections with that place than with any other place and not for the purposes of obtaining an education.

## Definitions

### Dependent Students

Dependent Students are those students under the age of 24 who are presumed to be a dependent of his or her supporting person(s) if he or she (1) has been primarily involved in educational pursuits as evidenced by being enrolled as a full-time student at any point during the last year, or (2) cannot prove financial self-sufficiency for at least one calendar year (12 consecutive months) prior to enrollment at the University. All students under the age of 24 are presumed to be dependent students unless proven otherwise through appropriate documentation.

### Minor Students

Minor Students are those students who lack the capacity to contract under the law of the State of Alabama because of their age (persons under 19 years of age or persons under 18 years of age if married) excluding those persons whose disabilities of non-age have been

removed by a court of competent jurisdiction for a reason other than establishing a legal residence in Alabama.

## Residence

For the purpose of this policy, a residence shall be the single location at which a person resides with the intent of remaining in that location indefinitely as evidenced by more substantial connections with that place than with any other place and not for the purposes of obtaining an education.

## Resident

A person or, if the person is a minor or dependent, the person's supporting person(s) whose residence is in the state of Alabama or the defined Service Area and not for the purposes of obtaining an education.

## Residence of a Minor or Dependent Student

The residence of a minor or dependent student shall be the residence of his or her supporting parent unless, in the case of a minor, neither parent has legal custody. When neither parent has legal custody, the residence of the minor student shall be the residence of the person having legal custody of the minor student.

## Supporting Person

If the student's parents are living together, the "supporting person(s)" may be either or both of the parents. If the parents are divorced or living separately, then either the parent having legal custody or the parent providing the greater amount of financial support of the two (verified by a copy of the most recent income tax return) shall be the "supporting person." If both parents are deceased or if neither has legal custody, then supporting person shall be established in the following order: legal custodian of the student, and, if none, the guardian, and, if none, the conservator.

## Service Area

The following counties in the states of Florida and Mississippi shall be defined as the University of South Alabama Service Area: in Florida: Escambia and Santa Rosa; in Mississippi: George, Greene, Harrison, Jackson, Perry, and Stone.

## Resident/Non-Resident Student

In determining resident or non-resident classification, the primary issue is one of intent. If a person is in Alabama primarily for the purpose of obtaining an education, that person shall be considered a non-resident student.

## Request Reclassification

### How Does a Non-resident Student Request Reclassification of Residency Status for Tuition Purposes?

To be reclassified for tuition purposes, a non-resident student must prove by sufficient evidence, as determined by the institution, that he or she is a resident of the state of Alabama. A student's status as a resident student is determined by one of the following methods by proving that:

- The student has a residence in the state of Alabama which means the specific address in Alabama at which they reside; that they intend to remain there indefinitely; that they have more substantial connections with Alabama than with any other state; and that the student has established a physical presence and place that has been their true, fixed, and permanent place of habitation for the 12 consecutive months preceding the semester of registration; or

- The student is not a "minor" and is a full-time employee (not temporary) of the University of South Alabama or is the spouse of such an employee; or
- The student is able to verify full-time permanent employment within the state of Alabama and shall commence said employment not more than 90 days after registration (first day of classes) with the institution, or is the spouse of such an employee; or
- The student is a member or the spouse of a member of the United States military on full-time active duty stationed in Alabama under orders for duties other than attending school; or
- The student is a resident of any county within the University of South Alabama's Service Area and has been a resident of that county for at least one year immediately preceding the date of registration; or
- The student has been a member of the Alabama National Guard for a period of at least two years immediately preceding the student qualifying for resident tuition and continues to be a member of the Alabama National Guard while enrolled at the public institution of higher education; or
- The student is in a program or takes courses within an interstate consortium of colleges or universities that either offers reciprocal resident student tuition to residents of Alabama in the program or courses offered by colleges or universities not within Alabama, or is enrolled in a program or courses through an interstate consortium of colleges or universities that assesses tuition at a uniform rate for all students enrolled in that course or program; or
- The student is an accredited member of or the spouse of an accredited member of a consular staff assigned to duties in Alabama.

If the student is a minor or dependent, then his or her "supporting person," as that term is defined in the Non-resident Tuition Policy statement, must meet similar tests which are described in the Non-resident Tuition Policy.

### In Determining Whether a Student Has a Residence in Alabama, The University Will Evaluate the Presence or Absence Of Connections With the State of Alabama Including, But Not Limited To, The Following:

- Continuous physical presence in the state or Service Area for a purpose other than attending school except for temporary absences for travel, military service, temporary employment, etc.
- Payment of income tax to the State of Alabama or Service Area in the previous calendar year.
- Evidence of employment in the State of Alabama or Service Area for the 12 consecutive months prior to the semester of registration.
- In-state or Service Area address and date shown on selective service registration, driver's license, automobile title registration, hunting and fishing license, insurance policies, stock and bond registrations, last will and testament, annuities, or retirement plans.
- Ownership of personal property in the state or Service Area and payment of state taxes thereon (e.g. automobile, boat, etc.) and possession of state license plates.
- Ownership of a residence or other real property in the state or Service Area and payment of state ad valorem taxes thereon; more significantly ownership of a residence other than the place where the student resides while in school.
- Residence in the state or Service Area of a spouse, parents, or children.
- Transfer of all banking services to Alabama or Service Area, such as "checking and savings" accounts, safe deposit boxes, and/or investment accounts.
- Financial transactions in the state or Service Area.

- Previous periods of residency in the state or Service Area continuing for 12 months or more.
- Possession of state or local licenses to do business or practice a profession in the state or Service Area.
- Membership in religious, professional, business, civic, or social organizations in the state or Service Area not connected to their status as a student.
- Location within the state or Service Area of the high school from which the individual graduated.
- Financial independence from non-Alabama resident parents or other relatives.
- Military records, such as Leave & Earning Statements, showing an in-state address. CO Letter indicating date of Assignment in Alabama or Service Area (for Active Duty Military).
- Documentation that Alabama or Service Area is home state of record for returning military personnel.

#### Other Possible Supporting Documentation:

Voter registration in the State of Alabama or Service Area; more significantly, certification of voting in the State of Alabama or Service Area that initially occurred at least 12 months prior to the initial registration of the student in Alabama at a public institution of higher education.

This list is not meant to be all inclusive and merely describes examples of supporting evidence which may be considered in the determination of whether a student has more substantial connections with the state of Alabama than any other state. Supplying such supporting evidence does not guarantee classification as a resident.

#### For a Student Who is Not a Minor, Factors Which May Show More Connections With a State Other Than Alabama Include, But Are Not Limited To, The Following:

- Student maintains ties with another state, excluding Service Area, such as maintaining a driver's license in another state, or owning a house in another state.
- Student begins living in Alabama or Service Area shortly before or only after being admitted to attend school in an Alabama university.
- Student lives in Alabama or Service Area only while in school and returns repeatedly to another state during summer term, vacations, and holidays.
- A parent or other person who is not an Alabama resident or Service Area resident provides more than minimal or occasional financial support.
- Student leaves personal possessions in another state, excluding Service Area, and only brings to Alabama what is necessary for temporary stay.
- Student receives PLUS loan money from parents who are not Alabama residents or Service Area residents.
- Student receives personal loans other than from a financial institution.
- Student obtains loans with co-borrowers who are non-Alabama residents.
- Student receives financial aid that requires the student to be a resident of another state.

For information regarding the Residency Reclassification process, please contact the Office of the Registrar at:

Office of the Registrar  
Meisler Hall, Suite 1100  
390 Student Center Circle  
Mobile, AL 36688  
Ph: (251) 460-6251  
residency@southalabama.edu

## Online Programs

Tuition and fees for programs delivered in a distance format are assessed based on a separate schedule approved by the Board of Trustees.

## International Student Residency Status

In general, international students may apply for residence reclassification but must have the ability to remain indefinitely in the United States and otherwise meet the requirements of the Code of Alabama 1975, Title 16, Chapter 64 (<http://alisondb.legislature.state.al.us/alison/codeofalabama/1975/coatoc.htm>). More specifically, a person must be a Permanent Resident Alien, Political Asylee, Political Refugee, or hold an A, E, G, H, I, L, O, P, R, TC, TD or TN visa to be eligible for review as an in-state resident for tuition purposes. Students with non-immigrant visa, such as a B, F, J or M status visa, will generally not be considered eligible for state residency status.

## Academic Common Market Non-Resident Tuition Remission

Academic Common Market (ACM) non-resident tuition remission (exemption) is available to students from certain states for specific academic programs. Application must be made first with the awarding state. The student must be a legal resident of that state and approved for a specific major at the University of South Alabama. Both undergraduate and graduate students are eligible to apply. The waiver is 100 percent of the non-resident tuition remission and will remain at this level unless the student's field of study changes, or a student no longer has full-time status.

A qualified student must maintain full-time status, remain in academic good standing and comply with all the requirements of the degree program. If a student changes their major from the approved ACM-certified major, then they must inform the Office of the University Registrar at USA of the change of status. The student will be responsible for the non-resident tuition for the remaining semesters at the University of South Alabama. To be eligible for the non-resident tuition remission during the first semester of enrollment, applications and resident verification must be submitted to and approved by the Office of the University Registrar prior to the first day of class.

For more information about submission and deadlines, please contact the Office of the University Registrar at (251) 460-6251. Students seeking information on the Academic Common Market waiver should contact the Academic Common Market at:

Southern Regional Education Board  
592 10th St. N.W.  
Atlanta, GA 30318-5776  
Main phone: (404) 875-9211  
Main fax: (404) 872-1477  
<http://www.sreb.org/academic-common-market> (<http://www.sreb.org/academic-common-market/>)

## Tuition and Fees

This schedule includes the basic fees required each semester of all students enrolled at the University. Since personal expenses including books, supplies, and other living expenses vary, no attempt is made to estimate those costs. The University reserves the right to change fees, as deemed necessary by the University Board of Trustees, without prior notice.

## Academic Infrastructure & Technology Fee

Fee	Amount
<b>Undergraduate (\$35/credit hour)</b>	
0-11 hours	\$0-385
12 or more hours	\$420
<b>Graduate (\$60/credit hour)</b>	
0-5 hours	\$0-300
6 or more hours	\$360
<b>Registration Fee (non-refundable)</b>	
0-14 hours (undergraduate)	\$150

## Undergraduate

Courses Taken in the Following Colleges	Per Semester hr In-State	Per Semester hr Out-of-State
College of Arts and Sciences	\$374	\$748
College of Education and Professional Studies	\$374	\$748
Pat Capps Covey College of Allied Health	\$389	\$778
School of Computing	\$389	\$778
Mitchell College of Business	\$399	\$798
College of Engineering	\$404	\$808
College of Nursing	\$423	\$846

**Note:** There is no registration fee for undergraduate Summer courses. Undergraduate students enrolled in less than 15 hours will be assessed a \$150 registration fee for fall and spring terms.

## Graduate

Courses Taken in the Following Colleges	Per Semester hr In-State	Per Semester hr Out-of-State
College of Arts and Sciences	\$480	\$960
College of Education and Professional Studies	\$480	\$960
Pat Capps Covey College of Allied Health		
Clinical Programs (PA, OT, SLP, PT, AUD)	\$505	\$1,176
Non-clinical programs	\$505	\$1,010

School of Computing	\$505	\$1,010
Mitchell College of Business	\$505	\$1,010
College of Engineering	\$519	\$1,038

## Web Course Credit Hour Rate for Tuition and Fees

### Undergraduate

Courses Taken in the Following Colleges	Per Semester hr
College of Arts and Sciences	\$374
College of Education and Professional Studies	\$374
Pat Capps Covey College of Allied Health	\$389
School of Computing	\$389
Mitchell College of Business	\$399
College of Engineering	\$404
College of Nursing	\$423
RN to BSN	\$328

### Graduate

Courses Taken in the Following Colleges	Per Semester hr
College of Arts and Sciences	\$480
College of Education and Professional Studies	\$480
Pat Capps Covey College of Allied Health	\$505
School of Computing	\$505
Mitchell College of Business	\$505
College of Engineering	\$519
College of Nursing	\$594

Nonresident Fees are waived for graduate assistants.

Students taking both online and on-campus courses are subject to additional on-campus fees including non-resident fees.

**Graduate Students enrolled in undergraduate courses will be assessed tuition at the graduate tuition rate.**

## Estimated Costs (Example Only)

### Full-time Commuting Students

Based upon 2024-2025

Course Fees of Typical Undergraduate Student	Semester	Year
Taking 15 credit hrs	\$5,610.00	\$11,220.00
Registration Fee	0	0
Academic Infrastructure & Technology Fee	\$420.00	\$840.00
	\$6,030.00	\$12,060.00

## Full-time Resident Students

Based upon 2024-2025

Course Fees of Typical Undergraduate Student	Semester	Year
Taking 15 credit hrs	\$5,610.00	\$11,220.00
Registration Fee	0	0
Academic Infrastructure & Technology Fee	\$420.00	\$840.00
Delta Room for Two	\$2,820.00	\$5,640.00
Jag Meal Plan	\$2,250.00	\$4,500.00
	\$11,100.00	\$22,200.00

## Departmental Fees

These fees are charged on a semester basis to students who enroll in certain courses; see Schedule of Classes (<https://www.southalabama.edu/schedule/>) for detailed information.

All students enrolled in courses utilizing university computing facilities will be charged a fee. The amount of the fee (\$15.00 or \$22.00) will be based on the planned level of computer utilization as defined by individual departments.

## Miscellaneous Fees

These fees are charged on a semester, yearly, or one-time basis or when certain conditions are present:

Miscellaneous Fee	Amount
<b>Admissions</b>	
Application Fee (non-refundable, on-line)	\$35.00
Application Fee (non-refundable, paper)	\$45.00
<b>Academic Infrastructure &amp; Technology Fee</b>	
Undergraduate (\$35/credit hour)	
0-11 hours	\$0-385.00
12 or more hours	\$420.00
<b>Graduate (\$60/credit hour)</b>	
0-5 hours	\$0-300.00
6 or more hours	\$360.00
Allied Health and Nursing Resource Fee	\$169.00
Payment Plan Enrollment Fee	\$35.00
Payment Plan Late Installment Fee	\$15.00
Biomedical Library Fee	\$10.00
College-Level Examination Recording Fee	\$10.00
Credit-by-Examination Fee (plus usual course fee)	\$30.00
<b>Document FAX Fee (non-refundable)</b>	
Domestic	\$10.00
International	\$15.00
Duplicate Diploma	\$25.00
Educational Testing Service Fee	\$15.00

Graduation Application Fee	\$65.00
HealthStream Fee - Fall Semester only - College of Allied Health Professionals	\$16.00
International Student Fee	\$100.00
JagEats (applies to students enrolled in 6 or more hours of on-campus courses)	\$175.00
Late Graduation Application Fee	\$25.00
Late Registration Fee (non-refundable)	\$100.00
Late Payment Fee (non-refundable)	\$50.00
Orientation Fee (one-time, non-refundable, all undergraduates)	\$100.00
Photo ID Fee (non-refundable, good for five years)	\$10.00
<b>Professional Liability Coverage (per academic year, non-refundable)</b>	
Fall	\$12.00
Spring	\$12.00
Summer	\$1.00
<b>Miscellaneous Fees</b>	
Returned Check Fee	\$15.00
Housing Returned Check Fee	\$25.00
<b>Resource Fee (Allied Health/Nursing)</b>	
Fall	\$169.00
Spring	\$169.00
Summer	\$169.00
<b>Resource Fee (College of Medicine)</b>	
Fall	\$254.00
Spring	\$254.00
Transcript Fee (per transcript)	\$10.00
Web Hybrid and Web Blended Classes	\$35.00

## Room and Board

The University offers a variety of residence hall accommodations and meal plan options. Students living in the residence halls are required to purchase a meal plan. The charges shown below are for one semester. The room rates are subject to change without notice by the University Board of Trustees.

### Residence Hall Fees - Revised June 2024

Room Type	Residence Hall	Community	Semester Room Rate <sup>1</sup> per Person
<b>Rooms for 2</b>			
Room for 2	Delta 3	Delta	\$2,340.00/Sem
Room for 2	Epsilon 1 & 2	Epsilon	\$3,000.00/Sem
Room for 2	Azalea Hall	Azalea Hall	\$3,000.00/Sem
Room for 2	Camellia Hall	Camellia Hall	\$3,000.00/Sem
Large Room for 2	Delta 3-5	Delta	\$2,340.00/Sem
<b>Suite-Style</b>			
Suite-Style for 1	Gamma 0-4	Beta/Gamma	\$3,110.00/Sem
Suite-Style for 1	Stokes Hall	Stokes Hall	\$3,350.00/Sem

**Apartment Style  
for 2 or 4**

2 Bedroom Apt. for 4	Beta 1	Beta/Gamma	\$2,340.00/Sem
Studio Apt. for 2	Beta 1-5/Gamma 5-9	Beta/Gamma	\$3,060.00/Sem
2 Bedroom Apt. for 2	Beta 1-5/Gamma 5-9	Beta/Gamma	\$3,380.00/Sem
Room for 2 with Kitchenette	Delta 6	Delta	\$2,820.00/Sem
<b>Private (limited availability)</b>			
Private Room	Delta 3-5	Delta	\$3,000.00/Sem
Private Room with Kitchenette	Delta 6	Delta	\$3,110.00/Sem
Large Private Room with Kitchenette	Delta 6	Delta	\$3,750.00/Sem
Large Private Room	Delta 4-5	Delta	\$3,110.00/Sem
Large Private Room	Gamma 0-4	Beta/Gamma	\$3,110.00/Sem
Large Private Room	Epsilon 1-2	Epsilon	\$3,750.00/Sem
Private Apartment	Beta 4/Gamma 5-9	Beta/Gamma	\$3,380.00/Sem

**Greek Housing**

For information about Fraternity and Sorority Housing rates, please visit <https://www.southalabama.edu/departments/housing/fshapply.html>.

<sup>1</sup> All rates are subject to change. Room rates include campus mailbox, digital cable, Ethernet & wireless internet access, all utilities (electricity, water/sewer, heat/air, garbage service, and pest control), housing and facilities staff available 24/7, accommodation furnishings, and unlimited laundry access.

**Board Plans**

Information on the Board Plans is available through USA Dining, located in the Student Center, (251) 460-6296. See Housing & Dining (<https://www.southalabama.edu/departments/housing/>) for additional information.

These are the University of South Alabama's payment policies effective Fall Semester 2024. Payment can be made via cash, check, electronic check or money order, Visa, MasterCard, Discover or American Express card. Student payments can be made online on PAWS with your credit card or ACH web check. Payment Drop Boxes are located at Meisler Hall and the lobby of the College of Education. (No Cash Please.) The Office of Student Accounting is open Monday-Friday 8:00 AM - 5:00 PM.

**Payment Plans**

The University of South Alabama offers the option to pay in full or to pay via participation in a payment plan. Students must enroll in the payment plans in accordance with each semester's payment deadlines or their class schedule is subject to cancellation.

Payment by payment plan requires the student or authorized user to sign up each term within their student financial account. The plan features four monthly payments for the Fall and Spring terms (late enrollment may reduce the number of payments available to three) based on actual charges and plan enrollment date. Three payments are offered for the Summer term. The plan payments may increase or decrease if a student makes changes to their schedule. A late fee of \$15 will apply if installment payments are not made by the due date. Installment plan payments are divided equally according to the duration of the plan.

The first payment and a \$35 nonrefundable processing fee are due at the time of enrollment. Students must have a minimum balance of \$400 to be eligible to enroll in the payment plan. Students with a past-due balance of \$200 or more from a previous term are not eligible to participate. Students in the College of Medicine, English Language Center, and Study Abroad are not eligible to participate. Enrolling in a payment plan does not result in automatic payment scheduling. Payment plan participants must either log in each month to make payments or schedule their payments in advance according to the due dates of the plan installments within the student financial account.

How to enroll in the payment plans.

Please go to <http://paws.southalabama.edu>

- Enter Secure Area
- Login
- Student Services & Financial Aid
- Student Records
- Student Account Access

**Please see** <http://www.southalabama.edu/departments/financialaffairs/studentaccounting/financialcalendar.html> **for summer payment deadlines.**

**2024 - 2025 Payment Policy Summary**

Full payment or enrollment in a payment plan is required for all tuition and fees, including housing and meals, by the following dates for students registered before the first day of class.

- Fall 2024 - August 14, 2024, on-campus payments or online (PAWS).
- Spring 2025 - January 8, 2025, on-campus payments or online (PAWS).

Full payment or enrollment in a payment plan is required for all tuition and fees, including housing and meals, by the following dates for students registering during the late registration period.

- Fall 2024 - August 27, 2024, on-campus payments or online (PAWS).
- Spring 2025 - January 17, 2025, on-campus payments or online (PAWS).

Class cancellations will occur on the following dates:

- Fall 2024
  - 1st cancellation - August 15, 2024, if account is not paid in full or not enrolled in a payment plan.
  - 2nd cancellation - August 28, 2024, if account is not paid in full or not enrolled in a payment plan.
- Spring 2025
  - 1st cancellation - January 9, 2025, if account is not paid in full or not enrolled in a payment plan.
  - 2nd cancellation - January 21, 2025, if account is not paid in full or not enrolled in a payment plan.

#### Late Registration and Re-registration Periods:

- Fall 2024: August 20-26, 2024
- Spring 2025: January 13-17, 2025

Students registering during the late registration period will be assessed \$100 Late Registration.

**Please see** <https://www.southalabama.edu/departments/financialaffairs/studentaccounting/financialcalendar.html> **for summer payment deadlines.**

## Fall Semester 2024

Date	Event
April 1	Registration for continuing students
July 22	Financial Aid/Scholarship Bookstore charges begin
August 14	100% of Fall balance due
August 15	All registration schedules released if 100% payment deadline not met or participation in the Payment Plan.
August 20	Classes Begin 100% refund period on dropped courses and complete withdrawals.
August 27	Deadline for electronic direct deposit (EDD) enrollment Late registration 100% of balance* due
August 27	100% refund period on dropped courses and complete withdrawals end at 10:00 PM Late registration schedules released if 100% payment deadline not met or participation in the Payment Plan. Financial Aid/Scholarship Bookstore Charges End
August 28	50% refund period begins on dropped courses and complete withdrawals.
August 30	Financial Aid Refunds Begin
September 2	50% refund period ends: No course withdrawal refunds after this date.

## Spring Semester 2025

Date	Event
October 28	Spring registration for continuing students
December 2	Financial Aid/Scholarship Bookstore Charges Begin
January 8	100% of Spring Balance Due
January 9	All registration schedules released if 100% payment deadline not met or participation in the Payment Plan.
January 13	Classes Begin 100% refund period begins on dropped courses and complete withdrawals.
January 17	Late registration 100% of balance* due
January 20	100% refund period on dropped courses and complete withdrawals end at 11:59 PM
January 21	Financial Aid/Scholarship Bookstore charges end Late registration schedules released if 100% payment deadline not met or participation in the Payment Plan Deadline for electronic direct deposit (EDD) enrollment 50% refund period begins on dropped courses and complete withdrawals.
January 26	50% refund period ends: No course withdrawal refunds after this date.
January 28	Financial Aid Refunds Begin

## Financial Aid Refunds Will Be Distributed After Drop/Add

The Office of Student Accounting will review eligibility after the third day of class and process the refunds within 10 business days. Refunds will continue to be processed via direct deposit and checks.

For more detailed information, please see the Schedule of Classes for fall semester. Remember, if you are a financial aid recipient, be sure to apply early and complete your file in a timely manner. Enrollment Services will be happy to direct students to the proper office, should assistance be needed.

## Charging Privileges at the USA Bookstore (For Financial Aid Recipients Only)

**Students who have been awarded financial aid may now charge their books at the USA Bookstore immediately.** Students will no longer need to wait until their financial aid balance is returned to them to buy books. If a student has been awarded financial aid by USA's Office of Financial Aid and has excess funds after all tuition, fees, meals, and housing have been paid, he or she may charge up to \$1,500 (or the available balance, whichever is less) of books at the USA Bookstore. The Bookstore will have the available amount at checkout. Bookstore charges will be placed

on the student's account and covered by the financial aid disbursement. **Bookstore charges for the Fall 2024 Semester will run from July 22 to August 27, 2024, and from December 2, 2024, to January 21, 2025, for the Spring 2025 Semester.**

## University Withdrawals and Refunds

A student who withdraws from one or more courses may request a refund on course fees only. The refund period is the first two weeks of the semester.

Withdrawal Date	Percent of Fees Refunded
First day of class through eighth day of classes (calendar days)	100%
Ninth day of class through fourteenth day of classes (calendar days)	50%

For complete withdrawals, other fees are also proportionately refunded, except those listed as nonrefundable. The actual dates for withdrawals are shown in the University Calendar (<https://www.southalabama.edu/academiccalendar/>) section of this Bulletin.

Application fees and registration fees (including the late-registration or late-payment fees) are nonrefundable fees.

A student called for military service during the school term should consult the Office of Student Accounting regarding refunds of fees.

Housing and Meal Plan refund information is located at: <https://www.southalabama.edu/departments/housing/financialpolicies.html>.

## Guaranty Tuition Bond

For certain distance education courses, the University of South Alabama maintains a guaranty tuition bond covering any amounts of tuition that may be refundable according to the policies of the University. To obtain a copy of this bond, please e-mail your request to USAonline at [ecampus@southalabama.edu](mailto:ecampus@southalabama.edu).

## Federal Financial and Recipient Withdrawals and Refunds

### Return of Federal Financial Aid Refunds

In accordance with federal guidelines, when a student completely withdraws from school, a portion of Federal Financial aid grant or loan funds, except for Federal Work-Study earnings, must be returned to the applicable federal program (s). If a federal aid recipient completely withdraws from school after beginning attendance, the amount of federal aid earned by the student must be determined based on the number of days the student attended in the given term. If the amount disbursed to the student is greater than the amount the student earned, the unearned federal aid funds must be returned. Federal aid funds will be returned in the following order:

- Unsubsidized Direct Stafford loans (other than PLUS loans)
- Subsidized Direct Stafford loans
- Federal Perkins loans
- Direct PLUS loans
- Federal Pell Grants
- Federal SEOG

- Federal TEACH Grants
- Iraq and Afghanistan Service Grant

**Note:** If your Title IV Financial Aid required return is greater than the posted University refund at the time of your withdrawal, you will owe the difference to the University. The Office of Student Accounting will notify you of the amount due.

If a student completely withdraws after completing 60% of the term, then it is assumed that the student has earned 100% of their federal aid award, and no funds will be returned to the federal programs.

## Return of Department of Defense Tuition Assistance Funds

In accordance with the Department of Defense Memorandum of Understanding (MOU), the University is required to return unearned funds to the program, if a student withdraws from a course paid for by Department of Defense funds (tuition assistance), based on the following schedules:

### 5-week Course Withdrawal

Withdrawal Date	Percent of Fees Refunded
Day 1-7	100% return
Day 8	77% return
Day 9	74% return
Day 10	71% return
Day 11	69% return
Day 12	66% return
Day 13	63% return
Day 14	60% return
Day 15	57% return
Day 16	54% return
Day 17	51% return
Day 18	49% return
Day 19	46% return
Day 20	43% return
Day 21	40% return (60% of course is completed)
Day 22	0% returns

### 8-week Course Withdrawal

Withdrawal Date	Percent of Fees Refunded
Before or during week 1	100% return
During week 2	75% return
During weeks 3-4	50% return
During week 5	40% return (60% of course completed)
During weeks 6-8	0% return

### 16-week Course Withdrawal

Withdrawal Date	Percent of Fees Refunded
Before or during weeks 1-2	100% return
During weeks 3-4	75% return
During weeks 5-8	50% return

During weeks 9-10	40% return (60% of course is completed)
During weeks 11-16	0% return

## Delinquent/Unpaid Accounts

In the event of an unpaid balance of any nature on the student's account (including any unpaid check returned by a bank) the following services will be withheld until the balance is paid in full:

- Enrollment for subsequent terms
- Transcripts, including any for transfer of college credits
- Grades, including viewing on PAWS
- Diploma

If it is necessary to refer an unpaid account to an outside collection agency, any costs and fees of collection (up to 34% of the debt) will be added to the student's account, and the account will be reported to the credit bureaus. If legal action is required to collect the account, attorney fees will be added to the amount due.

## Offset of Funds

If a student's University account has an outstanding balance due, of any nature, including departmental fines and the University has in its possession any funds payable to the student (from payments or credits applied to the student's account, payroll checks, and/or any other source, except federal financial aid awards), the University reserves the right to withhold the funds necessary to clear the student's outstanding balance and to cover any collection costs incurred. Once those amounts are paid, any remaining funds are paid to the student.

## Check-Cashing Service

Checks drawn on out-of-town banks to a maximum of \$25.00 may be cashed at the Office of Student Accounting by presenting a valid I.D. card. A \$15.00 charge will be made on each returned check not paid by the bank. Checks are not cashed for students during the last two weeks of classes each semester.

## Financial Aid

- Financial Aid General Information (p. 36)
- One Stop (p. 42)
- Scholarships (p. 42)

## Financial Aid General Information

### Purpose

The University of South Alabama (USA) subscribes to the principle that the purpose of financial aid is to provide assistance to students who, for lack of funds, would otherwise be unable to attend college. Financial aid is offered according to each student's need in relation to college costs. Aid offers may include grants, loans and part-time employment, and may be offered to a student in various combinations.

Inquiries about financial aid should be addressed to:

The Office of Financial Aid (<https://www.southalabama.edu/departments/finaid/>)  
390 Student Center Circle, 1200 Meisler Hall  
University of South Alabama, Mobile, AL 36688-0002

telephone (251) 460-6231 or e-mail: [finaid@southalabama.edu](mailto:finaid@southalabama.edu).

## Applying for Financial Aid

Students interested in receiving federal student aid must complete the Free Application for Federal Student Aid (FAFSA) at <https://fafsa.gov>. The FAFSA must be filed each year. USA's federal school code is 001057. By listing USA's federal school code and completing the FAFSA correctly, USA will receive the FAFSA electronically. Upon receipt of this data, notification will be sent via email of additional forms needed by the Office of Financial Aid.

Students are eligible to continue receiving financial aid as long as they meet federal aid eligibility criteria and the academic policies of the USA. Students must also meet the conditions of Satisfactory Academic Progress (SAP) as defined in the current University Bulletin.

Additionally, students may be asked to submit information such as tax transcripts and other documents to support the information provided on the FAFSA. Official aid offers will not be determined until all requested documents are received and reviewed.

When all required application information is submitted to the Office of Financial Aid, the student's file is reviewed and evaluated to determine eligibility for federal aid. Students are notified of their aid offers via JagMail.

## Application Deadlines

Students who submit all required application data early and correctly will receive priority for financial aid funding. Please refer to the Office of Financial Aid's website at <https://www.southalabama.edu/departments/finaid/> for important deadlines.

## Disbursement of Financial Aid

Financial aid is typically disbursed on the eighth day of each academic term and paid to students at the rate of one-half (1/2) per semester.

Aid eligibility is determined at the end of the official Drop/Add period. Classes added after the Drop/Add period ends will not increase a student's aid eligibility.

All aid except Federal Work Study (FWS) will be applied to institutional charges. Students whose federal aid eligibility has not been determined by the payment deadlines or whose federal aid does not cover all institutional charges should be prepared to pay the difference with a personal check, credit card or enroll in the University Payment Plan. If the amount of aid is more than institutional charges, the excess funds excluding scholarships will be issued as a credit balance refund by the Office of Student Accounting.

## Admission

To be considered for financial aid, a student must be accepted for admission. A student must be classified as a degree seeking student in an eligible program and major. Students who are non-degree, unclassified, transient, or audit students are not eligible to receive financial aid. Only courses required for the student's degree program can be used to determine enrollment status.

## Citizenship

For all programs, an applicant must be a citizen of the United States or an eligible noncitizen.

## Federal Pell Grant

The Federal Pell Grant is a need based grant given to undergraduate students who are seeking their first bachelor's degree. Eligibility is determined through a standard formula established by Congress, which is used to evaluate the information reported on the FAFSA. This will produce a Student Aid Index. The amount of Pell Grant a student is eligible to receive depends on the SAI and enrollment intensity. Students must be enrolled full time in order to receive the full amount of the Pell Grant listed on their finalized aid offer. A student's Pell Grant eligibility cannot exceed 600% which is the equivalent of 12 full time semesters. Pell Grant does have to be repaid.

- Maintain a cumulative USA GPA of at least a 3.25.
- An overall undergraduate GPA of at least 3.25 documented on the transcript at the time of graduation for new graduate students or a cumulative USA graduate GPA of 3.25 for continuing graduate students.

**If a student receives a TEACH Grant but does not complete the required teaching service, the student will be required to repay the grants as a Federal Direct Unsubsidized Direct Loan with interest charged from the date of each TEACH Grant disbursement.**

## Federal Supplemental Educational Opportunity Grant (FSEOG)

The Federal Supplemental Educational Opportunity Grant (SEOG) is a need based grant given to undergraduate students who are enrolled in a first bachelor's degree program and are Federal Pell Grant eligible. Students with the highest need are given priority. SEOG funds are limited and are given to eligible students until the funds are depleted. SEOG does not have to be repaid.

## Federal Teacher Education Assistance for College & Higher Education (TEACH) Grant

Federal Teacher Education Assistance for College & Higher Education (TEACH) Grant are conditional grants of up to \$4,000 per year provided to students who intend to teach in a public or private elementary or secondary school that serves students from low-income families.

In exchange for receiving a TEACH Grant, students must agree to serve as a full-time teacher in a high-need field in a public or private elementary or secondary school that serves low-income students. For more information on high-need fields and schools serving low-income students, visit <https://studentaid.gov>.

As a recipient of a TEACH Grant, students must teach for at least four academic years within eight calendar years of completing the program of study for which they received a TEACH Grant.

To receive a TEACH Grant, students must meet the following criteria:

- The FAFSA must be filed for the application year and USA must have the results of the FAFSA.
- Be a U.S. citizen or eligible non-citizen.
- Meet USA's Satisfactory Academic Progress standards.
- Attend each term at USA. Disbursement amounts are prorated based on hours of attendance. (ex: Full Time - 100% award, 3/4 time - 75% of award, 1/2 time - 50% of award, less than half time - 25% of award)
- If an undergraduate student (second bachelor's student are not eligible):
  - Be enrolled in the College of Education and Professional Studies in an eligible TEACH Grant major.
  - Maintain a cumulative USA GPA of at least a 3.25
  - A final high school GPA of 3.25 for a new first year students or a cumulative USA GPA of 3.25 for continuing students.
- If a graduate student (not eligible if received TEACH for previous degree in same teaching field):
  - Be enrolled in the College of Education and Professional Studies in an eligible TEACH Grant major.

## Alabama Student Assistance Program (ASAP)

Alabama Student Assistance Program (ASAP) is a need-based grant offered to eligible Alabama residents seeking a first undergraduate degree and are Federal Pell Grant recipients.

The amount of ASAP offered depends on the student's need, the amount of funds allocated to USA, and the availability of funds.

## Federal Work Study (FWS)

Federal Work Study (FWS) is a federally funded part time work program administered through the Office of Financial Aid. FWS is need-based and offered to students based on their eligibility as determined by the FAFSA and other financial aid criteria. FWS funds are limited and are offered to eligible students on a first come first serve basis until the funds are depleted.

The Office of Financial Aid will offer FWS to eligible students as part of their financial aid package. These funds must be earned and will not be available at the time of registration for the payment of fees. The amount listed on a student's aid offer is the maximum amount available to earn from the FWS program and will usually allow student employees to work up to 15 hours per week. FWS student employees are paid bi-weekly. Each student is required to accept their FWS offer, complete orientation, locate a job and begin working within 30 days of the first day of class.

The FWS Program provides funding for both on campus and off campus jobs. Students assigned on campus FWS are able to apply for jobs that are available on USA's campus. Students who are assigned off campus FWS may apply for community service-based jobs or through USA's Students Teaching America's Youth (STAY) program in partnership with the Mobile County Public School System (MCPSS) elementary schools under the America Reads Program. Through the STAY program, FWS students assist teaching students in approved Mobile County public elementary schools. STAY students are required to pay for a nationwide background check and be cleared before working in the elementary school. Some community service opportunities may require a background check as well. FWS jobs are exclusively posted on <https://southalabama.joinhandshake.com/login> (<https://southalabama.joinhandshake.com/login/>).

## Student Employment Program

Part-time employment is available to students through individual departments or colleges. Students should contact departments or colleges directly regarding possible employment opportunities for student employment.

## Off-Campus Employment

The Job Location and Development (JLD) Program is a federally funded program administered through the Office of Financial Aid and is dedicated to helping students find part-time employment to help alleviate the increasing cost of education. The primary goal of this program is to help currently enrolled students locate off-campus, part-time job opportunities regardless of financial need. Announcements of part-time job openings in the Mobile, AL and surrounding areas are posted in Handshake at <https://www.southalabama.edu/departments/finaid/job.html>. Students must be enrolled at USA to access the job listings.

## Federal Direct Loans

Federal Direct Loans are low interest loans that undergraduates, parents of dependent undergraduates and graduates may obtain from the federal government. They include the Federal Direct Subsidized Loan, Federal Direct Unsubsidized Loan, Federal Direct Parent Loan for Undergraduate Students (PLUS) Loan and the Federal Direct Graduate PLUS Loan. These loan programs were created by Congress to help all eligible students and parents with and without financial need pay for educational expenses. Students must be enrolled at least half time to be eligible to receive Federal Direct Loan funds.

Federal Direct Loans have loan origination fees that are a percentage of the total loan amount. The loan fee is deducted proportionately from each loan disbursement that is received. Information regarding loan fees and interest rates can be found at <https://studentaid.gov>.

## Direct Subsidized Loan

The Direct Subsidized Loan is offered to undergraduate students with demonstrated need. The federal government pays the interest that accrues while the student is in school.

## Direct Unsubsidized Loan

The Direct Unsubsidized Loan is offered to both undergraduate and graduate students without demonstrated need. The student pays the interest that accrues while in school and during the grace period. Undergraduate students may receive a combination of both Subsidized and Unsubsidized loans depending on their eligibility of need versus no-need and their dependency status.

## Federal Direct Loan Limits

### Dependent Undergraduates

- Freshmen may borrow up to \$5,500 per year. (Not to exceed \$3,500 in Federal Direct Subsidized Loans)
- Sophomores may borrow up to \$6,500 per year. (Not to exceed \$4,500 in Federal Direct Subsidized Loans)
- Juniors and Seniors may borrow up to \$7,500 per year. (Not to exceed \$5,500 in Federal Direct Subsidized Loans)
- The maximum that all dependent undergraduates may borrow for all years is \$31,000 (not to exceed \$23,000 in Federal Direct Subsidized Loans).

### Independent Undergraduates

- Freshmen may borrow up to \$9,500 per year. (Not to exceed \$3,500 in Federal Direct Subsidized Loans)
- Sophomores may borrow up to \$10,500 per year. (Not to exceed \$4,500 in Federal Direct Subsidized Loans)

- Juniors and Seniors may borrow up to \$12,500 per year. (Not to exceed \$5,500 in Federal Direct Subsidized Loans)
- The maximum that all independent undergraduates may borrow for all years is \$57,500. (Not to exceed \$23,000 in Federal Direct Subsidized Loans)

## Graduate Students

- Graduate students may borrow up to \$20,500 per year in Federal Direct Unsubsidized Loans.
- The maximum that all graduate students may borrow is \$138,500. (including Federal Direct Loans received as an undergraduate student)

The table below displays sample repayment plans. The minimum Federal Direct Loan payment is \$50 per month, and repayment usually begins six (6) months after a student graduates, drops below half time enrollment or leaves school.

### Appropriate Monthly Repayment Plan

Loan Amount	Monthly Payment	# of Payments	Total Interest Paid	Total Amount Paid
1,000	50.00	22	76.87	1,076.87
1,500	50.00	34	179.19	1,679.19
2,000	50.00	47	333.94	2,333.94
2,500	50.00	62	555.12	3,051.12
3,000	50.00	77	843.97	3,843.97
3,500	50.00	95	1,230.30	4,730.30
4,000	50.00	115	1,735.12	5,735.12
5,000	66.66	120	2,279.66	7,279.66
7,500	91.00	120	3,419.48	10,919.48
10,000	121.33	120	4,559.31	14,559.31

## Federal Direct Parent Loan for Undergraduate Students (PLUS)

The Federal Direct Parent Loan For Undergraduate Students (PLUS) allows parents to borrow up to the Cost of Attendance, less other financial aid. A credit check is required for all Federal Direct PLUS Loan applications. The parent borrower is generally expected to start making payments on the Direct PLUS Loan once the loan is fully disbursed. However, the parent borrower may request a deferment while the student is enrolled at least half-time and for an additional six months after the student graduates, leaves school, or drops below half-time enrollment. A student must be enrolled at least half-time to be eligible for the funds. Please visit <https://studentaid.gov> for current loan fees and interest rates.

## Federal Direct Graduate PLUS Loan

Federal Direct Graduate PLUS Loans are offered to students attending graduate school. With a Graduate PLUS Loan, students may borrow up to the full cost of their education less other financial aid received including Federal Direct Unsubsidized Loans. A credit check is required for all Graduate PLUS Loan applications. A student must be enrolled at least half time to be eligible for the funds. Repayment of Graduate PLUS Loans is not required while the student is in enrolled at least half-time, and for an additional six months after graduation, leaving school or dropping below half-time enrollment. Please visit <https://studentaid.gov> for current loan fees and interest rates.

## Federal Direct Student Loan Counseling Entrance Counseling

Students borrowing Federal Direct Loans for the first time at USA must complete online Entrance Counseling before receiving their loan disbursement. During Entrance Counseling, students will be informed of their rights and responsibilities as borrowers, advised on the consequences of excessive borrowing, of defaulting on a student loan, and given tips on money management. Students must complete Entrance Counseling online at <https://studentaid.gov>.

## Exit Counseling

Students who borrowed a Federal Direct Loan while attending USA must complete online Exit Counseling before leaving the University through graduation, withdrawal, transfer, or when dropping below half-time status. Students should complete Exit Counseling online at <https://studentaid.gov>. Completion of Exit Counseling will not prevent receipt of federal aid in the future or prevent a student from returning to school.

## Overawards

### Definition

When students receive federal funds, their financial need is established according to federal guidelines. Students may not receive more financial assistance than their Cost of Attendance. This occasionally occurs when students receive funds from other sources after the Office of Financial Aid issues a financial aid offer. This situation is called an overaward.

When overawards occur, the Office of Financial Aid is required to adjust the student's financial aid. Students may be required to repay some of the funds they have already received.

To prevent overawards, students should take the following steps:

- Notify the Office of Financial Aid of any assistance from outside sources not listed on the award letter such as scholarships, ROTC, etc.
- Check with the Office of Financial Aid before applying for financial assistance from other sources.

## Federal Financial Aid Recipient Withdrawals and Return to Title IV Funds

The Return to Title IV Funds Policy applies to all federal aid recipients who completely withdraw from the University or cease academic participation in all classes during the term of enrollment, after federal aid has been disbursed. Federal financial aid recipients considering withdrawing from all courses are advised to contact the Office of Financial Aid prior to withdrawal.

**Please Note:** This policy would not apply to students who withdraw from some classes but continue academically participating in and ultimately earn credit for their remaining classes. However, withdrawing from any classes can still impact future federal financial aid eligibility. Please refer to USA's Satisfactory Academic Progress Policy for more information.

Federal financial aid (Title IV aid) is offered under the assumption that the student will attend school for the entire term of enrollment for which the federal aid is received. When a Title IV aid recipient completely withdraws or ceases attendance in all classes, on or before completing 60% of the term, the University is required to return a percentage of the disbursed aid.

### 1. Official Withdrawals:

Official withdrawals occur when an enrolled student drops all registered courses for the term through their PAWS account. Students may contact the Office of the Registrar at (251) 460-6251 or by email at [registrar@southalabama.edu](mailto:registrar@southalabama.edu) for more information regarding the official withdrawal process.

### 2. Unofficial Withdrawals:

Unofficial withdrawals occur when an enrolled student begins academic participation and received Title IV aid, but ceases to attend class without officially withdrawing; the student is considered to have unofficially withdrawn for Title IV aid purposes. This includes students who earn failing grades in all classes if it is determined the student ceased academic participation in classes before the end of the term. The withdrawal date for a student who unofficially withdraws is the last date of academic participation reported by the student's instructor(s).

When a student is considered to have completely withdrawn during a semester in which he/she has begun attendance and received Title IV aid, federal regulations require the University to perform a calculation to determine the amount of Title IV aid that was earned versus unearned. A student is only eligible to retain the percentage of Title IV aid originally disbursed that is equal to the percentage of the term of enrollment actually completed by the student. If the amount disbursed to the student is greater than the amount the student earned, the unearned Title IV aid funds must be returned.

**Example:** If a student completed 30% of the term, the student would earn 30% of the aid they were originally scheduled to receive. The unearned Title IV aid must then be returned to the appropriate federal aid program(s). If more than 60% of the term of enrollment has been completed by the student, the student is considered to have earned all of the disbursed aid for the term and no Title IV aid needs to be returned.

In accordance with federal regulations, unearned Title IV aid shall be returned in the following order:

- Federal Direct Unsubsidized Stafford Loans
- Federal Direct Subsidized Stafford Loans
- Federal Direct Parent or Graduate PLUS Loans
- Federal Pell Grants
- Iraq and Afghanistan Service Grant
- Federal Supplemental Educational Opportunity Grants (SEOG)
- Federal Teacher Education Assistance for College and Higher Education Grants (TEACH)

The unearned portion of Title IV aid will be charged back to the student's billing account and must be repaid by the student. A hold will be placed on the student's account by the Office of Student Accounting until the outstanding balance is repaid. If it is determined that a portion of a student's federal financial aid must be returned due to completely withdrawing from the school, an email notification will be sent to the student's Jag Mail account.

The requirements of the Return to Federal Financial Aid (Title IV aid) program funds when a student withdraws are separate from other USA refund policies. If a student's required return to the Title IV aid program(s) is greater than the posted University refund at the time of withdrawal, the student will owe the difference to the University. Therefore, a student may

still owe funds to the school to cover unpaid institutional charges and/or any federal aid funds that the school was required to return.

## Student Rights

### Students Have The Right To Know:

1. The names of organizations which accredit and license the University;
2. About the University's programs, instruction, laboratories, physical facilities, and faculty;
3. The cost of attending the University and its refund policy;
4. The type of financial assistance offered by the University from federal, state, local, and private programs;
5. Who the financial aid personnel are and the location of the Office of Financial Aid;
6. What the procedures and deadlines are for applying for financial aid;
7. How the University selects its financial aid recipients;
8. How the University determines financial need;
9. How much financial need has been met;
10. How financial aid is received;
11. About each type of financial assistance offered;
12. Information about all student loans offered;
13. The kind of Federal Work Study (FWS) jobs that are offered, hours, duties, rate, and frequency of pay;
14. When and how financial aid offers are adjusted;
15. About special facilities for the handicapped; and
16. The University's Satisfactory Academic Progress (SAP) Policy.

## Consumer Complaint Procedures

Students and prospective students should be aware that, should they have concerns or complaints related to the management or conduct of the Title IV financial assistance programs or to misleading or inappropriate advertising and promotion of the institution's educational programs, this institution has a complaint procedure. To the extent possible, students must seek a resolution of such matters through the institution's internal complaint procedure before involving others. Students with complaints should refer to the guidelines at <https://www.southalabama.edu/departments/studentaffairs/grievances.html>. Should the institution not be able to resolve the problem, students may contact the Department of Education Ombudsman at 1 (202) 401-4498 or toll free at 1 (877) 557-2575.

## Student Responsibilities

### Students Have The Responsibility To:

1. Review and consider all information about the University before enrolling;
2. Pay special attention to the application for financial aid, complete it accurately, submit it on time and to the right place;
3. Know all deadlines for applying for aid and meet them;
4. Provide all required documentation, corrections, and/or information requested by the Office of Financial Aid;
5. Notify the University of any information that has changed since the financial aid application was submitted;
6. Read, understand, and keep copies of all forms;
7. Repay any student loans borrowed;

8. Complete Entrance and Exit Counseling at <https://studentaid.gov> if borrowing federal student loans.
9. Notify the Office of Financial Aid of a change in name, address, or enrollment status (half-time, full-time, three-quarter-time);
10. Satisfactorily perform the work agreed upon in a Federal Work-Study (FWS) job;
11. Understand the University's refund policy.

## Satisfactory Academic Progress (SAP) Policy

Federal financial aid funds are given with the understanding that students will make progress toward their chosen degree. The University of South Alabama, as directed by the U.S. Department of Education, has established guidelines (Standards of Satisfactory Academic Progress) to follow in order to meet this goal. To download a copy of the policy, please visit <https://www.southalabama.edu/departments/finaid/sap.html>.

Standards of Satisfactory Academic Progress apply for the following types of federal financial aid funds:

- Federal Pell Grant
- Federal Supplemental Educational Opportunity Grant (SEOG)
- Federal Work-Study (FWS)
- Federal Perkins Loan
- Federal Direct Loans (Subsidized & Unsubsidized)
- Federal Direct PLUS Loan
- Federal Direct Graduate PLUS Loan
- Federal Teacher Education Assistance for College & Higher Education Grant (TEACH)
- Iraq and Afghanistan Service Grant

The requirements of this policy apply to all undergraduates, graduates, and doctoral students including all levels of enrollment. Satisfactory Academic Progress is evaluated at the end of each semester.

## Student Standards for Satisfactory Academic Progress (SAP)

The Standards of Satisfactory Academic Progress (SAP) are comprised of the following components. Students who fail to meet any one of these academic standard components outlined below will lose their eligibility for federal financial aid funds. Students can view their SAP status at any time on PAWS.

**Cumulative Grade-Point Average (CGPA):** Undergraduate students must maintain a minimum CGPA of at least 2.0 on all credit hours attempted at USA. **Please note:** Undergraduate students enrolled in programs in the College of Education after being admitted to Candidacy must have and maintain a minimum 2.2 CGPA for non-teacher certification programs, or a 2.75 CGPA and 2.75 program GPA for teacher certification programs.

Graduate students must maintain a CGPA of 3.0 to meet minimum CGPA requirements.

**Please note:** Graduate students enrolled in the College of Education after being admitted to Candidacy must maintain a CGPA of 3.25 as well as a 3.25 program GPA and a 3.5 GPA for Educational Specialist Degree programs in order to graduate.

**Pace of Progression Requirements:** To ensure that students earn a degree within the maximum time frame allowed, students must be passing 67% of all attempted hours (including transfer hours).

**Maximum Time Frame:** Federal financial aid funds cannot be paid to a student who exceeds 150% of the published length of the degree program (including transfer hours) in credit hours.

Examples:

1. If a student's degree is a 120 hour program:  $120 \times 150\% = 180$  attempted hours maximum time frame. The student is eligible for only the first 180 hours attempted.
2. If a student transfers and bring 70 hours credit into a 120 hour program:  $120 \times 150\% = 180 - 70 = 110$  hours maximum time allowed for degree funding (transfer credits count towards credit hours attempted and earned so when the student transfers, the initial calculation would be 70/70).

**Please note:**

- Assigned grades of A, B, C, D, F and F\* are all included in the CGPA, Pace of Progression, and Maximum Time Frame components. Courses with non-assigned letter grades of S, P, U, I, X, WD, AU, UA, and N are considered in Pace of Progression and Maximum Time Frame components but are not included in the CGPA component.
- All terms of attendance are reviewed including terms when no federal financial aid funds were received.
- Students transferring to USA are assumed to be maintaining Satisfactory Academic Progress. Grades from transfer credits will not factor into the CGPA at USA but transfer credits will count as credits attempted and credits earned.
- A student may elect to declare Academic Bankruptcy, as defined in the USA Bulletin, in which none of a student's prior course work is counted towards completion of grade requirements and the computation of their institutional CGPA. Credit hours and grades earned prior to declaring Academic Bankruptcy will continue to be included in the determination of Satisfactory Academic Progress.
- Repeating classes may negatively affect federal aid eligibility. A student who remains otherwise eligible to receive federal financial aid funds under the applicable requirements, including this SAP Policy, may repeat failed classes and continue to receive federal financial aid funds. Similarly, an otherwise eligible student may repeat a previously passed course once and continue to receive federal financial aid funds. All attempts of a course, including repeat courses, are included in CGPA, Pace of Progression, and Maximum Time Frame components. Changes to a student's CGPA due to grade replacement will not be taken into account until the grade replacement is approved in accordance with the Grade Replacement Policy. Grade replacement will allow for a prior grade earned not being included in the CGPA component, if approved by the Registrar's Office; however, all attempts will still be counted in the Pace of Progression and Maximum Time Frame components.
- All remedial courses are included in CGPA, Pace of Progression, and Maximum Time Frame components.
- Students classified as pursuing a second Bachelor's degree will continue to be evaluated on Pace of Progression and Maximum Time Frame components stated above. For students who pursue a second degree at USA, a CGPA of 2.0 must be maintained. In calculating the Maximum Time Frame component, the published program length for the second degree will be reduced by the number of general

education credit hour requirements earned from the first degree (generally 40 credit hours).

- For students changing programs or majors prior to completion, all credit hours and grades will continue to be included in CGPA, Pace of Progression, and Maximum Time Frame components.
- Students in candidacy status in a program in the College of Education who fail to meet the minimum CGPA requirement at the end of a semester will automatically be removed from candidacy status and evaluated under the minimum CGPA requirement for students not in a candidacy status.

## Satisfactory Academic Progress (SAP) Evaluation - Financial Aid Warning Status

Students who have been receiving federal financial aid funds in a clear SAP status and fail to meet one or more of the SAP components at the end of a semester will automatically be placed on Financial Aid Warning and will be eligible to receive federal financial aid funds for one additional semester. Students who do not meet Satisfactory Academic Progress requirements after this period of Financial Aid Warning will be denied eligibility for future semesters until they have met SAP requirements or submit an appeal that is approved.

Students that have exceeded the Maximum Time Frame component will **not** be eligible for one term of Financial Aid Warning Status but may submit an appeal as indicated in the Satisfactory Academic Progress (SAP) Appeal Procedures and Financial Aid Probation section.

## Satisfactory Academic Progress (SAP) Appeal Procedures and Financial Aid Probation

Students who fail to meet the components of Satisfactory Academic Progress (SAP) after one semester on Financial Aid Warning status will be sent an e-mail notifying them that they are no longer eligible to receive federal financial aid funds. Students have the option to appeal the loss of federal financial aid eligibility as follows:

- If the failure to maintain SAP was due to extenuating circumstances (examples: a significant injury or illness of the student or the death of an immediate family member), students may submit an appeal through the USA Financial Aid Verification Portal. Once logged in, the appeal can be initiated by selecting the Manage Request box in the upper right-hand corner of the page and selecting the green plus sign for SAP appeal for the appropriate aid year.
- Students are strongly encouraged to submit their letter of appeal within 15 days of being notified of their aid suspension. Submitting an appeal letter does not guarantee that financial aid will be reinstated. Results of the financial aid appeal letter can be viewed in PAWS under "Academic Progress" within 14 business days of submission.
- If the appeal is approved and minimum requirements can be met in one additional term, the student will be placed on Financial Aid Probation. If it will require more than one additional term to meet SAP requirements, a student whose appeal has been approved will be placed on an Academic Plan where such a plan will make it possible for the student to meet the institution's SAP requirements within a reasonable timeframe. The student will be eligible for federal financial aid funds during the period of Financial Aid Probation and Academic Plan. As part of any Financial Aid Probation status or Academic Plan, a student is required to complete a Financial Aid Probation

Agreement which must be signed by the student and their academic advisor. If the student's appeal is not successful, the student will not be eligible for federal aid.

- Note: Circumstances related to the typical adjustment to college life such as working while attending school, financial issues related to paying bills and car maintenance/travel to campus are not considered as extenuating for purposes of appealing suspension of federal financial aid funds.
- If a student fails to meet the terms of the Financial Aid Probation or their Academic Plan, any additional federal financial aid funds will be denied until minimum standards are met.

## USA Education Study Abroad

Students wishing to use financial aid for study abroad opportunities should contact the Office of Financial Aid and the USA Office of International Education. Financial aid may be available based on student eligibility and certification of the program.

## One Stop

At the University of South Alabama, there's a shortcut for students with questions about everything from financial aid to academic resources to campus activities. It is called One Stop it makes problem-solving more convenient so students can focus on school and make the most of their college experience.

Whether you are getting a head start on planning for college, want to know more about your financial aid options, are a current student who needs assistance paying a bill, locating a transcript, or finding a job, the USA One Stop provides access to Academic, Campus, and Financial resources all in one location. On the One Stop website, there are specific links for all sorts of task.

The USA One Stop is staffed with a combination of professional student support advocates and a team of cross-trained student assistants. If you cannot find what you need online, or simply want to speak with someone in person, contact our team today – we are here to assist. If you've got questions, we've got answers.

One Stop is your go-to for assistance with resources and support services across USA. This is your experience; we are here to connect you!

You can reach us by calling 251-341-4USA, visiting us in Meisler Hall, emailing us at [onestop@southalabama.edu](mailto:onestop@southalabama.edu), or live chatting us at [www.southalabama.edu/onestop](http://www.southalabama.edu/onestop) (<http://www.southalabama.edu/onestop/>).

## South CARES

South CARES is USA's Collaborative Access, Resources, and Emergency Support program. At South, we are committed to your success and stand ready to support you in navigating your journey in whatever that includes.

The South CARES team was established to support students when unexpected challenges rise and may impact your ability to be successful. Our team can provide guidance and connect you to the resources necessary to flourish in your academic pursuit. This includes short term financial hardship, money management programs, a one-on-one resource connection.

You can reach our team by calling us at 251-341-4USA, emailing us at [southcares@southalabama.edu](mailto:southcares@southalabama.edu), or visiting our portal.

The South CARES portal will allow you to connect with us by submitting an online request for contact, securely. By giving us a little information about your situation we can match you with a Student Aid Advocate, who can help identify resources and programming for your specific need.

## Scholarships

USA's scholarship opportunities include four-year, renewable Freshman Scholarships (<https://www.southalabama.edu/departments/financialaffairs/scholarships/freshscholarships/>) for incoming traditional freshmen, one year General Scholarships (<https://www.southalabama.edu/departments/financialaffairs/scholarships/applyingforscholarships.html>) for new and Current Students (<https://www.southalabama.edu/departments/financialaffairs/scholarships/currentstudents.html>), Transfer Scholarships (<https://www.southalabama.edu/departments/financialaffairs/scholarships/transferstudents.html>), and Departmental Scholarships (<https://www.southalabama.edu/departments/financialaffairs/scholarships/departmentalscholarshipdirectory.html>) awarded by the various colleges and schools on campus.

Students should visit the Office of Scholarship Services website, at [www.southalabama.edu/scholarships](http://www.southalabama.edu/scholarships) (<https://www.southalabama.edu/departments/financialaffairs/scholarships/>), for a complete list of all scholarship opportunities and to access JagSPOT.

Students use JagSPOT – USA's Scholarship Program Opportunity Tracker - to search for scholarships, complete applications, and accept/track offers.

All incoming students must complete the application process by December 1st to ensure consideration for general and departmental scholarships. Individual scholarship deadlines vary.

Scholarships are awarded using a variety of factors including, but not limited to, academic achievement, departmental and community involvement, employment experience, areas of study, and financial need.

Students receiving University scholarships will have the award credited to their tuition and fees due each semester. Any balance from scholarships may be eligible to pay for associated academic costs such as books at the USA Bookstore, USA Housing and USA Food Service. Review your individual award letter for specific eligibility. Annual University scholarships are split between Fall and Spring semesters.

Any awards or scholarships funded by USA are considered institutional aid. Some examples of institutional aid are admission based scholarships, departmental awards, employee tuition assistance, housing benefits and athletic scholarships. USA reserves the right to adjust aid if a student receives multiple scholarship awards or exceeds the institutional maximum.

## Scholarships for Freshman Students Mitchell-Moulton Scholarship Initiative

Under the Mitchell-Moulton Scholarship Initiative, USA offers several scholarship levels based on standardized test scores, high school GPA and area of study. The University's largest scholarship programs for academic achievement are:

### USA Freshman Admission Scholarships for First-Time Freshmen

All first-time freshmen who meet the USA Freshman Admission Scholarship Program requirements, funded by the Mitchell-Moulton Scholarship Initiative, by December 1st will be guaranteed a scholarship

award. USA Freshman Admission Scholarship Program levels can be viewed at Freshman Scholarships (<https://www.southalabama.edu/departments/financialaffairs/scholarships/freshscholarships/>).

### Abraham Mitchell Scholars Program in Business

The Abraham Mitchell Scholars Program allows elite business students to develop to their full potential. Through faculty mentorships and a four-year scholarship that includes a laptop computer, scholars will pursue challenging programs while developing stewardship and civic responsibility.

After acceptance to USA, incoming first-time freshman majoring in the Mitchell College of Business will automatically be reviewed for the Abraham Mitchell Scholarship award.

For more information and qualifications visit the Mitchell Scholars Program ([https://www.southalabama.edu/colleges/mcob/mitchell\\_scholars.html](https://www.southalabama.edu/colleges/mcob/mitchell_scholars.html)) website.

**Please note:** Students who are awarded both a Mitchell Business Scholarship and a USA Freshman Admission Scholarship must choose which scholarship they wish to accept.

### USA Honors College

The University of South Alabama Honors College offers a curriculum of interdisciplinary excellence designed to stimulate the analytical and critical thinking of exceptionally qualified and highly motivated students. The USA Honors College challenges each student through discussion, research, creative scholarship, intercultural engagement and the arts in an effort to create the feel of a small college environment in the midst of the opportunities provided by a large urban university.

The USA Honors College provides its students with opportunities for travel, research programming support, and unique opportunities throughout their four years of enrollment. These experiences and activities are designed to foster student success and encourage students to participate in enhanced intellectual experiences.

A limited number of scholarships are awarded competitively and are available to students of the USA Honors College once admission is complete. Additional scholarships may be available as the student progresses through the Honors College.

First-time freshman, who meet the December 1st priority deadline, have a qualifying score on the ACT/SAT and have at least a 3.0 cumulative high school GPA, will automatically receive the USA Freshman Admissions Scholarship that matches their profile.

**Please note:** Students who are awarded both a Whiddon Honors Scholarship and a USA Freshman Admission Scholarship must choose which scholarship they wish to accept.

Visit the USA Honors College (<https://www.southalabama.edu/colleges/honors/>) website to learn more information.

## Scholarships for Transfer Students

### Scholarships for Community College Transfer Students

USA offers a variety of scholarships to admitted Community College transfer students based on criteria such as academics. These scholarships are not competitive and do require an application.

Please note that for the purpose of these scholarships, students will only be considered if they have earned at least 48 credit hours at an approved community college prior to the posted priority deadline. To ensure consideration for the Phi Theta Kappa Scholarship, students

accepted for admission must apply through the JagSPOT (<https://www.southalabama.edu/departments/financialaffairs/scholarships/>) portal prior to the transfer priority deadline. For questions about specific requirements or how to apply, please contact the Office of Scholarship Services.

## Scholarships for 4 Year College and University Transfer Students

USA offers a variety of scholarships to admitted University transfer students based on academic criteria. These scholarships are competitive and do require an application. Please note that for the purpose of these scholarships, students will only be considered if they have earned at least 30 credit hours at an approved community college prior to the posted priority deadline. To ensure consideration, students accepted for admission must apply through the JagSPOT (<https://www.southalabama.edu/departments/financialaffairs/scholarships/>) portal prior to the transfer priority deadline. For questions about specific requirements or how to apply, please contact the Office of Scholarship Services.

For more information, or assistance, please contact the Office of Scholarship Services:

Office: (251) 461-1958

E-mail: [scholarships@southalabama.edu](mailto:scholarships@southalabama.edu)

Website: [www.southalabama.edu/scholarships](https://www.southalabama.edu/scholarships) (<https://www.southalabama.edu/departments/financialaffairs/scholarships/>)

## Center for Continuing Education and Conference Services

### Department Information

UMCOM Center for Continuing Education 125  
(251) 460-7200

Title	Name
Executive Director, Outreach and Professional Development	Maya De Andrade
Program Director	Joy Aull
Program Director	Ginger Wade
Support Staff	Amanda McCree
Accountant	Patricia Miles

The mission of the Center for Continuing Education and Conference Services (CCE or the Center) is to provide innovative and in-demand educational programs and experiences to the Mobile, Gulf Coast and international communities focused on growing strategic partnerships, providing student enrichment opportunities and encouraging economic, civic and cultural development. The CCE offers professional and career development opportunities through noncredit seminars, courses and certificate programs. The Center also works with local businesses and industry to provide custom training solutions. In addition, the CCE enriches the lives of individuals who seek to invigorate their minds through noncredit enrichment course offerings including: foreign languages, art, music, literature, and leisure activities. The Center administers the awarding of Continuing Education Units (CEUs) and issues transcripts for noncredit courses, workshops, and conferences.

## Workforce Development

The CCE offers continuing education programs for the working professional in the form of seminars, workshops, conferences, and short-term courses. University faculty, along with field experts, actively participate in the development and instruction of these programs. Staff members focus on meeting the needs of our regional community partners by assisting them in building human capital.

The CCE Safety and Emergency Response Training program serves industry, government and other agencies with state-of-the-art instruction in the handling of hazardous materials and emergency spills, technical rescue and incident command in accordance with state and federal regulations. The Center also offers training programs in mental health and crisis intervention for first responders and other primary responders such as school counselors and hospital personnel.

## Career Development

Certificate programs are available for individuals seeking new careers or ways to advance in their current profession. Some of our certificate programs are Paralegal Studies, Photography and Medical Billing and Coding.

Recognizing that members of the community may need more flexibility than traditional in-person classes, the CCE has partnered with some of the most widely recognized providers of online educational courses to bring students learning opportunities in a plethora of areas for both professional development and personal enrichment.

## Personal Enrichment

The CCE offers noncredit classes for adults in a number of areas for personal enrichment. Whether it is to learn a new hobby or simply have fun, the CCE selects instructors who are experts in their fields to provide engaging quality courses in a wide variety of topics including foreign languages, photography, music and physical activities.

Odyssey USA is the University's Institute for Learning in Retirement in Mobile. Senior adults have the opportunity to attend noncredit classes that are designed to satisfy the quest for knowledge in areas of the arts, history, music, literature, and other interesting disciplines. These students enjoy a broad selection of classes and events year-round. Courses are offered in four 6-week terms, and students may choose to take just one course at a time, or they may choose to take all that are offered. No membership fee is required; students only enroll in and pay for the courses that interest them.

## Test Prep

With test preparation courses for the GRE®, GMAT®, LSAT®, Praxis®, SAT® and ACT®, the CCE is the Gulf Coast's leading test prep solution for admission exams. These courses are designed to strengthen students' performance in all core areas that are covered in the examinations, providing them a greater chance of success and a competitive edge among their peers.

## Summer Programs, Camps and Conferences

The CCE serves as a resource for event administration, registrations and payment processing for university departments and external groups. For external groups seeking to hold events at USA, the Center coordinates arrangements for University facilities and services. Our professional staff

also provides event management services for educational events off-site. As part of Global USA, the Center assists other university departments with the logistics, coordination and management of short-term, non-credit international cohorts. Additionally, the CCE develops custom short-term, non-credit programs with academic enrichment and cultural components for domestic and international groups.

## Global Outreach

(251) 460-7800

Title	Name
Executive Director, Outreach and Professional Development	Ms. Maya De Andrade
Assistant Director, Global Outreach	Mr. Zach Thomas
Coordinator, Global USA Support Services	Ms. Sharon Leinhos

The Office of Global Outreach oversees and implements the University of South Alabama's strategic plan for international student recruitment. Along with international and domestic recruitment travel, the Office of Global Outreach works closely with various educational organizations, institutions, consultancies and partners abroad. Faculty, staff, and university partners interested in collaborating with the Office of Global Outreach for international student recruitment should contact [globalusa@southalabama.edu](mailto:globalusa@southalabama.edu) for more information. Prospective students can visit <https://www.southalabama.edu/departments/globalusa/outreach/> to learn more.

## Global USA

(251) 460-6283

Title	Name
Assoc. VP for Global Engagement	Dr. Richard W. Carter
Coordinator, Global USA Support Services	Ms. Sharon Leinhos

Global USA is a division of Academic Affairs and is the central international office for the University of South Alabama. This division supports the University's Strategic Priority of Global Engagement by working with colleges, departments, faculty, staff, students and the Mobile area community to facilitate the comprehensive internationalization of the University of South Alabama.

Global USA encompasses all international and continuing education offices on the university's main campus in Mobile as well as our satellite campus in Fairhope, Alabama.

The Office of Immigration is designed to handle immigration and compliance for both students and scholars. The Office of International Admissions and Student Programs is specifically designed to assist with admissions, support services, and activities for international students and scholars. The Office of Global Outreach is in charge of all international recruiting. The Office of International Education connects students to study abroad programs in a variety of countries, facilitates foreign exchange programs and works with international partnerships. The Center for Continuing Education and Conference Services designs international and domestic camps, offers training programs and certificate programs, plans conferences and special events as well as provide continuing education for adults. USA Baldwin County

offers another location for students to take credit and non-credit courses as well as being the site for many university and community events.

Global USA is here to serve and support our international students and scholars as well as our domestic students who are interested in traveling and studying all over the world.

## Office of Immigration

251-460-6050

Title	Name
Director	Ms. Denise Robb
Immigration Manager	Ms. Arrin Hines
Secretary	Ms. Sharon Snelgrove

The Office of Immigration at the University of South Alabama is responsible for immigration compliance for those foreign national student, scholars, faculty, and staff associated with the University and USA Health. The University of South Alabama does not discriminate on the basis of age, sex, race, color, religion or national origin. These provisions also apply to disabled individuals pursuant to current federal and state regulations subject to reasonable standards of admission and employment.

## Immigration Compliance

The Office of Immigration is responsible for the development and implementation of policies and procedures associated with U.S. immigration compliance functions for foreign nationals associated with current and potential nonimmigrant degree and non-degree students, nonimmigrant faculty/staff employment, J exchange scholars (including postdoctoral trainees, medical trainees, degree and non-degree students, professors and research scholars), academic/co-curricular exchange program participants and international guests. Inquiries regarding immigration matters should be emailed to [immigration@southalabama.edu](mailto:immigration@southalabama.edu). For specific immigration policies and procedure, please visit <https://southalabama.edu/departments/immigration> (<https://southalabama.edu/departments/immigration/>).

## Office of International Admissions and Student Programs

(251) 460-6050

Title	Name
Director	Mrs. Heather Nix
Coordinator, International Student Services	Mrs. Olivia Jackson
International Admissions Specialist	Ms. Katherine Brown
Secretary	Mrs. Sharon Snelgrove

The Office of International Admissions and Student Programs at the University of South Alabama is responsible for the processing of applications for admission submitted by non-citizens. The University of South Alabama does not discriminate on the basis of age, sex, race, color, religion or national origin. These provisions also apply to disabled individuals pursuant to current federal and state regulations subject to reasonable standards of admission and employment.

## International Admission

The Office of International Admissions and Student Programs processes all non-citizen applications for admission to undergraduate and graduate programs at the University of South Alabama. Inquiries about admission for non-citizens should be addressed to:

The Office of International Admissions and Student Programs  
390 Student Center Circle  
Meisler Hall, Suite 2200  
University of South Alabama  
Mobile, Alabama 36688-0002  
or e-mail at [internationaladmissions@southalabama.edu](mailto:internationaladmissions@southalabama.edu).

For specific International Admissions policies and procedure, please visit <https://www.southalabama.edu/departments/international> (<https://www.southalabama.edu/departments/international/>).

## Office of International Education

(251) 460-7053

Title	Name
Executive Director for Global Engagement	Dr. Bri Ard
Assistant Director of International Programs	Ms. Jan-Dominique Santos
Education Abroad Advisor	Ms. Chele' Rigney
Education Abroad Advisor	Ms. Sylliah Neely
International Programs Assistant	Ms. Felicia Cooley

The Office of International Education provides to the University community information and support on international initiatives and is responsible for Education Abroad, student exchange and international partnerships as well as providing assistance with visiting international delegations, reviewing and approving university related travel abroad for students, faculty, and staff. OIE is actively involved in facilitating international academic exchange programs and additional international agreements for the University.

The Office of International Education is available for collaboration with local governmental, business and community organizations that foster international cooperation, exchange and understanding. All existing or proposed international programs, exchanges, contracts and grants are reviewed and registered with the Office of International Education. The director chairs the University Council on International Education and Scholarship (USACIES), whose members are appointed by the Senior Vice President of Academic Affairs and charged with disseminating information, developing, and guiding policy and planning for USA in the international arena.

## Study Abroad

The Office of International Education administers all USA Education Abroad Programs and international cooperation agreements/contracts. In addition, the Director of International Education works in collaboration with University deans, division heads and directors responsible for curriculum and faculty development.

All USA students who plan to participate in a study, research, internship, work or virtual abroad opportunity must contact the Office of

International Education for information on program advising and approval procedures.

## USA Baldwin County Campus

University of South Alabama Baldwin Campus  
111 St. James Avenue  
Fairhope, Alabama 36532  
(251) 928-8133

Title	Name
Director	Dr. Richard W. Carter
Business Operations	Kim Martin
Criminal Justice faculty	Dr. Mike Reynolds
Computer Support	Mike Miller
Security	Ralph McDonald
Environmental Services Aides	Brenda Gordon and Brenda Hill

The University of South Alabama Baldwin County (USABC) was established as a campus of the University in August, 1984, to offer higher education in one of the fastest growing and most diverse counties in Alabama. USABC offers upper-level (junior and senior) undergraduate courses, graduate courses, and non-credit programs. The campus is in downtown Fairhope. The classroom complex is at 111 St. James Avenue, the corner of Summit Street and St. James; and the College of Nursing building at 161 N. Summit Street.

Academic offerings include courses leading to Bachelor's degrees in Interdisciplinary Studies, Communication, Criminal Justice, Elementary Education, Emergency Medical Services and Nursing Accelerated BSN Track. Courses in business, education, and liberal arts are offered each semester which can be used as credit in a variety of degree programs. Faculty who teach these courses are hired by the University's academic divisions.

Computer services are provided for students and faculty. Classrooms have internet access and audio-visual equipment. This computer lab is located at the Classroom Complex.

Credit courses are offered during the day and the evening in Fairhope. Most evening courses meet once per week and day time courses meet in a variety of formats. USABC students are eligible for on-line courses scheduled by the academic departments. Check the USABC website for the complete schedule of courses for each semester.

USABC supports the University's mission of public service by working cooperatively with community organizations. The Fairhope Film Festival is co-sponsored by USABC and is held in the USABC Performance Center. Special events are held on the USABC campus throughout the year such as conferences, trainings and summer camps.

## Academic Services

Student Academic Success supports the mission of the University by developing, implementing, and assessing initiatives and practices to ensure all students are offered the resources and relationships necessary for high quality learning, academic persistence, and degree completion. This includes Academic Advising & Transfer Services, the Center for Academic Excellence, Career Development, Second Year Experience, Summer Start, freshman learning communities, the university first year experience courses, and the USA Scholars initiative,

including our Earn Back program. For more information visit <https://www.southalabama.edu/departments/academicsuccess/>.

## Learning Communities

Freshman learning communities at South are focused on academic courses. A learning community usually includes two or three classes shared with other students enrolled in that community. Learning communities typically enroll about 25 first year students; generally, all students share their first year experience course. In most communities, students will share one or two additional classes with the same group of 25 students. Learning communities are designed to provide students with the opportunity to meet other students in the same major, to offer the best schedule for the first semester, and to maximize the applicability of courses should a student decide to change majors.

## First Year Experience Courses

First year experience (FYE) courses are offered at universities around the world. At USA, this course was constructed by faculty and designed to address areas where first year students need additional development. First year experience courses include college success strategies, metacognitive practices, and often discipline specific skills. They help maximize our students' potential to achieve academic success; adjust to the shift in responsibility that comes with college learning; and overcome interpersonal challenges associated with college life.

## Summer Start

Summer Start is a six-week, seven credit-hour summer session that focuses on providing students with a jump-start on college, giving them an early opportunity to learn more about campus, and engage with academic success and extracurricular activities during the summer term. Students who are admitted into Summer Start are required to participate in the program and to continue at the University in the fall. Summer Start allows students to enjoy smaller class sizes while learning "in community" - sharing the same group of classes together. At its core, Summer start facilitates a smooth transaction into the University by ensuring strong support networks created prior to the fall semester.

## Second Year Experience

The Second Year Experience (SYE) at the University includes a leadership and skills development program for second year students, with a special focus on students who identify as first-generation and/or have unmet financial need, which supports strategic efforts to close equity gaps and graduate more students. Through the SYE Transformational Leadership Program (TLP), students develop leadership, service, and crucial career skills to prepare them for a Career Trek to meet employers. SYE focuses on student engagement with faculty in a high impact practice (HIP), such as diversity/global learning, experiential learning, internships, study abroad, and undergraduate research (AAC&U, 2013), and will culminate with a poster presentation on that experience to be delivered at the University Second Year Showcase to take place in the fall semester of a student's third year at USA.

## USA Scholars Initiative

The USA Scholars Initiative focuses additional attention on USA scholarship students who may be academically at risk. First year students whose fall GPA is below 3.0 may be contacted about additional resources designed specifically to increase academic insight. Included in this program is our Earn Back opportunity. Students who have lost

their Freshman Admission Scholarship may be able to earn it back by participating in this program.

At USA, an academic advisor's purpose is to encourage students to develop as self-directed learners and decision makers. Students begin their relationship with their advisor during their orientation. Students should meet with their academic advisor each term and are encouraged to meet as often as needed. Generally, students move to an advisor in their major when they complete between thirty and sixty credit hours. Students are expected to communicate with their assigned academic advisor regularly; however, expectations for meetings vary by major and department. For more information visit <https://www.southalabama.edu/departments/academicadvising/>.

#### Academic Coaching

Academic coaching can serve as a proactive approach to help students successfully overcome personal and academic challenges. Academic coaches can assist students in establishing and creating plans to reach their short and long-term goals. Coaches can help a student identify specific circumstances, thoughts, feelings and actions that can help the student identify and help change unintentional patterns. Students actively participate in this appointment by reflecting on their personal goals and dreams and with the guidance of the advisor develop a plan of action.

<https://www.southalabama.edu/departments/academicadvising/academic-coaching.html>

#### Pathway USA

Students enrolled in Pathway USA meet with transfer advisors during enrollment at their community college prior to transferring to USA. Transfer students outside of Pathway USA are welcome to make an appointment with transfer advisors to discuss their transition to USA. Students may also be referred to major advisors as appropriate. For more information visit <https://www.southalabama.edu/departments/admissions/pathwayusa/>.

#### Pre-Health and Pre-Law

Pre-Health advising at the University of South Alabama offers valuable resources to students interested in a variety of graduate professional health programs. In order to prepare students for the rigorous demands of these programs, advisors provide information and guidance on required course work, admission test needs, the application process and non-academic requirements. Pre-health advising is provided as a supplement to major academic advising. All pre-health students have an academic advisor who will guide them in meeting requirements for graduation.

<https://www.southalabama.edu/departments/academicadvising/pre-health/>

<https://www.southalabama.edu/colleges/artsandsci/pscj/pre-law/>

The Center for Academic Excellence is a full-service learning center, providing subject tutoring, writing center consultations, workshops, and learning resources for all USA students. The Center for Academic Excellence strives to help every student reach their academic goals. The CAE's academic enrichment services are grounded in a growth mindset that students can learn anything with hard work, perseverance, and good study habits.

The Center for Academic Excellence offers subject tutoring for a large variety of general education courses. Subject tutoring is a collaborative learning experience in which peers work together to develop knowledge, build skills, and think critically and creatively to solve problems. The CAE also provides writing center consultations for courses in any discipline. Writing center consultations focus on helping students improve their writing skills, rather than simply editing papers. Students may receive help with any type of writing task at any stage of the writing process, including understanding assignments, brainstorming, organization, development, and revision. Additionally, the CAE provides workshops, events, and a variety of programs aimed at empowering USA students to succeed in their coursework and beyond.

The Center for Academic Excellence is located on the second floor of the Marx Library. For more information, please call (251) 460-6480 or visit <https://www.southalabama.edu/cae> (<https://www.southalabama.edu/cae/>).

#### Career Development

USA Career Development assists students and alumni in all phases of the career development process. As a comprehensive career center, the office supports career and academic major exploration by assisting students in determining career interests and selecting appropriate academic programs to reach their goals. Staff helps students in co-op and internship participation which can supplement classroom experiences and promote academic and professional development. They also assist students in identification and preparation for employment opportunities, and graduate and professional school preparation.

Handshake, an online career management system, is just one of the resources students are encouraged to use when seeking a job, internship, or co-op. From Handshake, students can share their profile, submit employment applications, and have resume documents reviewed.

<https://www.southalabama.edu/departments/careerservices/>

## Student Affairs & Services

The Division of Student Affairs is responsible for that part of the student's total educational experience which takes place outside the formal classroom program. Among its concerns are student center, student activities, student health, recreation, student organizations, programs, disciplinary actions, disabled student services, multicultural student affairs, counseling and testing services, housing and dining, university police, and veterans affairs. Through such activities as the Student Government Association (<https://www.southalabama.edu/departments/sga/>), the students are given a responsible voice in the governance of the University.

(See Student Handbook, The Lowdown <https://www.southalabama.edu/lowdown/>).

Students also participate as members of some University-wide committees as well as on committees within the colleges of the University.

- Student Life and Student Center (p. 48)
- Campus Recreation (p. 48)
- Counseling/Testing, Drug/Alcohol, Disability Services (p. 48)
- Multicultural Student Affairs (p. 49)
- University Programs and Activities (p. 49)
- Student Conduct (p. 49)

- Housing and Dining (p. 50)
- Student Affairs Services (p. 51)
- University Police (p. 52)
- Office of Veterans Affairs (p. 52)

## Student Life and Student Center

The University of South Alabama, is committed to providing services and creating a supportive campus environment which fosters engagement, academic success, and personal development within a diverse community of learners.

### Student Center

The Student Center (<https://www.southalabama.edu/departments/studentcenter/>) supports the University mission by providing quality programs, facilities, and services that create a community that encourages involvement, development and personal and academic growth. The Student Center is truly the center of it all on campus.

Located in the building are lounge areas, the Student ID Office, a computer lab office that supports student engagement, dining and other student life areas. Nine meeting rooms, including a ballroom, that have audio-visual equipment are available for registered student organizations, and administrative and academic departments. Individuals and outside organizations must be sponsored by a registered student organization or department to reserve space and equipment for a fee.

Reservations for any space in or around the Student Center may be made Monday through Friday, 8:00 a.m. - 5:00 p.m. at (251) 460-6077 or <https://www.southalabama.edu/departments/studentcenter/>.

### Campus Recreation

The Department of Campus Recreation and Wellness (<https://www.southalabama.edu/departments/campusrec/>) strives to improve the holistic health and well-being of our entire University community. Our mission is to inspire students to play hard, get fit, and live happy, healthy lives. We want to emphasize that wellness is an active, ongoing pursuit. Campus Recreation and Wellness provides active programming designed to help South Alabama students maintain healthy habits on their individual paths toward wellness.

The path to wellness begins with our state-of-the art Student Recreation Center (<https://www.southalabama.edu/departments/campusrec/studentrecreationcenter/>) (SRC). The 116,000 square foot complex contains a cardio exercise theater and two weight rooms with selectorized machines, plate loaded machines, and free weights. The SRC houses three multipurpose basketball and volleyball courts, an indoor soccer court, four racquetball courts, and two fitness studios. Our SouthFit fitness program offers free classes to students and members of the SRC including Zumba, Spinning, and Yoga! The SRC is also home to a 35' high rock climbing wall offering challenges and excitement to climbing enthusiasts. Students can participate in Aquatics (<https://www.southalabama.edu/departments/campusrec/aquatics/>) fitness year-round by swimming laps in our indoor heated pool, relaxing in the hot tub, playing a game of volleyball, basketball, water-polo, or attending an Aqua Fitness class in our outdoor heated pool. In addition, the SRC has dry saunas inside the men's and women's locker rooms. After a good workout, students can enjoy refreshments from the smoothie bar and sit on the deck overlooking the courtyard containing beautiful heritage oak trees.

Students can explore the Mobile Delta and surrounding areas for little cost with our Outdoor Adventures (<https://www.southalabama.edu/departments/campusrec/outdoor/>) program. Outdoor Adventures offers a variety of trips each semester including canoeing, kayaking, and hiking for students and members of the SRC. The Outdoor Adventures program also offers rentals on camping equipment, kayaking equipment, and bikes, which students can rent on a semester basis.

Compete against other students on campus while building a community through sports! Our Intramural & Club Sports program offers leagues and tournaments in basketball, flag football, volleyball, softball, soccer, and more to meet your competitive edge. The Intramural Sports Complex (<https://www.southalabama.edu/departments/campusrec/southsports/>) is home to six lighted multipurpose playing fields, an outdoor sand volleyball court, and an outdoor basketball court.

Research shows a strong correlation between enhanced mental wellbeing and participation in activities based in an outdoor and relaxed environment. We're fortunate that South Alabama has outdoor areas to get you moving along our beautiful campus. The Jag Fitness Trail is a mile and half trail allowing for each person to incorporate the strength, balance, and flexibility training with the cardio workout of the trail itself through three fitness stations. The Glenn Sebastian Nature Trail (GSNT) is a 100-acre wooded area on the north side of campus with one-, two-, and three-mile paths. The GSNT is lined with informational signage highlighting different plants and animals that you may see along the way, offering a beautiful and informational fitness experience.

All members of our university community are encouraged to take advantage of the wonderful opportunities for fun and fitness offered through the Department of Campus Recreation and Wellness (<https://www.southalabama.edu/departments/campusrec/>). For further information, please visit our web page or call (251) 460-6065.

### Counseling/Testing, Drug/Alcohol, Disability Resources

The University Counseling And Testing Center (<https://www.southalabama.edu/departments/counseling/>) (UCTC), a department in the Division of Student Affairs, provides counseling and standardized testing services to the University of South Alabama's undergraduate and graduate student community. Our mission is to provide high quality counseling, testing, outreach and consultative services and strives to facilitate the academic, emotional, social, and career development of students. Counseling services are free and confidential and provided by a staff of qualified mental health counselors. Students experiencing mental health and/or behavioral problems are invited to take advantage of this campus resource.

The USA Substance Abuse (USASA) Program is another facet of the University Counseling and Testing Center. This program provides USA students with counseling, educational, and prevention programs related specifically to substance abuse. The primary goals of the USASA program are to increase knowledge and awareness of alcohol and other drug issues and to decrease the harmful consequences associated with high risk drinking and/or illegal drug use.

The University Counseling and Testing Center also serves as a regional testing center for various national testing organizations. Testing services are provided for USA students as well as non-students. Fees for testing services vary according to the types of tests administered.

The University Counseling and Testing Center is located at 300 Student Center Circle. For further information about any of these services, contact our office at (251) 460-7051 or go on-line to [www.southalabama.edu/departments/counseling](http://www.southalabama.edu/departments/counseling) (<http://www.southalabama.edu/departments/counseling/>).

The University does not permit the possession, consumption, or distribution of alcohol by an individual on any of its campuses and in any of its facilities without prior approval. The possession, consumption, and/or distribution of illegal substances are forbidden. Violation of either policy is subject to both University administrative action and criminal prosecution.

See The Lowdown at <https://www.southalabama.edu/lowdown/> for a full description of the policy.

The University offers special services to students with disabilities. Students requesting services must submit documentation regarding the disability to the Center for Educational Accessibility and Disability Resources (<https://www.southalabama.edu/departments/sds/>) (CEADR) prior to receiving services. Reasonable accommodations are offered in accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Amendments Act of 2008. The Center for Educational Accessibility and Disability Resources is located at 320 Student Center Circle, Suite 19, (251) 460-7212.

## Multicultural Leadership Center

The Multicultural Leadership Center (MLC) is committed to providing programming for cultural awareness, coordinate efforts to increase the retention of minority students, encourage minority students to participate in all aspects of campus life, and provide leadership development for aspiring student leaders. For further information or assistance contact (251) 460-6895 or visit <https://www.southalabama.edu/departments/omsa/>.

## University Programs and Activities

The Student Activities Board, Jaguar Productions, presents activities to serve the cultural, educational, recreational, and social interests of students. Students directly involved have opportunities to exemplify creative thinking and leadership outside the classroom.

Jaguar Productions functions through committees, such as Talks & Topics, Comedy, Music, Movies, Special Events, Technical and Promotions. Students select, publicize and produce the events. All students are invited to join these committees. For more information, please call (251) 460-7144 or visit the Jaguar Productions Office on the first floor of the USA Student Center.

Educational Talent Search (E T S) is a federally funded program designed to encourage low income and first generation college students to consider post-secondary opportunities while they are in secondary schools. The program serves sixth (6th) through twelfth (12th) grade students. Participants must demonstrate a potential for academic success and have a desire to further their education. E T S is designed to improve academic performance, increase student motivation and facilitate transitions from one level of education to the next. The services offered are counseling techniques related to academic, career, vocational, and enrichment activities, study skills training, college preparation, financial aid and scholarship information, educational trips, and tutorial sessions. Tutorial services are conducted by students who are enrolled at the University. For more information, contact the Educational Talent

Search Office, 320 Alumni Circle, Educational Services Building, Suite 6 (251) 380-2620.

Upward Bound is a federally funded, college preparatory program for high school students in Mobile County. The program provides academic counseling, tutorial support, cultural enrichment activities, and academic courses offered during a six (6) week summer residential component. The primary goal of Upward Bound is to provide each participant with the necessary skills to successfully enter and complete a program of post-secondary education. USA students serve as tutors and residential counselors for the participants. For information, contact the Upward Bound Office, 320 Alumni Circle, Educational Services Building, Suite 5, (251) 460-7322.

Student Activities is home to over 240 registered student organizations which represent a wide variety of interests and provide an opportunity for students to get involved. The Office of Student Activities is committed to the development of student organizations and student leaders. The addition of new student organizations enhances the campus community and provides more opportunities for students to become involved and participate in activities that support their interest. For more information about registered student organizations, including how to start a new student organization, visit <https://www.southalabama.edu/departments/studentactivities/>.

The University and the community offer to students an opportunity to participate in a variety of cultural and recreational programs. Among them are concerts by symphonic and chamber organizations, choral groups and choirs, ballet and opera productions, theatre, art exhibits, film series, and lecture and discussion conferences. In many of these programs, students are urged to participate as performers. Special events are scheduled on the campus, and reduced rates for students are arranged for many civic programs.

## Student Conduct

The University of South Alabama is dedicated to the advancement of a community of leaders and learners that become actively engaged citizens who advance the Gulf Coast region and the World.

Our goal is to uphold an environment that is free from all forms of discrimination, harassment, and retaliation. The University promotes fair and equitable treatment for all students, faculty, and staff. The spirit of South Alabama was adopted by the Student Government Association as a basis for expectations from our students. In keeping with the University of South Alabama's values, any sanctions imposed are for the purposes of restoring the standards of the university community, educating students and student organizations about the seriousness of their actions(s), and promoting civility and positive growth, while maintaining the safety and integrity of the university community.

All students and student organizations are held to high standards of academic excellence and expected to conduct themselves in accordance with all federal, state and local laws, board of governors and university regulations, and policies. Failure to assume responsibility for actions which jeopardize the rights and freedoms of others or defame the integrity of the University will result in disciplinary review.

When a student or student organization is not a danger to the university community or when the repetition of misconduct is unlikely, the University will try to educate the student through a sanction(s) process. However, the University reserves the right to deny admission, continued

attendance, or recognition to students or student organizations who continually violate expected standards or established regulations and demonstrate an unwillingness to obey the rules governing student conduct. The Lowdown, the USA student handbook (<https://www.southalabama.edu/lowdown/>), contains the Code of Student Conduct.

## Student Academic Conduct

The Student Academic Conduct Policy is presented in the USA student handbook, The Lowdown. Please refer to <https://www.southalabama.edu/lowdown/>.

## Housing and Dining On-Campus Living

A college education offers students opportunities for advanced learning, interesting career options, and meeting new people. Students who live on campus have an even greater opportunity for an enhanced college experience! Residents of USA Housing report a sense of community by living where learning and personal growth are a priority. Students who live in one of our residence halls have direct access to campus resources and support staff which helps cultivate a positive and successful college experience.

The University of South Alabama offers a wide range of facilities to meet the lifestyles of a diversified student body. As a student, you have a wealth of choices to choose from when it comes to on-campus housing, including private and semi-private room options. Whether your plans include taking classes the entire academic year or simply during the spring or summer semesters, you can find housing on-campus. Our 33 residence halls can be found on the west side of main campus divided into 7 residential communities that are home to approximately 2500 residents.

Once admitted to the University, students should apply for housing as soon as possible. The earlier you complete your housing contract the larger your selection of room choices will be. Visit the USA Housing website (<https://www.southalabama.edu/departments/housing/>) for details about room assignments and key deadlines.

### Overview

The University of South Alabama is committed to providing students with a vibrant, comprehensive and successful undergraduate student experience. National studies show that students who live on campus are more successful, have higher grade point averages, are more engaged, and have higher rates of retention and graduation. This is true for students who live on campus at the University of South Alabama.

Data from USA's Office of Institutional Research suggests that students who live in University Housing at South Alabama have higher grade point averages, have a higher rate of first to second year retention and are more likely to graduate within six years (national average). Additionally, results from the Annual Resident Student Satisfaction Survey indicate students who live on campus report a greater sense of belonging on campus and to college life.

Therefore, in an effort to enhance student success and the undergraduate student experience as well as improve student retention and graduation rates, the University of South Alabama requires first-time, fulltime students to live on campus for their first academic year.

## Policy

First-time, full-time students are required to live on campus for their first academic year.

Students who first enroll in the **summer** are required to live in the residence halls for the **summer, fall, and spring** semesters during their first year attending the University.

Students who first enroll in the **fall** are required to live in the residence halls for **fall and spring** semesters during their first year attending the University.\*

Students who first enroll in the **spring** semester are required to live in the residence halls for the **spring** semester during their first year attending the University.

## Residency Exception

Exceptions will be made for students meeting the following criteria:

- 21 years of age or older by the first day of classes
- Enrolled in less than full-time (12) credit hours each semester on campus
- Graduated high school more than one (1) year before the first day of classes
- Have dependent child(ren) in residence
- Live within 80 miles of USA with relative(s) (*i.e., parent, grandparent, aunt, uncle*) or legal guardian
- Married
- Military veteran
- Other\*\*

*\*The listed exemptions are not applicable to students who have received their room key and moved into their room for their currently active contract. These exemptions are not valid for cancellation requests. For example, if a student moves into their room on campus in the fall, they may NOT request a first-year exemption for the spring semester.*

*\*\*Students who believe they have circumstances not listed above that warrant an exemption may submit a request for review. Exemptions will be granted in situations where the policy presents an undue hardship and in other well-documented circumstances. To access the exemption request form, please log in to [SouthAlabama.edu/MyUSAHousing](https://www.southalabama.edu/MyUSAHousing) (<http://bulletin.southalabama.edu/information/student-affairs-services/housing-dining/SouthAlabama.edu/MyUSAHousing/>) and select 'First Year Residency Exemption'.*

## Furnishings and Amenities

Room rates include campus mail box, digital cable, Ethernet, all utilities (electricity, water/sewer, heat/air, garbage service, and pest control), housing and facilities staff available 24/7, accommodation furnishings, and unlimited laundry access. All residence hall rooms are furnished with a bed frame (adjustable height), mattress, desk, chair, and closet or wardrobe per student. Additionally, each room comes with its own fridge or mini-fridge (size depends on the room type). Visit our Residence Hall webpage (<https://www.southalabama.edu/departments/housing/>)

residencehalls.html) for virtual tours, floor plans, and more detailed furnishings information for each residential community. USA Housing and Facilities staff are available 24/7 to ensure all resident maintenance concerns are addressed quickly and effectively.

All residential communities include vending machines with drink and snack options. Also, each residential community has one or more common spaces available for student use (lounges, study rooms, TV rooms, conferences rooms, etc.).

## Additional Residence Hall Info

All students living in University housing must provide proof of having received the Meningitis vaccine within the last 5 years by uploading to the Student Health Web Portal: [studenthealth.southalabama.edu](https://studenthealth.southalabama.edu) (<https://studenthealth.southalabama.edu/>). Please call Student Health at (251) 460-7151 should you encounter any problems.

While all of the rooms in our residence halls are great places to live, we understand that some students would prefer to live in a different room than where they are assigned for various reasons. This is why we offer several opportunities for students to request a room change after receiving their initial assignment. Please visit the 'Assignment Process' section of your specific classification online at the USA Housing website to review the timelines and procedures associated with these opportunities.

Visit our Financial Policies webpage (<https://www.southalabama.edu/departments/housing/financialpolicies.html>) page for detailed housing contract cancellation guidelines.

## USA Dining / Meal Plans

USA Dining offers a wide variety of food and convenient services across campus. These services are designed with the students' needs in mind, providing flexibility and convenience to meet their demanding schedules. Click Here to review all campus dining locations (<https://usouthal.campusdish.com/LocationsAndMenus/>).

### Residential Meal Plans

Living where you learn means that eventually, you'll need to eat. With the dining experience at South you'll never have to worry! The meal plan options for residential students offer quality food at a discounted price. The Dining Hall is conveniently located within the residential area. Visit the Meal Plan section of our Rates (<https://www.southalabama.edu/departments/housing/rates.html>) page for detailed meal plan descriptions, requirements, and cost. All students living in University housing are required to have a meal plan.

### Commuter Student and Faculty/Staff Meal Plans

Meal plan options are also available for faculty, staff, and commuter students. These plans provide a discounted price over purchasing individual meals on each visit to the dining facility.

### Other Meal Plans

In addition, faculty, staff, residential and commuter students can purchase Dining Dollars to use at any food service location on campus. Dining Dollars never expire! These funds are added to the Jag ID card and are deducted each time there is a food service transaction.

Click Here (<https://usouthal.campusdish.com/>) to review detailed meal plan descriptions and cost.

## Catering

USA Dining is also the exclusive caterer on campus. A full catering guide is available online under the Catering tab. Click Here to view the full catering guide. Don't see what you want listed in the guide? Call USA Catering to request a custom menu. Written approval to use an outside caterer must be obtained in advance from the Vice President for Student Affairs.

## USA Housing and USA Dining Contact Info

USA Housing  
housing@southalabama.edu  
P. (251) 341-HOME (4663)

DLTC 100  
University of South Alabama 251 Delta Loop  
Mobile, AL 36688-0002  
[www.southalabama.edu/housing](http://www.southalabama.edu/housing) (<http://www.southalabama.edu/housing/>)

USA Dining  
dining@southalabama.edu  
P. (251) 460-6296

SC 232  
University of South Alabama 350 Campus Drive  
Mobile, AL 36688-0002  
[www.southalabamading.com](http://www.southalabamading.com) (<http://www.southalabamading.com>)

## Student Affairs Services

### USA Bookstore

The USA Bookstore is located in the Student Center on the main campus. The bookstore offers a wide range of products and services on campus and online at <http://southalabama.bncollege.com/>. The bookstore carries all required textbooks in either new, used, rental and digital options and required supplies for courses taught on campus and online for distance students. The bookstore also carries a wide variety of USA branded clothing and gift items as well as school supplies, laptops, test preps, general reading trade books, and diploma frames.

Regular store hours are Monday-Friday, 8am-5pm and Saturday, 11am-3pm. Extended store hours for back to school and summer hours will be posted in store and online.

The bookstore accepts all major credit cards and student financial aid. For additional information, please visit our website at [southalabama.bncollege.com](http://southalabama.bncollege.com) (<http://southalabama.bncollege.com/>) or call the store at (251) 460-7012.

### USA Mail Hub

Located in the Student Center and managed by Ricoh Americas Corporation, the USA Mail Hub provides campus mail services for students, faculty and staff. University of South Alabama students and employees have access to an array of services including: mailing, shipping options using all major carriers, shipping and mailing supplies, printing, faxing, and copying services. Cash, checks, and credit/debit cards are accepted.

Departmental mail pickup and delivery service is provided by means of an established route. The Mail Hub processes all departmental mail, domestic and foreign.

All residence hall students receive a mail box in the Mail Hub at no additional cost. Mail Hub service includes automated electronic notifications for student letters and packages. Mail and packages are not delivered to residence hall rooms.

For more information, contact USA's Ricoh representative at mailhub@southalabama.edu, or call (251) 414-8191.

## Student Insurance

All students should have medical insurance. This information is available through Student Health Services. Students are encouraged to purchase this policy if they do not have medical insurance. For more information contact Student Health Services, (251) 460-7151.

## University Police

The University of South Alabama has its own University Police Force (<https://www.southalabama.edu/departments/police/>). The mission of the University of South Alabama Police Department is to uphold the values of safety, security, and respect, fostering a campus environment that encourages academic success and personal responsibility. To achieve this mission, we are committed to the following:

1. Safety - We prioritize the safety and security of all students, faculty, staff, and visitors by implementing strong security measures and proactive policing to protect against potential threats and ensure a safe learning environment.
2. Communication - We foster a strong relationship with the campus community, actively engaging with students, faculty, and staff through open communication, listening to their concerns, and working together to address issues related to campus safety.
3. Professionalism - We maintain the highest standards of professionalism, ethics, and accountability among our officers by providing training and development to ensure they carry out their duties with integrity in their interactions with the campus community.
4. Support - We actively contribute to the development of the campus community by providing educational programs and resources that promote personal safety and responsible decision-making.

## Auxiliary Student Services

Please navigate to the individual services for additional information on these services:

- Intercollegiate Athletics (p. 52)
- Student Health Services (p. 52)
- Student Media (p. 52)
- Telecommunications Department (p. 53)
- Licensing (p. 53)

## JagTran

The University of South Alabama's campus transportation, JagTran, was created to provide easy, safe, and efficient transportation for USA students, employees and visitors. Some JagTran vehicles run continuously throughout the day on the main campus. No tickets, money, or reservation are needed. Students will park their cars in color-coded lots, which they choose, and then walk or ride JagTran. For more information, visit <https://www.southalabama.edu/jagtran> (<https://www.southalabama.edu/jagtran/>).

## Intercollegiate Athletics

Competing in both men's and women's sports on the intercollegiate level, the University's athletic program fulfills a vital role in giving the students a well-rounded environment of study and recreational entertainment. The University is an active member of the National Collegiate Athletic Association Division 1AAA. Teams are maintained yearly in baseball, basketball, cross country, golf, soccer, tennis, track, and volleyball. Governed by regulations set forth by the President of the University, the Director of Athletics, the NCAA, and the Sun Belt Conference, athletic participation and expansion is occurring as rapidly as facilities permit.

## Student Health Services

Student Health Center 5870 Alumni Circle  
(251) 460-7151

[www.southalabama.edu/studenthealth/](http://www.southalabama.edu/studenthealth/) (<http://www.southalabama.edu/studenthealth/>)

The USA Student Health Center (SHC) is staffed with a team of physicians, nurse practitioners, registered nurses, licensed practical nurses and clerical personnel dedicated to providing quality medical and educational services to students.

All currently enrolled students are eligible for treatment in the SHC. The SHC accepts and processes claims for most major insurance carriers along with Alabama Medicaid. We strongly recommend that all students have health insurance. The University sponsors a United Healthcare health insurance plan that is specifically designed for USA students and is available for purchase.

The services offered in the Student Health Center are the same as in any physician's private practice. The SHC provides treatment for a variety of medical conditions as well as physical examinations, sports medicine, immunizations, women's health, psychiatry, sexual assault services and health education. Laboratory testing is offered in the clinic and by reference laboratory to assist in properly diagnosing and treating students. X-rays are also available by referral through the SHC.

For more information, you may contact us at (251) 460-7151 or <https://www.southalabama.edu/departments/studenthealth/>

## Student Media

The student newspaper The Vanguard, is distributed free to students and is under the direction of a Board comprised of representatives from the Student Government Association, The Vanguard, the faculty, media services, and public relations. The editor and business manager are selected from applications submitted by interested students.

## Office of Veterans Affairs

The Office for Veteran Affairs provides services to meet the special needs of veterans, service members, dependents, and survivors in order to ease their transition to college life and fulfill their educational goals.

The office is located in the Academic Services Center, III Student Services Drive, Suite 1345 on the main campus. Students who wish to use veterans' education benefits must contact the office of Veterans Affairs, (251) 460-6230.

## Tuition Rates for Veterans and Certain Military-Affiliated Students

The following individuals shall be charged a rate of tuition not to exceed the in-state rate for tuition and fees purposes:

- A student using educational assistance under either chapter 30 (Montgomery G.I. Bill -Active Duty Program), chapter 33 (Post-9/11 G.I. Bill), or chapter 35 (Dependents Educational Assistance), of title 38, United States Code, who lives in Alabama while attending a school located in Alabama (regardless of his/her formal State of residence).
- Anyone using transferred Post-9/11 GI Bill benefits (38 U.S.C. § 3319) who lives in Alabama while attending a school located in Alabama (regardless of his/her formal State of residence) and enrolls in the school within three years of the transferor's discharge or release from a period of active duty service of 90 days or more.
- Anyone described above while he or she remains continuously enrolled (other than during regularly scheduled breaks between courses, semesters, or terms) at the same school. The person so described must have enrolled in the school prior to the expiration of the three year period following discharge or release as described above and must be using educational benefits under either chapter 30 or chapter 33, of title 38, United States Code.
- Anyone using benefits under the Marine Gunnery Sergeant John David Fry Scholarship (38 U.S.C. § 3311(b)(9)) who lives in Alabama while attending a school located in Alabama (regardless of his/her formal State of residence).
- Anyone using transferred Post-9/11 G.I. Bill benefits (38 U.S.C. § 3319) who lives in Alabama while attending a school located in Alabama (regardless of his/her formal state of residence) and the transferor is a member of the uniformed service who is serving on active duty.
- Anyone using educational assistance under chapter 31, Vocational Rehabilitation/Employment (VR&E), also be charged the resident rate. Effective for courses and terms beginning after March 1, 2019, a public institution of higher learning must charge the resident rate to chapter 31 participants, as well as the other categories of individuals described above. When an institution charges these individuals more than the rate for resident students, VA is required to disapprove programs of education sponsored by VA. Refer to 38 U.S. Code 3679.

## Veterans Benefits Transition

Students utilizing VA education benefits shall not be charged a penalty, including assessment of late fees, denial of access to classes, libraries, or other institutional facilities, or be required to borrow additional funds because of the individual's inability to meet their financial obligations due to the delayed disbursement of a payment to be provided by the Department of Veterans. Refer to PL 115-407 Sec. 103.

## Complaint Policy for Students Receiving VA Education Benefits

Individuals who wish to submit a complaint can do so on their own behalf, on behalf of someone else, or anonymously, by visiting the GI Bill Feedback System at <https://www.benefits.va.gov/GIBILL/Feedback.asp>

## Mitchell Center

The Mitchell Center, home to the University of South Alabama Jaguars, which is located adjacent to the historical Jaguar Gymnasium, features a 10,000-seat arena and exceptional support space with state-of-the-art equipment. The Center is a multi-purpose facility that hosts major events such as graduation, convocation, concerts, sporting events, and a variety of family events. There is also space dedicated to classrooms, meeting rooms, private offices, Athletic Administration offices and the USA Coastal Weather Research Center. A "must see" for many tourists visiting the area, the Waterman Globe is located in the Grand Lobby of the Mitchell Center. This massive historic globe was originally installed in 1948 in the Waterman Building, in downtown Mobile. It was acquired by the University and installed in the Mitchell Center Grand Lobby to be shared with the community and its many visitors. For rental information call (251) 461-1632 or visit our website at <http://www.mitchellcenter.com>.

## Telecommunications Department

USA Telecommunications Department is committed to providing high quality, cost effective services to the University Community.

Telecommunications is located off USA North Drive. As you approach the traffic circle on USA North Drive, we are the first building on your right. Hours are Monday through Friday, from 8:00 a.m. to 4:45 p.m. Our information number is (251) 460-7114 or if you are on campus, dial 6-7114.

## Licensing

As a program within the Public Relations Department, licensing serves as a support function to the University's overall mission which is: to protect the name and identifying marks of the University of South Alabama, also, to preserve the University's good name and reputation by insuring that products bearing its name or marks are good quality and reflect positively on the University, and to promote the University by stimulating public awareness and support of the University through use of its name and marks.

All items bearing the logo/marks of the University, must be ordered through companies that are officially licensed. A list of vendors is maintained by this office and can be provided if requested. This includes items that bear the log/marks of the University that aren't for resale. A letter of request should be sent to the licensing department stating the nature of the use and that the product is being used internally along with the name and address of the licensed company so the royalty fee can be waived.

All royalty income received will be placed into a permanent endowment for scholarships. The proceeds from this endowment will be divided equally for use in undergraduate, graduate, and athletic scholarships.

For questions concerning the licensing program, please call (251) 460-6211.

# ACADEMIC POLICIES & PROCEDURES

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## General Academic Policies

The University of South Alabama's academic policies and procedures provide the framework for the orderly conduct of its degree programs. They are intended to ensure a thorough and complete education for each of the University's graduates. Academic programs are administered through the Office of the Provost and Senior Vice President for Academic Affairs and the Office of the Vice President for Medical Affairs

## General Information

### University E-mail

Each student admitted to the University of South Alabama is assigned a free, official University e-mail address (@jagmail.southalabama.edu). Most changes in University policies and official University correspondence will be transmitted via the student's official e-mail account. Instructors must also utilize this address to communicate with students. Students are responsible for regularly reading e-mail sent to this address. The official University e-mail address cannot be changed, but students may elect to have official mail forwarded to any other personal e-mail address. To activate your JagMail account, select that link on the University's PAWS website at <https://www.southalabama.edu/services/logins/students/>.

### Academic Terms and Credit Hours

The institutional process for assigning credit hours to courses is based on the minimum academic activity to achieve intended learning outcomes as verified by evidence of student achievement. For traditional classes, a credit hour consists of approximately one hour of classroom or direct faculty instruction and a minimum of two hours of out of class work each week for approximately fifteen weeks for one semester or the equivalent amount of work over a different amount of time for semesters of other durations. For classes offered in other formats leading to the award of academic credit, the equivalent amount of academic activity is required.

The University Academic Calendar is two semesters (Fall and Spring) and three terms: a May term and two Summer terms. Semesters normally consist of fifteen weeks of class followed by a final examination week. In some programs of study, courses may be scheduled for parts of terms different from a normal semester. Usually, one semester credit hour is

awarded for each 50-minute lecture class per week or 2-3 hour laboratory or studio period.

Each hour of lecture usually requires two hours of outside preparation. Thus, a student carrying sixteen semester hours should be prepared to spend at least 48 hours in class and study per week.

### Student Classification

A student's classification is determined by the number of credits earned toward the degree. A student is classified as follows:

Student Classification	Number of Credits
Freshman	0 - 29 semester hours
Sophomore	30 - 59 semester hours
Junior	60 - 89 semester hours
Senior	90 semester hours or more

### Policy for Declaring an Academic Major

Declaring an Academic Major, Non-Transfer Students

Students who enter the university as undeclared or who intend to complete a degree at the university must declare a degree granting major by the time they complete 60 credit hours.

There are two exceptions: Students classified as Business Administration students need to declare their major in the College of Business by 75 credit hours. Students majoring in programs leading to teacher certification in the College of Education and Professional Studies need to enter candidacy, which leads to a degree granting major, by 75 credit hours.

Policy will not apply to second degree seeking or graduate students.

### Full-time/Part-Time Enrollment Status

Undergraduate degree seeking students carrying twelve or more credit hours of coursework each semester are considered full-time. However, students must carry at least fifteen hours each semester (for eight semesters) to meet requirements for graduation in four academic years. Co-op students who alternate full-time enrollment with employment are considered full-time students for enrollment purposes. Students carrying nine to eleven credit hours are considered three-quarter time, students carrying six to eight credit hours are considered half-time and students enrolled for one to five credit hours are considered less than half-time.

### Full Load of Course Work in a Semester

Permission of the student's academic dean is required to take more than 19 semester hours.

### Registration

Registration (making course selections and enrolling in classes) occurs prior to the beginning of each semester or term. All students obtain registration appointment times ("time tickets") and register utilizing USA's Personal Access Web System (PAWS) at <https://www.southalabama.edu/services/logins/students/>.

Registration is not complete until all fees have been paid and all admissions documents and examinations furnished. Failure to satisfy any of the admission or registration requirements will prevent registration for subsequent semesters and terms. Enrollment status can be found in PAWS website at <https://www.southalabama.edu/services/logins/students/>.

## Course Numbering System

Course Number	Classification
001-099	Remedial courses which do not carry credit toward graduation
100-199	Freshman
200-299	Sophomore
300-399	Junior
400-499	Senior
500-599	Graduate/Professional
600-799	Doctoral

## Attendance and Absences

An individual student is responsible for attending the classes in which the student is officially enrolled. The quality of work will ordinarily suffer from excessive absences. At the beginning of classes, instructors must define their policy on absences, and all cases of illness and emergency shall be promptly reported and verified to the instructor. For excessive absences (two or three consecutive class meetings) due to illness, death in family, or family emergency, the Dean of Students' office should be advised. Absence notices will be sent to each instructor notifying him of the reason for and the approximate length of the absence. This notification does not constitute an excused absence.

Students receiving veterans' benefits are required to attend classes according to the regulations of the Veterans Administration.

All international students on F-1 visas must comply with attendance regulations as dictated by the Department of Justice, Immigration and Naturalization Services. They must remain students in good standing with at least twelve (12) hours per semester.

Students attending authorized off-campus functions or required activities shall be excused by the responsible University official through the Office of Academic Affairs. In case of doubt, instructors may consult these lists in that office. Work missed as a result of these excused absences may be made up.

## Computer Access Requirement

All students enrolled at the University of South Alabama are required to have access to a personal computer. This may be achieved by individual ownership, access to a family computer when residing at home, sharing with a roommate, or other suitable arrangements not dependent on University public computer laboratories. Student personal computer access must include a current version of word processing software appropriate to college-level work, access to the Internet, and access to the university's e-mail system. Individual degree programs and specific courses may have additional requirements appropriate to curriculum needs.

Students will be permitted to enroll in mathematics classes based on their prerequisite course grade(s), Math-ACT score, Math-SAT score, or the Mathematics Placement test score as described on the following website: <https://www.southalabama.edu/colleges/artsandsci/mathstat/placementinfo.html>

Students who transfer credit for MA 112 or higher with a grade C or better and who plan to take subsequent mathematics courses are not required to take the Mathematics Placement Exam. Nevertheless, they are encouraged to take the exam to help evaluate their level of preparation.

If a student chooses to take the Mathematics Placement test, it must be completed before enrolling in any mathematics course other than ST 210.

Students who transfer credit for MA 110 or higher and who **do not** plan to enroll for any other mathematics courses are not required to take the Mathematics Placement Exam. Note that MA 110 does not fulfill prerequisite requirements for most mathematics courses.

The Mathematics Placement test is a computer-based test administered in a computer lab. A Texas Instruments TI-30XIIs calculator is allowed during this exam. No other resources are permitted during this exam. Students should complete the exam at least 48 hours prior to coming to campus for orientation. Students without any transfer credit for prerequisite course(s) will be blocked from registering for most mathematics and some statistics courses. Questions concerning the Math Placement Exam should be directed to the Department of Mathematics and Statistics (MSPB 325, (251) 460-6264). Dates when the Math Placement Exam is given and information on how to sign up for it can be found on the webpage:

<https://www.southalabama.edu/colleges/artsandsci/mathstat/placementschedule.html>.

## Requirements for Baccalaureate Degrees

### Bachelor's Degree

To qualify for a baccalaureate degree a student must complete a minimum of 120 approved semester hours, meet the university's general education requirements, meet the requirements of the major, and meet any specific requirements of the college or school. Some colleges and schools also require a minor. Degree requirements in some academic programs may exceed 120 hours. Students should consult the individual college or school for more details.

### I. General Education Requirements

#### General Education Mission

The General Education Curriculum at USA helps students succeed academically in college, be prepared for their professional careers, be equipped for life-long learning, and become responsible citizens and leaders. To meet these goals in a dynamic world, General Education provides shared experiences for students to acquire foundational skills and knowledge, along with an appreciation of diverse perspectives and a broad intellectual context in which students can situate their specialized fields of study.

#### General Education Competencies and Student Learning Outcomes

##### Communication Skills:

- The student will demonstrate effective writing skills.
- The student will demonstrate effective oral presentation skills.

##### Aesthetic and Critical Interpretations:

- The student will demonstrate a foundational knowledge of artistic and literary interpretations, and the student will demonstrate proficiency in basic interpretive skills.

##### Scientific Reasoning:

- The student will demonstrate proficiency in scientific reasoning and foundational knowledge of the natural sciences.

*Quantitative Reasoning:*

- The student will demonstrate proficiency in quantitative reasoning and the use of mathematics.

*Social Scientific Literacy:*

- The student will demonstrate foundational knowledge of the social sciences.

*Historical Perspectives:*

- The student will demonstrate a foundational knowledge of historical perspective.

**General Education Course Requirements**

All students must fulfill the following general education requirements, consisting of a minimum of 41 semester hours plus two designated writing intensive or "W" courses. Specific degree program and college requirements may exceed any or all of the minimum general education requirements. Also, because specific course requirements in general education will vary from major to major, students must refer to the program section of the Bulletin for their major before enrolling in courses intended to satisfy general education requirements as well as other program requirements. In addition, students should plan their degree program with an academic advisor. The general education requirements are:

**Area I. Written Composition**

EH 101 and EH 102 are required of all students, unless exempted. In addition, two designated writing (W) courses are required with at least one course chosen from offerings in the student's major or minor. Courses carrying this required credit are identified in the University Bulletin by a (W) after the course title. EH 101 and EH 102 are prerequisites to writing courses.

Students must demonstrate general competence in writing by earning a "C" or better in EH 101 and a "C" or better in EH 102. Students are exempt from the EH 101 requirement with an enhanced ACT English score of 27 or above, a recentered old SAT score of 610 or above, or a new SAT Reading Test. Students scoring a minimum of 50 on the CLEP English Examination will satisfy the EH 101 and EH 102 requirement. A score of 4 or higher in the Advanced Placement Program will satisfy the EH 101 requirement. Students completing an IB degree, with an IB exam score of 5 or higher in English, will satisfy the EH 101 and EH 102 requirements. Students failing to complete an IB degree, but who have an IB exam score of 5 or higher in English, may satisfy only EH 101 requirement.

**Note:** Credits earned in the English as a Second Language courses or Developmental Studies will not be accepted toward meeting writing competency requirements.

**Area II. Humanities and Fine Arts**

Requirements include at least 12 semester hours in humanities, with a minimum of three semester hours in literature, three semester hours in the arts, and the remaining semester hours from the humanities and fine arts. In addition to literature, disciplines in the humanities include, but are not limited to, philosophy, religious studies, speech<sup>1</sup>, modern and classical languages and literature, art, music, and theater and dance.

Courses should be broad in scope and content rather than specific and should emphasize a global perspective. Courses in the arts should emphasize history and appreciation rather than performance. Examples in the humanities and fine arts include, but are not limited to, world

literature, art history, music appreciation, comparative religions, and history or origins of dance.

<sup>1</sup> Students must complete one course that demonstrates competency in oral communication. Within the Colleges of Allied Health Professions, Arts and Sciences, Education and Professional Studies, Nursing, the School of Computing, and in the Departments of Civil Engineering, Electrical and Computer Engineering, and Mechanical Engineering in the College of Engineering, students must complete CA 110 to satisfy the competency in oral communication requirement. Students majoring in the College of Business and the Department of Chemical and Biomolecular Engineering must meet the specific oral communication requirements of their major (see appropriate sections of this Bulletin for details.)

**Area III. Natural Sciences and Mathematics**

Requirements include at least 11 semester hours with at least three semester hours in mathematics at the finite mathematics (MA 110) or precalculus algebra (MA 112) level or higher and at least eight semester hours in the natural sciences which must include laboratory experiences. See the **Mathematics Placement** section.

Disciplines in the natural sciences include, but are not limited to, astronomy, biology, chemistry, geology, physical geography, and physics.

Courses in the natural sciences should be broad in scope and content rather than specific to an aspect of a discipline and may include interdisciplinary science courses. Courses in the natural sciences must include laboratory experiences which emphasize the scientific method.

**Area IV. History, Social, and Behavioral Sciences**

Requirements include twelve semester hours in history, social, and behavioral sciences with at least six semester hours from among other disciplines in the social and behavioral sciences. Other disciplines include, but are not limited to, anthropology, economics, geography, political science, psychology, and sociology.

Courses should be broad in scope and content, include global or international perspectives, and must emphasize the methods of inquiry in the social sciences.

Students must complete a six-semester hour sequence in literature or history.<sup>1</sup> Note that some majors specify the sequence and the requirements of the major should be referred to before deciding upon either a literature or history sequence. If the sequence selected is in literature, an additional three hours must be taken in any of the history, social science, or behavioral science disciplines above.

<sup>1</sup> Students preparing to complete the BS degree in engineering are required to complete nine rather than 12 semester hours in the humanities and fine arts. Rather than the six hour sequence in history or literature, they must demonstrate in-depth study in the humanities and fine arts, history, and the social and behavioral sciences as indicated in the General Education Requirements of the College of Engineering.

**II. Major Requirements**

(Refer to the Program Section of the Bulletin)

**Technology Use Requirement**

All undergraduate students must have access to and training in the use of technology to enhance learning and appropriate to meet the objectives

of individual degree programs. Each degree program will specify how its students will meet this requirement.

### Pre-requisites

Students may not register for courses for which they do not have the prerequisites specified in the course descriptions. Any student who does so will be withdrawn by the Registrar, the student's dean, or the dean of the college in which the course is taught.

### Minimum Grade-Point Average

A student must earn a minimum grade-point average (GPA) of 2.00 (an average grade of "C") based on all coursework taken at the University of South Alabama. Students enrolled in the College of Education and Professional Studies in majors with candidacy requirements must have a minimum grade-point average of 2.20 (2.75 grade-point average for teacher certification). Grades in pass-fail (S/U) courses do not carry quality points and are not used in determining the grade-point average.

### Hours in Residence/Residency Requirement

A candidate for graduation must complete a minimum of 25 percent of the credit hours required for the degree through instruction offered by the University of South Alabama in upper-division coursework (300 and 400 levels). Upon the recommendation of the dean of the appropriate college and approval of the Provost and Senior Vice President for Academic Affairs or Vice President for Medical Affairs, other credit earned at USA may be substituted to meet the residency requirement. Up to 15 credit hours of study abroad courses may be used to satisfy USA upper-division course requirement. In such cases, up to 15 credit hours of lower-division courses may be used to help meet the requirement that a minimum of 25 percent of the credit hours required for the degree are accomplished through courses offered by USA.

There is also a minimum number of semester hours that must be completed in the major and minor at the University of South Alabama: A minimum of 15 credit hours of courses at the 300/400 level in the major discipline must be completed at the University of South Alabama. If a minor is required in the particular degree program, 9 credit hours of courses in the minor must also be completed at the University of South Alabama.

Any deviation from these residency policies must be approved by the Executive Vice President and Provost for Academic Affairs or Vice President for Medical Affairs. Students should consult the University Bulletin for additional regulations in each academic unit.

## Dual Bachelor's Degree

Students currently enrolled in a degree program may pursue a dual degree. A dual degree differs from a double major in that the dual degree has additional requirements beyond those of a second major's as specified below. To earn a dual degree, students must fulfill the following requirements:

1. They must complete the appropriate form(s) in the Registrar's Office.
2. They must be enrolled in the college(s) in which both degrees are administered.
3. They must complete at least 150 total semester hours.
4. They must complete a course of study, approved by the appropriate dean, consisting of at least 30 credit hours in upper-division coursework in residence over and above the requirements for the first bachelor's degree including a recognized major program.

5. They must satisfy all degree requirements of the college(s) awarding each degree.
6. They must comply with all other University regulations.

## Second Bachelor's Degree

Students who have been awarded a bachelor's degree from a regionally accredited college or university, based on at least 120 semester hours of fully accredited work, may seek a second bachelor's degree at the University of South Alabama. To earn a second bachelor's degree, students must fulfill the following requirements:

1. Complete the appropriate form(s) in the Admissions Office or Registrar's Office.
2. Complete a course of study, with a grade-point average of 2.0 or higher, consisting of at least 30 credit hours in upper-division coursework in residence over and above the requirements for the first bachelor's degree, including a recognized major program.
3. Students must select a major different from that of the first degree.
4. Certain majors may require students to complete prerequisite courses before enrolling in the minimum 30 hours in upper-division coursework.
5. The general education requirements earned during the first baccalaureate degree will be honored by the University as fulfillment of the general education curriculum unless the college or school of the student's major has accreditation requirements that state otherwise.

## College Course Credit

### English Composition I Exemption

Students who score a minimum ACT English score of 27 or an old SAT verbal score of 610 or a new SAT Reading Test score of at least 33 will be exempt from taking English 101. Official scores should be mailed to the Office of Admissions for exemption to be granted.

### Credit by Examination

A student may receive credit for a course by passing a locally prepared examination and by paying appropriate fees. (See "Credit by Examination".)

### Military Service/ROTC Credit

A student may receive Military Science or Aerospace Science placement credit for prior military service or Junior ROTC training. Contact the Department of Military Science or the Department of Air Force Studies for details.

## The Prior Learning Assessment Center

The Prior Learning Assessment Center, housed in the Department of Integrative Studies, will serve as a central location where potential and enrolled USA students can obtain information and advising on the assessment options available for earning USA credit for prior learning. The center will also be the primary academic unit responsible for the coordination and administration of prior learning assessment by portfolio.

## Advanced Placement (AP) Credit

Students participating in the Advanced Placement Program of the College Entrance Examination Board (CEEB) will be granted University credit as indicated below.

AP Course	USA Course	Score	Credit Hours
Art History	ARH 100	4	3 hrs
Studio Art: 2-D Design	ARS Elective	4	3 hrs
Studio Art: 3-D Design	ARS Elective	4	3 hrs
Studio Art-Drawing	ARS Elective	4	3 hrs
Art History	ARH 100	4	3 hrs
Biology	BLY 121/ BLY 121L & BLY 122/ BLY 122L	3	8 hrs
Chemistry	CH 131/CH 131L	4	4 hrs
Chemistry	CH 131/CH 131L & CH 132/ CH 132L	5	8 hrs
Computer Science A	CSC 120	4	4 hrs
Computer Science Principles	CSC 108	3	3 hrs
Microeconomics	ECO 215	3	3 hrs
Macroeconomics	ECO 216	3	3 hrs
Language & Composition	EH 101	3	3 hrs
Language & Literature	EH 101	3	3 hrs
Human Geography	GEO 114	3	3 hrs
World History	HY 101	4	3 hrs
World History	HY 101/HY 102	5	6 hrs
European History	HY 102	4	3 hrs
US History	HY 136	4	3 hrs
US History	HY 135/HY 136	5	6 hrs
Precalculus	MA 115	3	4
Calculus AB	MA 125	3	4 hrs
Calculus BC	MA 125 and MA 126	3	8 hrs
Music Listen & Lit	MUL Elective	3	3 hrs
Music Theory	MUT Elective	3	3 hrs
Physics 1	PH 114/PH 114L	4	5 hrs
Physics 2	PH 115/PH 115L	5	5 hrs
Physics C Mechanics	PH 201/PH 201L	4	4 hrs
Physics C Electricity & Magnetism	PH 202/PH 202L	4	4 hrs
American Gov't	PSC 130	3	3 hrs

Comparative Gov't	PSC 250	3	3 hrs
Psychology	PSY 120	3	3 hrs
Statistics	ST 210	3	3 hrs
<b>Chinese:</b>			
Chinese Language and Culture	LG 121 & LG 122	3	6 hrs
Chinese Language and Culture	LG 121, LG 122, & LG 221	4	9 hrs
Chinese Language and Culture	LG 121, LG 122, LG 221, & LG 222	5	12 hrs
<b>French:</b>			
French Language and Culture	LG 111 & LG 112	3	6 hrs
French Language and Culture	LG 111, LG 112, & LG 211	4	9 hrs
French Language and Culture	LG 111, LG 112, LG 211, & LG 212	5	12 hrs
<b>German:</b>			
German Language and Culture	LG 151 & LG 152	3	6 hrs
German Language and Culture	LG 151, LG 152, & LG 251	4	9 hrs
German Language and Culture	LG 151, LG 152, LG 251, & LG 252	5	12 hrs
<b>Latin:</b>			
Latin	LG 101 & LG 102	3	6 hrs
Latin	LG 101, LG 102, & LG 201	4	9 hrs
Latin	LG 101, LG 102, & LG 201 & LG 202	5	12 hrs
<b>Spanish:</b>			
Spanish Language and Culture	LG 131 & LG 132	3	6 hrs
Spanish Language and Culture	LG 131, LG 132, & LG 231	4	9 hrs
Spanish Language and Culture	LG 131, LG 132, & LG 231, & LG 232	5	12 hrs

## International Baccalaureate Program (IB)

Students participating in the International Baccalaureate Program (IB) will be granted credit by the University of South Alabama to those who have achieved a score of "5" or higher on the International Baccalaureate Program examinations. Individual academic disciplines will determine if a higher score is required in a particular course(s). IB Credit with a grade of at least "5" will be awarded as follows:

Title	SL/HL	Passing Score	USA Course Equivalent	Credit Hours
Biology	SL	5	BLY 101, BLY 101L, BLY 102, BLY 102L	8
Biology	HL	5	BLY 121, BLY 121L, BLY 122, BLY 122L	8
Chemistry	SL	5	CH 101, CH 101L or CH 131, CH 131L	4
Chemistry	HL	5	CH 131, CH 131L, CH 132, CH 132L	8
Economics	SL	6	ECO 215, ECO 216	6
Economics HL	HL	4	ECO 215	3
Economics HL	HL	5	ECO 215, ECO 216	6
Language A: Language and Literature	HL	5-6	EH 101	3
Language A: Language and Literature	HL	7	EH 101, EH 102	6
Geography	SL and HL	4	GEO 114	3
History of the Americas	HL	5	HY 135	3
History of Asia and Oceania	HL	5	HY 104	3
History of Europe	HL	5	HY 102	3
Information Technology in a global society	SL and HL	5	ISC 245 or ITE 271	3
Arabic	ab initio SL/HL	4	LGS 106	3
Arabic	SL and HL	3	LGS 106	3
Arabic	SL and HL	4	LGS 106, LGS 107	6
Arabic	SL and HL	5	LGS 106, LGS 107, LGS 206, LGS 207	12
Chinese	ab initio SL/HL	4	LG 121	3
Chinese	SL and HL	3	LG 121	3
Chinese	SL and HL	4	LG 121, LG 122	6
Chinese	SL and HL	5	LG 121, LG 122, LG 221, LG 222	12
Classical Languages	ab initio SL/HL	4	LG 101	3
Classical Languages	SL and HL	4	LG 101	3
Classical Languages	SL and HL	5	LG 101, LG 102	6
Classical Languages	SL and HL	6	LG 101, LG 102, LG 201	9
Classical Languages	SL and HL	7	LG 101, LG 102, LG 201, LG 202	12
French	ab initio SL/HL	4	LG 111	3
French	SL and HL	4	LG 111	3
French	SL and HL	5	LG 111, LG 112	6
French	SL and HL	6	LG 111, LG 112, LG 211	9
French	SL and HL	7	LG 111, LG 112, LG 211, LG 212	12
German	ab initio SL/HL	4	LG 151	3
German	SL and HL	4	LG 151	3
German	SL and HL	5	LG 151, LG 152	6
German	SL and HL	6	LG 151, LG 152, LG 251	9
German	SL and HL	7	LG 151, LG 152, LG 251, LG 252	12
Hindi	ab initio SL/HL	4	LGS 131	3
Hindi	SL and HL	3	LGS 131	3
Italian	ab initio SL/HL	4	LGS 161	3
Italian	SL and HL	4	LGS 161	3
Italian	SL and HL	5	LGS 161, LGS 162	6
Italian	SL and HL	6	LGS 161, LGS 162, LGS 261	9
Italian	SL and HL	7	LGS 161, LGS 162, LGS 261, LGS 262	12
Japanese	ab initio SL/HL	4	LGS 101	3
Japanese	SL and HL	3	LGS 101	3

Japanese	SL and HL	4	LGS 101, LGS 102	6
Japanese	SL and HL	5	LGS 101, LGS 102, LGS 201, LGS 202	12
Korean	ab initio SL/ HL	4	LGS 171	3
Korean	SL and HL	3	LGS 171	3
Korean	SL and HL	4	LGS 171, LGS 172	6
Korean	SL and HL	5	LGS 171, LGS 172, LGS 271, LGS 272	12
Modern Greek	ab initio SL/ HL	4	LGS 141	3
Modern Greek	SL and HL	4	LGS 141	3
Modern Greek	SL and HL	5	LGS 141, LGS 142	6
Modern Greek	SL and HL	6	LGS 141, LGS 142, LGS 241	9
Modern Greek	SL and HL	7	LGS 141, LGS 142, LGS 241, LGS 242	12
Portuguese	ab initio SL/ HL	4	LGS 181	3
Portuguese	SL and HL	4	LGS 181	3
Portuguese	SL and HL	5	LGS 181, LGS 182	6
Portuguese	SL and HL	6	LGS 181, LGS 182, LGS 281	9
Portuguese	SL and HL	7	LGS 181, LGS 182, LGS 281, LGS 282	12
Russian	ab initio SL/ HL, SL and HL	4	LG 171	3
Russian	ab initio SL/ HL, SL and HL	5	LG 171, LG 172	6
Russian	ab initio SL/ HL, SL and HL	6	LG 171, LG 172, LG 271	9
Russian	ab initio SL/ HL, SL and HL	7	LG 171, LG 172, LG 271, LG 272	12
Spanish	ab initio SL/ HL	4	LG 131	3
Spanish	SL	4	LG 131	3
Spanish	SL	5	LG 131, LG 132	6
Spanish	SL	6	LG 131, LG 132, LG 231	6
Spanish	HL	5	LG 131, LG 132	6

Spanish	HL	6	LG 131, LG 132, LG 231	9
Spanish	HL	7	LG 131, LG 132, LG 231, LG 232	12
Mathematical Studies	SL	4	MA 110	3
Mathematics: SL and HL Applications & Interpretation	SL and HL	4	MA 112	3
Mathematics: SL and HL Analysis & Approaches	SL and HL	4-5	MA 115	4
Mathematics: SL and HL Analysis & Approaches	SL and HL	6	MA 125	4
Music	SL	5	MUL 101	3
Music	HL	5	MUL 235	2
Philosophy	SL and HL	5	PHL 110	3
Physics	SL and HL	5	PH 104	4
Psychology	SL and HL	5	PSY 120	3
Social and Cultural Anthropology	SL and HL	5	AN 100	3
Theatre	SL and HL	4	DRA 110	3

## CLEP

A student can receive up to 25% of the total credits required for the degree from the General Examinations and certain Subject Examinations of the College Level Examination Program (CLEP) as shown below. Official CLEP scores mailed directly from the CLEP division of the Educational Testing Service are required before credit will be awarded.

CLEP Exam	USA Credit Awarded	Hours Awarded	CLEP Score Required
American Government PSC 130	3	3 hrs	50
General Biology BLY 121/BLY 122	3	8 hrs	50
Calculus MA 125	3	4 hrs	60
Precalculus MA 115	3	4 hrs	50
General Chemistry CH 131/CH 132	3	8 hrs	50
Intro to Psychology PSY 120	3	3 hrs	50
Financial Accounting ACC 211	3	3 hrs	50
Intro to Business Law BUS 265	3	3 hrs	50
Intro to Macroeconomics ECO 216	3	3 hrs	50

Intro to Microeconomics ECO 215	3 hrs	50
Intro to Marketing MKT 320	3 hrs	50
Intro to Sociology SY 109	3 hrs	50
Human Growth and Development PSY 250	3 hrs	50
U.S. History I: Early Colonizations to 1877 HY 135	3 hrs	50
US History II: 1865 to Present HY 136	3 hrs	50
Western Civilization I: Ancient Near East to 1648 HY 101	3 hrs	50
Western Civilization II: 1648 to Present HY 102	3 hrs	50
College Composition EH 101/EH 102	6 hrs	50
Humanities-General Fine Arts and Lit Elect	6 hrs	50
College Mathematics Math Electives	8 hrs	50
Natural Sciences-General Bio & Nat Science Elect	8 hrs	50
Social Science & History Soc Science & Hist Elect	6 hrs	50
French	6 hrs	50-58
LG 111 and LG 112 LG 111, LG 112, and LG 211	9 hrs	59+
German	6 hrs	50-59
LG 151 and LG 152 LG 111, LG 112, and LG 211	9 hrs	
Spanish	6 hrs	50-62
LG 131 and LG 132 LG 131, LG 132, and LG 231	9 hrs	63+

Computer Science CLEP credit is awarded based on USA departmental recommendations. The University reserves the right to change the CLEP minimum scores and credit awarded based on recommendations by the College Board and University research.

## Double/Second Majors

### Double Majors

Undergraduate students may elect to fulfill the requirements for two majors concurrently. To do so, the student must declare a primary major and a secondary major on the Declaration/Change of Undergraduate Program form (<https://www.southalabama.edu/departments/eforms/registrar/majorminor.pdf>) approved by their academic advisor and then filed with the Registrar's Office. Students who declare a double major must participate in academic advising in each major. Completion of a minor is not required of students completing two majors. Students who declare two majors from different colleges will be required to fulfill all requirements for each major and to fulfill all degree requirements, including those for general education, that apply in the college of the primary major. Students who complete the requirements for two majors from different colleges will be awarded the degree granted by the college of the primary major, and transcripts will designate that both the primary and secondary majors were completed.

### Second Major

Students who have been awarded a baccalaureate degree at the University of South Alabama may return to study for a second major as a non-degree student (see unclassified). Such students must fulfill the following requirements to have a second major recorded on their academic record:

1. They must be enrolled in the college in which the major is administered.
2. They must meet all the requirements of the second major.
3. At least half the total number of hours required for the second major must be satisfactorily completed in residence at the University of South Alabama.
4. At least nine hours of the work in the second major satisfactorily completed in residence at the University of South Alabama must be in addition to work completed as part of the baccalaureate degree.
5. The appropriate dean's office is responsible for notifying the Registrar's office of satisfactory completion of the second major.

When these requirements have been met, a notation will be entered on the student's record to indicate that the student has "completed work equivalent to a major in \_\_\_\_". Students completing a major equivalency in this fashion may not apply the additional coursework toward a second bachelor's degree.

### Minors

The purpose of a minor program is to specify a set of courses that provide a degree of content mastery in a discipline or coherent interdisciplinary field. Ordinarily, a minor program consists of a minimum of 18 hours with at least 9 hours at the upper-division level. Exceptions to the 9 upper-division hours in a minor may occur when the prerequisite sequence for a minor requires more than 9 hours of lower-division courses. Minors approved prior to December 3, 2014 are exempted from the minimums identified above. A minimum of 9 credit hours of courses in the minor must be completed at the University of South Alabama.

# Graduation

## Application and Bulletin Choice

### Application for Graduation

Students planning to graduate must submit an application for graduation with the Registrar's Office at least one semester before expected degree completion (see the Academic Calendar (<https://www.southalabama.edu/academiccalendar/>) for deadlines). Failure to apply will result in a delay in scheduled graduation dates.

The degree audit/official check sheet must be approved by the graduation clearance personnel in each college/school with the approval of the chair of the major department and the academic dean.

### Choice of Bulletin Under Which a Student Graduates

A candidate for the baccalaureate degree must fulfill the requirements of a degree program as specified in the Bulletin in effect during the academic year of the student's first matriculation as a degree-seeking student. Students may select a subsequent Bulletin during their matriculation with the approval of an academic advisor. If a student does not attend the University for a period of one (1) calendar year or longer, the student will be required to fulfill the requirements of the degree program as specified by the Bulletin in effect during the year of the student's return as a degree-seeking student.

If a student prolongs the completion of a degree program, curricular or programmatic changes may occur to such an extent that the requirements for the degree program as outlined in a Bulletin for which the student would otherwise be eligible can no longer be fulfilled. If, in the judgment of the appropriate academic dean, this has occurred, such Bulletins cannot be used for meeting degree requirements. In these cases, the academic dean would designate the appropriate Bulletin for the determination of degree requirements.

If a student changes degree programs, the student will fulfill the requirements of the Bulletin in effect when the change of degree program is approved.

The University reserves the right to make changes, as required, in course offerings, curricula, academic policies, and other rules and regulations affecting students, to be effective whenever determined by the University. These changes will govern current and former students. Interpretations of these policies will be made by the appropriate University authorities, keeping in mind the interests of the students and the University. Enrollment of all students is subject to the conditions and policies as set forth in the Bulletin.

## Evaluation of Degree Requirements

Each candidate will have one official check of remaining degree requirements following filing of the application for graduation which includes the payment of the \$65.00 application fee. Students who apply for graduation after the dates posted in the Academic Calendar (<https://www.southalabama.edu/academiccalendar/>) will be assessed a \$25.00 late fee. Students may verify degree progress at any time using the Degree Works audit available through PAWS.

## Graduation with Honors

Undergraduate students who have at least 60 GPA hours in residence with a grade-point average of 3.50 or better at the University of South Alabama are graduated with distinction. Transfer credit hours are not

included in the determination of academic honors. Academic honors are not awarded for graduate or professional degrees.

Students completing a second undergraduate degree at USA are eligible for consideration of academic honors. Such students must have 60 or more undergraduate GPA hours in residence at USA, including any work towards a first degree at USA and all work on the second degree. All undergraduate work at USA is used in the calculation. No work at another institution is considered.

- Students earning a grade-point average of 3.90 or higher are graduated summa cum laude.
- Students earning a grade-point average of 3.70 but less than 3.90 are graduated magna cum laude.
- Students earning a grade-point average of 3.50 but less than 3.70 are graduated cum laude.

The institutional grade-point average, rounded to the nearest hundredth, can be found in PAWS. No additional rounding will occur; students must have a minimum USA GPA of 3.50 to be eligible for Latin honors.

Since commencement occurs before final grades are processed, final official honors cannot be determined before the commencement ceremony. Thus tentative honors, based on the student's academic record through the end of the last term completed, will appear in the printed commencement program. Final, official honors will be computed after all grades are processed at the end of the term for the last term of attendance and will appear on the student's diploma and transcript.

## Honors College

Students who have completed all requirements for the University of South Alabama Honors College with an institutional grade-point average of 3.50 or higher will receive special recognition at graduation. For details of the USA Honors College see USA Honors College (<https://www.southalabama.edu/departments/honors/>).

## Commencement

USA has commencement ceremonies in Spring and Fall Semesters. Summer candidates participate in the Spring commencement ceremony with the exception of doctoral candidates. Summer doctoral graduates will have their degrees conferred at the Fall commencement ceremony. Participation in commencement does not mean degree requirements have been completed or academic honors have been awarded.

## Diplomas

Diplomas are issued each term. Diplomas will be held until all outstanding obligations to the University have been cleared. Unclaimed diplomas become the property of the University one calendar year thereafter.

## Awarding of Posthumous Degree

A posthumous degree may be awarded to a deceased undergraduate student who had senior academic status or to a deceased graduate student near completion of his or her graduate program. Qualifying students must have been registered at the University of South Alabama within twelve months of the time of death and be in good academic standing at the University. The Dean of the student's college submits a recommendation to the Executive Vice President and Provost or Vice

President for Medical Affairs for review. If approved, the recommendation will be forwarded to the Office of the President for final approval.

If they so desire, the deceased student's family may receive the diploma in a regularly scheduled university commencement ceremony or in a private ceremony.

## Examinations

### Examinations

Final examinations are held at the end of each semester or term.

### Credit by Examination

USA students may receive credit by special examination upon approval of the appropriate academic personnel (statement of application procedures may be obtained from the Office of the Registrar). A fee of \$30.00 will be charged for each examination. In addition, the student will be charged the current course fee per hour of credit. Hours attempted will be included in determining the student's grade-point average.

## College Level Examination Program (CLEP)

The University of South Alabama is a participant in the College Level Examination Program. Transfer credits earned through the College Level Examination Program will be evaluated according to standards established by this University. Prospective or enrolled students may seek information from the Office of Admissions or Office of the Registrar.

### Credit Limitation

No more than a combined total of 25% of the total credits required for the degree will be allowed for credit received through the College Level Examination Program (CLEP), Advanced Placement Program (AP), International Baccalaureate Program (IB), military service school courses, and other approved non-collegiate-sponsored programs, as recommended by the American Council on Education.

## Grades

### Grades

#### Reporting of Grades

Final grades are available through PAWS (Personal Access Web System at <http://paws.southalabama.edu>) at the completion of each semester or term.

#### Midterm Grades

Undergraduate students in full-term courses will receive midterm grades that will address attendance, participation, and academic progress. Midterm grades are intended to provide feedback for students and will not show on the academic transcript unless the midterm grade is the final grade submitted due to the student's failure to continue in the course.

Graduate students in full-term courses will receive midterm grades. Letter grade feedback for graduate courses may or may not be assigned at midterm but all graduate course midterm grades will address attendance, participation, and academic progress. Midterm grades are intended to provide feedback for graduate students and will not show on academic transcripts unless the midterm grade is the final grade submitted due to the student's failure to continue in the course.

## Grades and Grade-Points

Final examinations are held at the end of each semester. Students are graded based on the following guidelines:

Grade	Guideline
A	Excellent, 4 grade-points per semester
B	Good, 3 grade-points per semester
C	Satisfactory, 2 grade-points per semester hour (Undergraduate); Marginal, 2 grade-points per semester hour (Graduate)
D	Minimum Passing, 1 grade-point per semester hour (Undergraduates)
F	Failure, no grade-points (weighted)
F*	Failure in cases where the student does not officially withdraw, but failed to attend or participate in class activities, or stopped attending or participating in class activities prior to the end of classes. No grade points.
S	Satisfactory, no grade-points (unweighted)
U	Unsatisfactory, no grade-points (unweighted)
U*	Unsatisfactory in cases where the student does not officially withdraw, but failed to attend or participate in class activities, or stopped attending or participating in class activities prior to the end of classes. No grade points.

The following symbols are substitutes for grades. They are not grades.

Symbol	Guideline
I	Incomplete (see below)
WD	Withdrawal
P	Course in progress (see below)
AU	Audit
N	No grade or invalid grade (assigned only by the University Registrar)

The symbol "I" (Incomplete) is assigned when, for reasons beyond the student's control, the student is unable to fulfill all the normal course requirements. The situation warranting an "I" must be a medical condition, an equipment problem, or other mitigating circumstance that is patently demonstrable to be beyond the student's control. This symbol is not used to provide time for completion of extra work beyond the normal course requirements for improving the student's grade, or to permit the student to avoid probation, suspension, or dismissal. The "I" symbol should not be assigned unless the amount of incomplete work can reasonably be completed in the time period allotted for an "I" grade without additional extensions. Extensions of "I" grades should only be granted in rare cases where additional and unanticipated circumstances beyond a student's control have prevented completion. All records of the symbol "I" must be cleared by the specified deadline of the next semester.

or term; if they are not, grades of "F" will be recorded by the University Registrar.

The symbol "P" (In Progress) is assigned only in a limited number of approved courses that require more than one semester or term for completion. Unless the "P" is removed by the end of the second succeeding semester or term, a grade of "F" will be recorded.

## Change of Grade

Grades reported by instructors to the University Registrar may not be changed unless there was an error in recording or in evaluation. Grade changes require the approval of the primary instructor of record and the signature of the department chair and the dean of the college in which the course is taught (or, for graduate students, the Director of Graduate Studies and the Dean of the Graduate School.) A Dean may delegate this responsibility to an Assistant/Associate Dean or to a Director or other academic administrator in their college when appropriate. All grade changes involving an F\* or U\* grade will also require the signature of the Associate Vice President for Academic Affairs. Grades on record for one calendar year may not be changed. The approval authority of the Dean is not intended to impede or restrict the right of the faculty to request and be granted approval to change a grade when it has been erroneously entered into the official academic records of the University.

## Final Grade Grievance Policy

A student may initiate an inquiry under procedures set forth by the Undergraduate Final Course Grade Grievance Policy. A copy of this policy is available in the dean's office of each college and is published in The Lowdown (<https://www.southalabama.edu/departments/studentaffairs/lowdown/>) (Student Handbook) and in the Faculty Handbook (<https://www.southalabama.edu/departments/academicaffairs/facultyhandbooks.html>).

## Repeated Courses

A student may repeat a course in which a grade of "D" or "F" is received. Total grade-points are computed based on all attempts. A student who has a grade of "C" or better may repeat the course with the approval of the appropriate academic dean. Credit for a repeated course may be counted only once toward graduation, but all grades are recorded on the student's transcript and are counted in determining quality points.

## Grade Replacement Policy

Please Note: A USA grade point average that includes grade replacement, may not be used for some purposes. For example, graduate and professional programs may recalculate your grade point average with no grade replacement for admissions decisions.

Note to students: If you are receiving financial aid, please be aware that the Satisfactory Academic Progress Policy is separate from the Grade Replacement Policy. Replacement of a grade does not change the Satisfactory Academic Progress calculation. All work attempted is part of this calculation and repeating courses could negatively affect your eligibility for financial aid. If you have questions, please contact the Office of Financial Aid (251-460-6231 or [finaid@southalabama.edu](mailto:finaid@southalabama.edu)).

If you received a University of South Alabama Scholarship that requires you to complete 30 semester hours/academic year, be aware that repeating a course for grade replacement in the same year will not contribute additional credit hours toward satisfying the 30 semester hour requirement. For the replacement to impact your USA GPA in a specific year or term, a Grade Replacement Application must be processed prior

to the deadline for scholarship review for that year or term. Contact the Office of Scholarship Services to obtain deadline dates.

Grade replacements are subject to the following conditions:

- Only USA undergraduate students seeking a first Bachelor's degree qualify for this policy.
- All attempts for each course are recorded on the transcript. Courses that are not used in calculating the GPA will remain on the transcript.
- Only courses taken at USA are eligible for grade replacement.
- Courses in which a B, C, D, or F was earned may be eligible for grade replacement.
- A maximum of 12 credit hours of undergraduate (100-400 level) course grades may be replaced. In each case, the student must have repeated the identical course with an improved grade relative to the course grade being replaced.
- It is possible for a student to have more than one grade removed from the GPA calculation for the same course. However, each grade that is removed counts towards the maximum 12 credit hours eligible for grade replacement.
- Certain courses are not eligible for grade replacement. Courses that are not eligible include: Graduate courses, PE activity courses, internships/clinical courses, health science professional courses, field experiences, research seminars, independent/ directed studies, and special topics courses. Students check with their specific program for further restrictions on eligible courses.
- A course grade for which academic misconduct has been established does not qualify for grade replacement.
- Once a student graduates with any first Bachelor's degree, a class may not be repeated to improve the USA grade point average.
- Grade replacement does not change a student's past academic standing.

## Application Procedure

- Complete a Grade Replacement Application form and turn it in to your College Advising office.
- Each course grade replacement request must be done on a separate form.
- Once a grade is replaced, the action is irrevocable.
- A maximum of 12 USA credit hours for repeated courses can be replaced. Additional requests will not be granted. This rule may not be appealed.
- The Grade Replacement Application form may be turned in anytime before the awarding of the student's first Bachelor's degree at USA.
- Students will be notified through their USA e-mail of the approval or denial of this request. Students may confirm grade replacement by viewing their PAWS transcript.

## Adding or Dropping Courses

Students may drop courses, using PAWS (<http://paws.southalabama.edu/>) (the student online self-service system), without penalty provided the withdrawal occurs within the time limits listed in the Academic Calendar (<https://www.southalabama.edu/academiccalendar/>). See the procedures for withdrawals below. Course drops may also be submitted in person to the Registrar's Office. The grade of "F\*" or "U\*" is recorded for a course abandoned without an official withdrawal. Students who withdraw from a course after the last day for refunds may, with the permission of the instructor, continue to attend the course but may participate in class activities and assignments

only to the extent allowed by the instructor. Students who withdraw from clinical courses, laboratory, or field experiences must have permission from the department chair to continue in the course.

## Plagiarism and Cheating

See Student Academic Conduct Policy (p. 49).

## Academic Status Policy

### Status Policies

#### Required Grade Point Average

All undergraduate students must meet the established standards designating appropriate academic progress.

As discussed in the section, Requirements for Baccalaureate Degrees, a student must earn a minimum cumulative USA grade point average of 2.0 to graduate. (See special requirements in the College of Education and Professional Studies.) The cumulative GPA hours- all hours taken at USA and all transfer hours -will determine the required minimum USA GPA. Cumulative GPA hours can be found in PAWS.

#### Academic Probation

Students with a cumulative grade point average below 2.0 are having academic difficulties and are alerted to this fact by being placed on Academic Probation. Students who earn Academic Probation receive a Academic Probation hold and are required to meet with their academic advisor to discuss their course load and plans for the upcoming semester. Students will not be able to adjust or make changes to their schedule until they speak with their academic advisor or designated staff in their dean's office.

#### Academic Suspension

Academic Suspension for one regular semester, Fall or Spring, results if a student at the end of any semester on Academic Probation does not have the minimum cumulative USA grade point average indicated in the table below. If a student earns a USA grade point average of 2.0 or higher for the term but does not meet the table requirements, the student will be allowed to register for the upcoming term. A student in this case must meet with an academic advisor to create an Academic Success plan that specifies a viable path to degree completion.

The minimum required grade point average varies with the total number of Cumulative GPA hours. No student will be placed on Academic Suspension who has not spent the prior term of enrollment on Academic Probation. Students will not receive credit at USA for courses taken at other institutions while on suspension from USA.

#### What Should I Do If I Have Been Suspended?

There are a number of positive things you can do to make good use of your time away from South and improve your chances for academic success moving forward.

1. Enroll in summer courses at the University of South Alabama during the summer term immediately following your suspension. Students on Academic Suspension for the upcoming fall semester, due to spring grades, can earn reinstatement for the upcoming fall semester by completing courses at USA during the summer term and increasing their cumulative USA GPA to the appropriate level stated on the Suspension/Dismissal Table. Be sure to work with your academic advisor to plan the best course of action for your success.

2. If you have any Incomplete grades from this past semester, be sure to complete the work in the course(s). Incomplete grades that go unattended will change to I/F grades on your transcript and eventually lower your GPA.
3. Check to see if you have utilized grade replacements or academic reboot. This could impact your GPA and academic status.
4. When appropriate, consider enrolling in courses at another college and achieve the highest grades you can. Be sure to speak with your advisor about the best course options for you. Note, courses completed at other institutions do not contribute to your USA grade point average.
5. Working may be a good option for some students. Working now might allow you to reduce your work schedule upon reinstatement, especially if you have to work while in school and you know that balancing school and work has been a challenge for you.

- If your academic performance has suffered due to personal or family illness or personal or family issues, use this time while out on suspension to heal, recuperate, and/or attend to family concerns.
- Take stock of your academic strengths and areas of growth and how these relate to your future goals. Is your current major the right fit for you? Do you have a major yet? If you can honestly assess your academic strengths and choose a path of study that allows you to excel rather than struggle academically upon your reinstatement, you will find yourself a much happier and more successful student. Be sure to talk to your advisor and a career counselor.
- Meet with your academic advisor to develop a success plan for your return.

#### Appeal for First Academic Suspension

The procedure for a student to appeal an academic suspension decision follows:

1. The suspended student must present a letter describing the extenuating personal circumstances that contributed to his or her academic deficiencies. Each individual wishing to appeal an academic suspension is required to submit this letter outlining the reasons for the applicant's previous academic problems and how the applicant plans to correct the problems.

Examples of extenuating circumstances to be considered for appeal could include:

- death of an immediate family member,
- significant trauma that impaired the student's ability to be successful, and/or
- other unexpected, documented circumstances beyond the control of the student.

2. Appropriate documentation relative to the need for additional consideration and/or substantiating the circumstances related to the appeal can be included and will aid in the committee's decision.
3. An academic success plan developed with the student's academic advisor detailing a clear path to future academic success.

Additional materials for consideration:

4. While not required, you may submit letters of support from staff/ faculty

The student petition with additional documentation should be submitted to [appeals@southalabama.edu](mailto:appeals@southalabama.edu). Please note – the appeal process can take up to two weeks.

The suspension appeal documentation will be forwarded to the Office of Academic Affairs.

Should the Office of Academic Affairs approve an appeal, they will recommend that the student be reinstated on academic probation. The student must maintain a minimum 2.0 term grade point average or reach the retention standards outlined on the probation table - <https://www.southalabama.edu/bulletin/current/academic-policy/academic-status.html>. The decision of the Office of Academic Affairs is final.

If you have applied for or intend to apply for federal financial aid, please be aware that the Financial Aid Academic Progress Policy (<https://www.southalabama.edu/departments/finaid/sap.html>) and appeal process is separate from the Academic Suspension Appeal Policy and procedure. Reinstatement from suspension does not change the Financial Aid academic progress calculation. If you have questions please contact the Office of Financial Aid at (251) 460-6231 or [finaid@southalabama.edu](mailto:finaid@southalabama.edu).

## Academic Dismissal

Academic Dismissal for one calendar year results if a student who has been reinstated following a previous Academic Suspension or Dismissal fails to make satisfactory progress. Satisfactory progress is specified in the sections following titled Reinstatement Following Academic Suspension and Reinstatement Following Academic Dismissal.

## Suspension and Dismissal Table

Cumulative GPA hours include both institutional and transfer GPA hours.

Cumulative GPA Hours	GPA (USA GPA Only)
0-42	1.20
43-54	1.43
55-66	1.56
67-77	1.64
78-89	1.69
90-102	1.73
102-up	1.80

## Reinstatement Following Academic Suspension

Students reinstated following one regular term, Fall or Spring, (excludes summer term) of Academic Suspension are reinstated on Academic Probation. Students who do not return to the institution immediately following Academic Suspension will be subject to the rules of readmissions. Returning students are subject to Academic Dismissal if they do not make satisfactory progress. A student is considered to be making satisfactory progress as long as he or she maintains a USA grade point average for each semester of 2.0 or above until their cumulative USA grade point average is above the minimum required grade point average as outlined in the table above. Once a student achieves a grade point average higher than the minimum required grade point average, he or she is subject to the requirement to maintain his or her grade point average above the minimum value as listed in the table. Reinstated students will remain on probation until the cumulative USA grade point average is 2.0 or greater.

## Reinstatement Following Academic Dismissal

Students academically dismissed from USA will be reinstated on Academic Probation after a period of one calendar year. Reinstatement on Academic Probation requires students to meet with an academic advisor prior to registering for classes. Students reinstated after Academic Dismissal are subject to a second Academic Dismissal if they do not make satisfactory progress. A student is considered to be making satisfactory progress as long as he or she maintains a USA grade point average for each semester of 2.0 or above until their cumulative USA grade point average is above the minimum required grade point average as outlined in the table above. Once a student achieves a grade point average higher than the minimum required grade point average, he or she is subject to the requirement to maintain his or her grade point average above the minimum value as listed in the table. Reinstated students will remain on Academic Probation until the cumulative USA grade point average is 2.0 or greater.

Students intending to seek reinstatement after Academic Dismissal must first file a Readmission Form with the Admission's Office by the official deadline.

## Academic Bankruptcy

Undergraduate students readmitted after an absence of at least one or more calendar years may choose to count all or none of their University of South Alabama credits toward completion of degree requirements and the computation of their GPA. Should the student elect to count none of the prior work, i.e., declare academic bankruptcy, the student is, in effect, allowed to start academic work at the University of South Alabama over with a GPA of zero in good standing; however, all course work will remain on the student's academic record. This determination must be made by the student during the term of reentry no later than the last day of class for that term, but preferably at the time of application for readmission. It requires dean's office approval. This election may be made only once during a student's USA career and is irrevocable. Such election also carries with it the stipulation that the student's choice of Bulletin is limited to those in effect from the time in which the student declares academic bankruptcy onward. Academic bankruptcy applies only to courses completed at the University of South Alabama.

In determining academic honors at the University of South Alabama, only the course work taken after academic bankruptcy has been declared counts in the calculation of GPA.

The option of academic bankruptcy is not available to a student who has received a bachelor's degree or certificate.

For financial aid recipients - filing academic bankruptcy will not clear your satisfactory progress problem nor reinstate your federal financial aid eligibility (including loans).

### Academic Reboot

Students may request to declare Academic Reboot for one single academic term of study. This could be particularly appropriate for a change of program or major, where none of an earlier semester's classes are prerequisites for the new major or program of study. If approved, the Academic Reboot request will retroactively remove all registered courses for that term on the last day of classes from the completion of their degree requirements and from the USA GPA calculation for that term.

Note to students: If you are receiving financial aid, please be aware that the Standards of Academic Progress Policy is separate from the Academic Reboot policy. Filing Academic Reboot will not improve the

satisfactory academic progress calculation. All work attempted is part of this calculation and rebooting courses could negatively affect your eligibility for financial aid. If you have questions please contact the Office of Financial Aid (251) 460-6231 or [finaid@southalabama.edu](mailto:finaid@southalabama.edu).

If you have received a University of South Alabama Scholarship that requires you to complete 30 semester hours/ academic year, be aware that an academic reboot will impact the hour earning required for scholarship renewal. If you are considering petitioning for academic reboot, you should speak with the Office of Scholarship Services about the implication for scholarship renewal. The Office of Scholarship Services can be reached at (251) 461-1958 or at [scholarships@southalabama.edu](mailto:scholarships@southalabama.edu).

The following specific rules apply to any petition for academic reboot:

- Only currently enrolled undergraduate students, first Bachelor degree seeking, at the University of South Alabama are eligible to request Academic Reboot.
- Certain programs do not allow for Academic Reboot, including the College of Nursing clinical program and some other professional, clinical programs. Students should meet with their academic advisor to discuss eligibility.
- Maymester, Summer I, and Summer 2 sessions are together considered a single academic term.
- Academic Reboot is never granted for the academic term in which the student is currently enrolled. The earliest petition for Academic Reboot can be filed is after the end of the following term, provided a 2.0 term USA GPA is earned.
- A petition for Academic Reboot may only be filed following a term in which a student earned a 2.0 term USA GPA.
- Academic Reboot is only granted for coursework completed during an academic term at the University of South Alabama. Transfer and placement credits are not eligible for Academic Reboot.
- Petitions for Academic Reboot must be filed by the last class day during the term prior to graduation.
- No more than one petition for Academic Reboot may be approved during the student's academic career at the University of South Alabama. If approved, the Reboot is irrevocable.
- If the petition for Academic Reboot is approved, the courses the student was registered for on the last day of classes for that term will not contribute to degree requirements or be computed in the USA GPA; however, all course work for that term will remain on the student's academic record, including the transcript.
- The option of Academic Reboot is not available to a student who has completed any Bachelor's degree.
- The application for Academic Reboot is filed in the Dean's office of the academic college in which the student is enrolled (i.e. the college including their academic major). Once a student has been enrolled in an academic college for one term, that college has the authority to grant Academic Reboot for a term in which the student was enrolled in another academic college.
- A course in which academic misconduct has been established will not be included in an Academic Reboot.
- No courses subject to the Academic Reboot can be used to satisfy prerequisite requirements for any subsequent course.

Related policies: Grade Replacement (p. 64) and Complete Withdrawal from All Courses (p. 67)

## Withdrawals

Official withdrawal (dropping all courses in progress) from the University can be done through PAWS (the student on-line self-service system). Students attending with VA benefits need to check with the Veteran Affairs Office prior to withdrawing. Students with financial aid need to check with that office to determine the impact of course drops or complete withdrawals on financial aid eligibility or possible repayments. International students must get authorization from the Office of International Services prior to withdrawing. The symbol "WD" is recorded for all courses when the student completes the withdrawal within the time limits listed in the official calendar. A grade of "F, or U" is recorded when a currently enrolled student leaves the University without completing the withdrawal.

## Readmission to the University

Students who were previously enrolled in courses at the University of South Alabama, and have been absent from the University of South Alabama for at least three consecutive terms should comply with the following:

### How to Apply for Readmission

An applicant should request the appropriate forms from the Admission's Office. The readmission form, including all required credentials, should be filed with the Admission's Office by the published deadlines found on the Admission's Office website <https://www.southalabama.edu/departments/admissions/applytousa.html>.

### Requirements for Readmission

An applicant must be eligible to return to the University of South Alabama on the basis of a previous academic record at this institution. If the student has attended any college or university subsequent to last enrollment at the University of South Alabama, the student must also have the required transfer average or higher (as computed by the University of South Alabama) on work attempted, and must be in good standing and eligible to return to the last institution attended.

## Transient Credits Earned

University of South Alabama students who plan to attend another college or university to take a course(s) for transfer to USA are considered transient students. A student must be in good academic standing (a cumulative GPA of 2.0 or higher) and submit a Transient Credit form (<https://www.southalabama.edu/departments/registrar/records/transferassistance/transientpolicy.html>) to the University of South Alabama Registrar to take credit work as a transient student at another institution and have the credit applied toward their degree program at USA.

Students should use the USA Transfer Evaluation System ([https://www.southalabama.edu/departments/registrar/records/transferassistance/transfer\\_evaluation\\_system.html](https://www.southalabama.edu/departments/registrar/records/transferassistance/transfer_evaluation_system.html)) (TES) to verify that the course(s) they wish to take will transfer to USA. Students should consult their advisor if uncertain of a course equivalency or an institution or course is not listed in the TES. Students should check with their academic advisor on transfer credit limitations.

Once the transient coursework is completed, the student must request that an official transcript be sent from the other institution to the University of South Alabama Registrar. This can be sent electronically through the National Student Clearinghouse or can be sent directly from the college or university. Information on this process can be found

here: <https://www.southalabama.edu/departments/registrar/records/transcripts.html>.

Students do not need to submit a transient credit form if they have not been enrolled at the University for two or more consecutive terms (not including summer).

## Student Records

The University of South Alabama maintains records and data relative to the individual student to facilitate the educational process of the student and to assist in the administration of student needs by the University. The University of South Alabama complies with the rights of privacy and access to the educational records of the student as set forth in the Family Educational Rights and Privacy Act (FERPA) of 1974.

The University of South Alabama has formulated the following policy in accordance with the Act:

- No information from records, files, or data directly related to a student other than that defined as "directory information" shall be disclosed or released to any individual or agency outside the University without the prior written consent of the student, except according to lawful subpoena or court orders, or except in the case of need by other educational agencies or governmental agencies. Information will be available to University personnel and faculty only for legitimate educational purposes. The student shall have the right of access to and to review the accuracy of all such information with those exceptions that are defined within this policy statement.
- The University is not required to disclose information from the student's education records to any parent of a dependent student. Discretion in releasing the student's records to the parent will be exercised.
- Information about deceased students may be released to legal next of kin and or the executor of the student's estate. The request for deceased student information must be in writing accompanied by an official death certificate and any additional documentation deemed necessary by the University.
- A deceased student's educational records may also be accessed by subpoena and/or court order issued by a court of competent jurisdiction. No notification of such subpoena or court order will be issued by the University.
- Directory information may be released by the University without the written consent of the student. Directory information, as defined by FERPA, includes the student's name, address, photograph, major, dates of enrollment, degrees conferred and dates of conferral, any graduation distinction, classification, participation in officially recognized activities and sports, and weight and height of members of University athletic teams.
- To request nondisclosure of directory information, students must complete a Request to Prevent Disclosure of Directory Information form ([https://www.southalabama.edu/departments/eforms/registrar/request\\_to\\_prevent\\_disclosure.pdf](https://www.southalabama.edu/departments/eforms/registrar/request_to_prevent_disclosure.pdf)) with the Registrar's Office. This request will remain in effect unless changed by the student.

Additional information on FERPA may be found in the student handbook, The Lowdown (<https://www.southalabama.edu/departments/studentaffairs/lowdown/>), under "Student Record Policy". A complete explanation of FERPA is available in the Registrar's Office. Any complaints regarding University compliance with this law may be filed

with the Family Educational Rights and Privacy Act, Department of Education, Washington, DC 20201.

The Registrar's Office follows the recommendations of the State of Alabama Records Disposition Authority and the American Association of Collegiate Registrars and Admissions Officers in the retention and disposal of student records.

## Transcripts

Students may request transcripts online through the National Student Clearinghouse (<https://tsorder.studentclearinghouse.org/school/welcome/>) or via PAWS (<https://paws.southalabama.edu/>) (the student online self-service system). Students may also request their transcript at the Registrar's Office in Meisler Hall, Suite 1100. The costs involved when requesting transcripts can be obtained by contacting the Registrar's Office or visiting <https://www.southalabama.edu/departments/registrar/records/transcripts.html>.

Under certain circumstances, students owing a balance to the University may be eligible to obtain an official transcript. In compliance with C.F.R. 668.14(b)(33 & 34), these circumstances include: (1) the balance owed resulted from an error in the University's administration of the Title IV, HEA programs; (2) the balance owed resulted from any fraud or misconduct by the University or its personnel; or (3) at the time of the request, a student who received Title IV, HEA funds during the relevant period, has either paid all institutional charges for the relevant period or included all such charges in an agreement to pay with the University for which installment payments are current. The University does not release copies of transcripts from other institutions.

## Enrollment Certification / Degree Verification

Students may request official enrollment/degree verification through their PAWS (<https://www.southalabama.edu/services/logins/changes-coming.html>) account, from the National Student Clearinghouse or by submitting a Request for Enrollment/Degree Verification form ([https://www.southalabama.edu/departments/eforms/registrar/verification\\_new.pdf](https://www.southalabama.edu/departments/eforms/registrar/verification_new.pdf)) to the Registrar's Office.

For enrollment/degree verification related to employment or financial aid, the University of South Alabama is a participant in the National Student Clearinghouse. The Clearinghouse is a repository for enrollment/degree status information and was established to simplify, standardize, and automate the status verification and deferment process. The Clearinghouse, the University's agent, will provide student enrollment/degree information directly to the guaranty agencies, lenders, and other services.

## International Education/Study Abroad

University of South Alabama students in all academic disciplines are encouraged to participate in a study abroad experience for credit toward their major, minor or elective credits. Academic research, practicum, internship and work abroad experience are also highly encouraged for all disciplines and all USA students. Students should check with their academic advisors and the Office of International Education for available opportunities, information on scholarships and application/approval procedures.

## Study Abroad

All students receiving academic credit for study or interning abroad must be enrolled in an official USA Study Abroad "course" (check with the Office of International Education for course and section numbers). This includes participation in faculty- led USA Study Abroad programs as well as other USA approved study abroad programs offered by other universities and third party program providers. To participate in a study abroad program, have an overall GPA of at least 2.25 for undergraduates. Graduate student qualifications vary by department and program. Student should see Office of International Education for "exceptional" circumstances procedures. Students with a GPA between 2.0 and 2.25 must demonstrate positive and constructive maintenance of their GPA with no decline in order to be considered for study abroad. Students should have no incomplete coursework due from the term prior to going abroad. Students experiencing academic challenges on campus should work closely with their academic advisors and the Office of International Education prior to making any plans to study abroad. Students requiring accommodations or special services should contact the USA Office of Student Disability Services and discuss such arrangements with OIE and the host program well in advance of their proposed activity abroad. All applicants for USA Study Abroad must be in good academic and non-academic standing prior to and during the proposed activities abroad. Additionally, all students who plan to study are encouraged to take a pre-departure course entitled IST 300: Global Orientation prior to going abroad. This course is an eight week, one credit hour blended format course designed to help students prepare to go abroad. The IST 300 course is a requirement for all students who intend to participate in semester or yearlong programs, and for all Foreign Languages and Literature majors.

With some planning, study abroad can be fully integrated in USA degree programs and applied to core, major, minor and elective courses. Prior knowledge of a foreign language is not required although many programs provide access to all levels of language learning (beginning to expert). All programs encourage and facilitate intercultural learning opportunities. Opportunities abroad last from one week (depending on the nature of the program) to a full academic year and are available for all semesters including fall, spring, summer and May term. Upon completing USA's study abroad application, including course approval form(s), students will enroll in a USA Study Abroad "course". These courses carry an administrative and registration fee of at least \$150 per program and term abroad. With this registration students are able to receive academic credit for courses taken abroad and while abroad have access to a 24/7 emergency assistance network. Additionally this registration provides access to study abroad advising and support services. Depending on the duration of the program, students may be charged additional fee for international insurance. Students participating in USA Faculty-led programs will enroll in a discipline specific USA course that confers USA credits. Students on Faculty-led programs pay a program fee that generally includes tuition, housing abroad, in-country travel, international insurance, and other on-site expenses. All students who plan to study abroad must attend required USA Study Abroad information and pre-departure sessions. By participating in an approved program, students will retain official full time USA student status and in some instances, may apply for or retain their existing financial aid and scholarship money. Freshmen are encouraged to begin planning for study abroad upon arrival to USA. Scholarship information is available through International Education for internal University scholarships as well as for external sources, such as the Gilman Scholarship, U.S. Fulbright Awards for graduating seniors, and the National Security Education/ Boren Program for Undergraduate and Graduate Students. Additionally,

students eligible for the Alabama prepaid tuition (PACT) program, vocational rehab, and veteran's benefits may be able to apply these funds to their study abroad program. For more information, please visit the Office of International Education's website at [www.southalabama.edu/ie/](http://www.southalabama.edu/ie/) (<http://www.southalabama.edu/ie/>) or [www.southalabama.edu/studyabroad/](http://www.southalabama.edu/studyabroad/). Students can also come to Study Abroad walk-in hours (see website for hours) or schedule an appointment with a study abroad advisor by e-mailing [intledu@southalabama.edu](mailto:intledu@southalabama.edu).

## Graduate Study for Advanced Undergraduates

With permission of the department chair and appropriate director of graduate studies, a student who has completed 90 semester hours with a "B" (3.0) average may register for graduate courses, provided the total load does not exceed 12 hours. This policy is extended to provide an opportunity for well-prepared undergraduates who meet minimum GPA and sufficient undergraduate course work in the major subject to qualify for graduate study in the involved discipline.

The same course may not be counted both for undergraduate and graduate credit. Up to 12 graduate credit hours may be transferred to a future graduate degree at USA. The graduate course may only count toward a degree in graduate school if and when the student is admitted to the graduate school, provided such course was taken no more than 5 years prior to the completion of the graduate degree, and the course is approved for credit by the graduate advisor.

## Academic Recognition

Candidates for all honor lists must be undergraduate degree-seeking students with a clear academic status. Graduates, professional level, unclassified, auditors, transients, non-degree, or other special categories are excluded.

- The President's Scholars include all full-time students earning a 4.0 semester grade-point average.
- The Dean's Honor List includes all full-time students who have completed a minimum of 30 hours at the University of South Alabama, earned a cumulative grade-point average of 3.40 or greater, and a 3.50 or greater semester grade-point average.
- The Dean's List includes all full-time students earning a 3.50 or greater semester grade-point average.
- The Dean's List for part-time students (students taking fewer than twelve hours) includes all students who are enrolled in at least six semester hours and have earned a semester grade-point average of 3.50 or greater.

All of the above lists are compiled upon completion of the processing of a particular semester's grades. Removal of "I" and "P" symbols at a later date will not qualify the student for recognition. Grades recorded in error will be considered only if properly changed and the Dean's office is notified before publication of the lists.

# GRADUATE SCHOOL

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The University of South Alabama, the only major public institution of higher learning on the upper Gulf Coast, was created by act of the Alabama State Legislature in May, 1963. With Alabama's two older senior universities more than 200 miles distant, the University is strategically located in the greater Mobile area, which has a population of more than a million within a 100-mile radius. The Graduate School provides the student with opportunities for creative achievement and the advancement of knowledge. Graduate study fosters the spirit of independent investigation while creating an environment for free inquiry and intellectual challenge in advanced and specialized areas. Emphasis upon scholarship, original thinking, and the practical application of knowledge to the solution of complex problems will enable the student to make a valuable contribution to society.

All graduate work is administered by the Graduate School under the direction of the Graduate Dean who is advised by the Graduate Council. The voting members of the council are eight Full Members of the Graduate Faculty, eight Graduate Directors, one from each college, a Faculty Senate representative, a Graduate Student Association member, and one graduate student at large. Non-voting ex officio members are the Graduate Dean, the Executive Director of the University Libraries, a representative of the Office of Institutional Effectiveness, a representative from the Innovations and Learning Center, a representative of the Office of Admissions, and a representative of the Registrar's Office.

For more information, see Graduate School (p. 725) section in the Bulletin under Colleges and Schools.

# PRE-PROFESSIONAL PROGRAMS

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Please navigate to the appropriate program:

- Pre-Health (p. 71)
- Pre-Law (p. 71)

## Pre-Health

### Pre-Health Advising

Pre-Health advising at the University of South Alabama offers valuable resources to students interested in a variety of graduate professional health programs. In order to prepare students for the rigorous demands of these programs, advisors provide information and guidance on required course work, admission test needs, the application process and non-academic requirements. Pre-health advising is provided as a supplement to major academic advising. All pre-health students have an academic advisor who will guide them in meeting requirements for graduation.

<https://www.southalabama.edu/departments/academicadvising/pre-health/>

## Pre-Law

### Pre-Law Advising

Students interested in preparing for a career in law will find outstanding opportunities at the University of South Alabama. To help the student develop the best possible course of study to prepare for law school, the University of South Alabama provides pre-law advising in the Academic Advising & Transfer Services office as well as a pre-Law Advisor in the Department of Political Science and Criminal Justice. Pre-Law students are urged to consult with their Advisor for detailed information concerning how best to prepare for law school and for information concerning the Law School Admission Test, now required by practically all law schools.

<https://www.southalabama.edu/colleges/artsandsci/pscj/pre-law/>

# COLLEGES AND SCHOOLS

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- College of Arts and Sciences (p. 91)
- College of Education and Professional Studies (p. 416)
- College of Engineering (p. 571)
- College of Nursing (p. 641)
- Graduate School (p. 725)
- Honors College (p. 743)
- Mitchell College of Business (p. 745)
- Pat Capps Covey College of Allied Health Professions (p. 832)
- School of Computing (p. 913)
- Whiddon College of Medicine (p. 632)

## PROGRAMS A-Z

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Program	Credential Type	Meta Major	Program Level
Accounting (BSBA) (p. 751)	Bachelors	Business	Undergraduate
Accounting (MAcc) (p. 829)	Masters		Graduate
Accounting For Business Majors Minor (p. 754)	Minor		Undergraduate
Advanced EMT (AEMT) Certificate Program (p. 851)	Certificate <30		Undergraduate
Advertising Public Relations (BA) (p. 165)	Concentration/Specialization/Track	Business	Undergraduate
Advertising Public Relations Minor ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/communication/advertising-public-relations-minor/">http://bulletin.southalabama.edu/programs-az/arts-sciences/communication/advertising-public-relations-minor/</a> )	Minor		Undergraduate
African American Studies Minor (p. 102)	Minor		Undergraduate
Air Force Studies Minor (p. 105)	Minor		Undergraduate
Anthropology (BA) (p. 389)	Bachelors	Society and Public Service	Undergraduate
Anthropology Minor (p. 390)	Minor		Undergraduate
Applied Linguistics Minor (p. 281)	Minor		Undergraduate
Applied Statistics Graduate Certificate (p. 265)	Graduate Certificate		Graduate
Applied Statistics Minor (p. 265)	Minor		Undergraduate
Art History Minor (p. 116)	Minor		Undergraduate
Artificial Intelligence Certificate Non-Degree Program (p. 925)	Non-Degree Certificate		Undergraduate
Audiology (AuD) (p. 905)	Doctoral		Graduate
Basic Medical Sciences (PhD) (p. 641)	Doctoral		Graduate
Biology (BS) (p. 143)	Bachelors	Science and Technology	Undergraduate
Biology (BS) - Environmental Science Concentration (p. 144)	Concentration/Specialization/Track	Science and Technology	Undergraduate
Biology (BS) - Marine Biology Concentration (p. 145)	Concentration/Specialization/Track	Science and Technology	Undergraduate
Biology (BS) - Senior Thesis Concentration (p. 146)	Concentration/Specialization/Track	Science and Technology	Undergraduate
Biology (MS) (p. 147)	Masters		Graduate
Biology (MS) - Thesis Concentration ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/biology/biology-ms-thesis-concentration/">http://bulletin.southalabama.edu/programs-az/arts-sciences/biology/biology-ms-thesis-concentration/</a> )	Masters		Graduate
Biology (MS) Non-Thesis Concentration ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/biology/biology-ms-nonthesis-concentration/">http://bulletin.southalabama.edu/programs-az/arts-sciences/biology/biology-ms-nonthesis-concentration/</a> )	Masters		Graduate
Biology Minor (p. 148)	Minor		Undergraduate
Biomedical Sciences (BS) (p. 840)	Bachelors	Science and Technology	Undergraduate
Biomedical Sciences (MS) (p. 844)	Masters		Graduate
Biomedical Sciences Minor (p. 844)	Minor		Undergraduate

Business Administration (MBA) (p. 829)	Masters		Graduate
Business Administration (PhD) (p. 830)	Doctoral		Graduate
Chemical and Biomolecular Engineering (PhD) (p. 734)	Doctoral		Graduate
Chemical Engineering (BS) (p. 577)	Bachelors	Science and Technology	Undergraduate
Chemical Engineering (MS) (p. 580)	Masters		Graduate
Chemistry ACS Certified Chemistry Track, Major (p. 153)	Concentration/Specialization/Track	Science and Technology	Undergraduate
Chemistry Biochemistry Track, Major (p. 155)	Concentration/Specialization/Track	Science and Technology	Undergraduate
Chemistry Minor (p. 156)	Minor		Undergraduate
Chinese Minor (p. 282)	Minor		Undergraduate
Civil Engineering (BS) (p. 587)	Bachelors	Science and Technology	Undergraduate
Civil Engineering (MS) (p. 589)	Masters		Graduate
Civil Engineering - Coastal Engineering Certificate (p. 590)	Certificate <30		Undergraduate
Civil Engineering - Structural Engineering Certificate (p. 591)	Certificate <30		Undergraduate
Civil Engineering - Water/Wastewater Engineering Certificate (p. 591)	Certificate <30		Undergraduate
Classics Minor (p. 337)	Minor		Undergraduate
Clinical and Counseling Psychology (PhD) (p. 742)	Doctoral		Graduate
Clinical Mental Health Counseling (MS) (p. 437)	Masters		Graduate
Clinical Mental Health Counseling Graduate Certificate (p. 438)	Graduate Certificate		Graduate
Coaching Certificate (p. 459)	Certificate <30		Undergraduate
Communication (MA) (p. 167)	Masters		Graduate
Communication (MA) - Non- Thesis Concentration ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/communication/communication-ma-nonthesis-concentration/">http:// bulletin.southalabama.edu/ programs-az/arts-sciences/ communication/communication-ma- nonthesis-concentration/</a> )	Masters		Graduate
Communication (MA) - Thesis Concentration ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/communication/communication-ma-thesis-concentration/">http:// bulletin.southalabama.edu/ programs-az/arts-sciences/ communication/communication-ma- thesis-concentration/</a> )	Masters		Graduate
Communication Minor (p. 169)	Minor		Undergraduate
Communication Sciences and Disorders (PhD) (p. 906)	Doctoral		Graduate
Communication Studies (BA) (p. 162)	Bachelors	Society and Public Service	Undergraduate
Composite Science Minor (p. 231)	Minor		Undergraduate
Computed Tomography Certificate ( <a href="http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-ct-cert/">http://bulletin.southalabama.edu/ programs-az/allied-health/ radiologic-sciences/rad-ct-cert/</a> )	Certificate <30		Undergraduate
Computer Engineering (BS) (p. 602)	Bachelors	Science and Technology	Undergraduate

Computer Science (BS) (p. 925)	Bachelors	Science and Technology	Undergraduate
Computer Science (MS) (p. 929)	Masters		Graduate
Computer Science Minor (p. 930)	Minor		Undergraduate
Computing (PhD) (p. 944)	Doctoral		Graduate
Criminal Justice (BA) (p. 359)	Bachelors	Society and Public Service	Undergraduate
Criminal Justice Minor (p. 361)	Minor		Undergraduate
Cybersecurity (MS) (p. 960)	Masters		Graduate
Data Analytics Minor (p. 801)	Minor		Undergraduate
Digital Film Television (BA) (p. 163)	Concentration/Specialization/Track	Society and Public Service	Undergraduate
Digital Film Television Minor ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/communication/digital-cinema-television-minor/">http://bulletin.southalabama.edu/programs-az/arts-sciences/communication/digital-cinema-television-minor/</a> )	Minor		Undergraduate
Drama (BA) (p. 415)	Bachelors	Language, Arts, and Design	Undergraduate
Drama Minor (p. 416)	Minor		Undergraduate
Drama Minor with Concentration in Dance (p. 416)	Minor		Undergraduate
Early Childhood Education (Alt. M.Ed.) (p. 532)	Masters		Graduate
Early Childhood Education (M.Ed.) (p. 532)	Masters		Graduate
Early Childhood Studies (BS) (p. 533)	Bachelors	Health and Human Studies	Undergraduate
Economics Finance (BSBA) (p. 760)	Bachelors	Business	Undergraduate
Economics Finance (BSBA) - Economics Concentration (p. 760)	Bachelors	Business	Undergraduate
Economics Finance (BSBA) - Finance Concentration (p. 764)	Bachelors	Business	Undergraduate
Economics Finance (BSBA) - Real Estate Concentration (p. 767)	Bachelors	Business	Undergraduate
Economics for Business Majors Minor (p. 770)	Minor		Undergraduate
Economics for Non-Business Majors Minor (p. 770)	Minor		Undergraduate
Educational Administration (M.Ed.) (p. 536)	Masters		Graduate
Educational Leadership (Ed.D.) (p. 537)	Doctoral		Graduate
Educational Media (M.Ed.) - Library Media (p. 439)	Masters		Graduate
Educational Media and Technology (MS) (p. 440)	Masters		Graduate
Educational Media and Technology Graduate Certificate (p. 440)	Graduate Certificate		Graduate
Educational Specialist (Ed.S.) (p. 539)	Educational Specialist		Graduate
Electrical Engineering (BS) - General Track (p. 605)	Bachelors	Science and Technology	Undergraduate
Electrical Engineering (BS) - Premed Track (p. 607)	Bachelors	Science and Technology	Undergraduate
Electrical Engineering (MS) (p. 610)	Masters		Graduate

Elementary Education (Alt. M.Ed.) (p. 542)	Masters		Graduate
Elementary Education (M.Ed.) (p. 542)	Masters		Graduate
Elementary Education: K-6 (BS) (p. 543)	Bachelors	Education	Undergraduate
Emergency Medical Services (BS) (p. 851)	Bachelors	Health and Human Studies	Undergraduate
Emergency Medical Services Minor (p. 854)	Minor		Undergraduate
EMT Certification Program (p. 854)	Certificate <30		Undergraduate
English (BA) (p. 199)	Bachelors	Language, Arts, and Design	Undergraduate
English (BA) - Creative Writing Concentration (p. 200)	Concentration/Specialization/Track	Language, Arts, and Design	Undergraduate
English (BA) - Professional Writing and Editing Concentration (p. 202)	Concentration/Specialization/Track	Language, Arts, and Design	Undergraduate
English (MA) - Literature Concentration (p. 203)	Masters		Graduate
English (MA) Creative Writing (p. 204)	Masters		Graduate
English Creative Writing Minor (p. 204)	Minor		Undergraduate
English Minor (p. 205)	Minor		Undergraduate
English Professional Writing Minor (p. 205)	Minor		Undergraduate
Entrepreneurship for Non-Business Majors Minor (p. 780)	Minor		Undergraduate
Environmental Sustainability Sciences (B.S.) (p. 404)	Bachelors	Health and Human Studies	Undergraduate
Environmental Sciences (BS) - Natural Sciences Concentration ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/marine-sciences/evss-natural-sciences-concentration/">http://bulletin.southalabama.edu/programs-az/arts-sciences/marine-sciences/evss-natural-sciences-concentration/</a> )	Concentration/Specialization/Track	Science and Technology	Undergraduate
Environmental Sciences (BS) - Sustainability Concentration ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/marine-sciences/evss-sustainability-concentration/">http://bulletin.southalabama.edu/programs-az/arts-sciences/marine-sciences/evss-sustainability-concentration/</a> )	Concentration/Specialization/Track	Science and Technology	Undergraduate
Environmental Sciences Minor ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/marine-sciences/environmental-sciences-minor/">http://bulletin.southalabama.edu/programs-az/arts-sciences/marine-sciences/environmental-sciences-minor/</a> )	Minor		Undergraduate
Environmental Toxicology (p. 205)	Masters		Graduate
Environmental Toxicology (MS) (p. 206)	Masters		Graduate
Environmental Toxicology (MS) ( <a href="http://bulletin.southalabama.edu/programs-az/graduate/environmental-toxicology/environmental-toxicology-ms/">http://bulletin.southalabama.edu/programs-az/graduate/environmental-toxicology/environmental-toxicology-ms/</a> )	Masters		Graduate

Exercise Science (BS) ( <a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/exercise-science-bs/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/exercise-science-bs/</a> )	Bachelors	Health and Human Studies	Undergraduate
Exercise Science (BS) - Health And Fitness Concentration (p. 459)	Bachelors	Health and Human Studies	Undergraduate
Exercise Science (BS) - Pre-Professional Concentration (p. 462)	Bachelors	Health and Human Studies	Undergraduate
Exercise Science (MS) (p. 481)	Masters		Graduate
Exercise Science and Performance Nutrition (Ph.D.) (p. 465)	Doctoral		Graduate
Film Studies Minor ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/english/english-film-studies-minor/">http://bulletin.southalabama.edu/programs-az/arts-sciences/english/english-film-studies-minor/</a> )	Minor		Undergraduate
Finance for Business Majors Minor (p. 770)	Minor		Undergraduate
Finance for Non-Business Majors Minor (p. 771)	Minor		Undergraduate
Forensic Science Minor (p. 207)	Minor		Undergraduate
French Minor (p. 282)	Minor		Undergraduate
Gender Studies Minor (p. 211)	Minor		Undergraduate
General Business (BSBA) (p. 780)	Bachelors	Business	Undergraduate
General Business for Non-Business Majors Minor (p. 783)	Minor		Undergraduate
Geographic Information Science (GIS) Certificate (p. 181)	Certificate <30		Undergraduate
Geographic Information Technology Minor (p. 181)	Minor		Undergraduate
Geography (BS) (p. 181)	Bachelors	Science and Technology	Undergraduate
Geography Minor (p. 183)	Minor		Undergraduate
Geology (BS) (p. 183)	Bachelors	Science and Technology	Undergraduate
Geology Minor (p. 184)	Minor		Undergraduate
German Minor (p. 282)	Minor		Undergraduate
Gerontology Graduate Certificate (p. 216)	Graduate Certificate		Graduate
Gerontology Minor (p. 217)	Minor		Undergraduate
Gerontology Undergraduate Certificate (p. 217)	Certificate <30		Undergraduate
Global Engagement Certificate Program (p. 218)	Certificate <30		Undergraduate
Graduate Certificate in Accounting ( <a href="http://bulletin.southalabama.edu/programs-az/business/mcob-graduate-programs/accounting-macc-certificate/">http://bulletin.southalabama.edu/programs-az/business/mcob-graduate-programs/accounting-macc-certificate/</a> )	Graduate Certificate		Graduate
Graduate Computer Science Cybersecurity Certificate (p. 930)	Certificate <30		Graduate
Graduate Information Systems Cybersecurity Certificate (p. 961)	Graduate Certificate		Graduate
Health Wellness Minor (p. 467)	Minor		Undergraduate
Health (BS) - Health Education 6-12 Teacher Certification (p. 467)	Bachelors	Education	Undergraduate

Health (BS) - Health Promotion (p. 470)	Bachelors	Education	Undergraduate
Health Informatics (BS) (p. 961)	Bachelors	Health and Human Studies	Undergraduate
Health Informatics Certificate (p. 964)	Certificate <30		Undergraduate
Health Promotion (MS) (p. 482)	Masters		Graduate
Health-Physical Ed (BS) - Physical Education P-12 and Health Education 6-12 Teacher Certification (p. 474)	Bachelors	Education	Undergraduate
History (BA) (p. 225)	Bachelors	Society and Public Service	Undergraduate
History (MA) - Non-Thesis Option (p. 227)	Masters		Graduate
History (MA) - Thesis Option (p. 227)	Masters		Graduate
History Minor (p. 228)	Minor		Undergraduate
Hospitality and Tourism Management (BS) (p. 495)	Bachelors	Business	Undergraduate
Hospitality and Tourism Management (BS) Events Marketing and Management Concentration ( <a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/hospitality-tourism-management/hospitality-tourism-management-bs-events-concentration/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/hospitality-tourism-management/hospitality-tourism-management-bs-events-concentration/</a> )	Bachelors	Business	Undergraduate
Hospitality and Tourism Management (BS) Global Leadership Concentration ( <a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/hospitality-tourism-management/hospitality-tourism-management-bs-global-ldr-concentration/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/hospitality-tourism-management/hospitality-tourism-management-bs-global-ldr-concentration/</a> )	Bachelors	Business	Undergraduate
Hospitality and Tourism Management Minor (p. 498)	Minor		Undergraduate
Human Performance Improvement Graduate Certificate (p. 440)	Graduate Certificate		Graduate
Industrial-Organizational Psychology Minor (p. 783)	Minor		Undergraduate
Information Systems (BS) (p. 964)	Bachelors	Business	Undergraduate
Information Systems (MS) (p. 968)	Masters		Graduate
Information Systems Minor (p. 968)	Minor		Undergraduate
Information Technology (BS) (p. 968)	Bachelors	Science and Technology	Undergraduate
Information Technology Minor (p. 971)	Minor		Undergraduate
Instructional Design and Development (MS) (p. 441)	Masters		Graduate
Instructional Design and Development (Ph.D.) (p. 442)	Doctoral		Graduate
Instructional Design and Development Graduate Certificate (p. 444)	Graduate Certificate		Graduate

Interdisciplinary Studies (BS or BA) (p. 503)	Bachelors	Society and Public Service	Undergraduate
Interdisciplinary Studies Minor (p. 506)	Minor		Undergraduate
International Business (BSBA) (p. 801)	Bachelors	Business	Undergraduate
International Studies (BA) - Asian Studies Concentration (p. 237)	Concentration/Specialization/Track	Society and Public Service	Undergraduate
International Studies (BA) - European Studies Concentration (p. 239)	Concentration/Specialization/Track	Society and Public Service	Undergraduate
International Studies (BA) - Global Health Concentration (p. 241)	Concentration/Specialization/Track	Health and Human Studies	Undergraduate
International Studies (BA) - International Relations Concentration (p. 242)	Concentration/Specialization/Track	Society and Public Service	Undergraduate
International Studies (BA) - Latin American Studies Concentration (p. 244)	Concentration/Specialization/Track	Society and Public Service	Undergraduate
International Studies (BA) - Middle East Studies Concentration (p. 246)	Concentration/Specialization/Track	Society and Public Service	Undergraduate
International Studies (BA) - Modern and Classical Languages and Literature/International Studies Double Major (p. 248)	Bachelors	Society and Public Service	Undergraduate
International Studies Minor (p. 248)	Minor		Undergraduate
Jewish and Holocaust Studies Minor (p. 252)	Minor		Undergraduate
Journalism (BA) (p. 164)	Concentration/Specialization/Track	Society and Public Service	Undergraduate
Journalism Minor ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/communication/journalism-minor/">http://bulletin.southalabama.edu/programs-az/arts-sciences/communication/journalism-minor/</a> )	Minor		Undergraduate
Magnetic Resonance Imaging Certificate ( <a href="http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-mri-cert/">http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-mri-cert/</a> )	Certificate <30		Undergraduate
Mammography Certificate ( <a href="http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-mammography-cert/">http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-mammography-cert/</a> )	Certificate <30		Undergraduate
Management (BSBA) (p. 784)	Bachelors	Business	Undergraduate
Management (BSBA) - Entrepreneurship Concentration (p. 786)	Bachelors	Business	Undergraduate
Management (BSBA) - General Management Concentration (p. 789)	Bachelors	Business	Undergraduate
Management (BSBA) - Human Resources Concentration (p. 793)	Bachelors	Business	Undergraduate
Management for Business Major Minor (p. 796)	Minor		Undergraduate
Management for Non-Business Majors Minor (p. 796)	Minor		Undergraduate

Marine Science (MS) - Marine Conservation (p. 405)	Masters		Graduate
Marine Science (MS) - Non-Thesis Option (p. 406)	Masters		Graduate
Marine Science (MS) - Thesis Option (p. 407)	Masters		Graduate
Marine Science (Ph.D.) (p. 409)	Doctoral		Graduate
Marine Sciences (B.S.) (p. 410)	Bachelors	Science and Technology	Undergraduate
Marine Sciences Minor (p. 412)	Minor		Undergraduate
Marketing (BSBA) (p. 805)	Bachelors	Business	Undergraduate
Marketing (BSBA) - Marketing Management Concentration (p. 805)	Bachelors	Business	Undergraduate
Marketing (BSBA) - Professional Sales Concentration (p. 808)	Bachelors	Business	Undergraduate
Marketing for Business Majors Minor (p. 812)	Minor		Undergraduate
Marketing for Non-Business Majors Minor (p. 812)	Minor		Undergraduate
Mathematics (MS) - Non-Thesis Option (p. 266)	Masters		Graduate
Mathematics (MS) - Non-Thesis Option with Computer Science Emphasis (p. 266)	Masters		Graduate
Mathematics (MS) - Thesis Option (p. 267)	Masters		Graduate
Mathematics and Statistics Major (BS) (p. 267)	Bachelors	Science and Technology	Undergraduate
Mathematics Minor (p. 268)	Minor		Undergraduate
Mechanical Engineering (BS) (p. 623)	Bachelors	Science and Technology	Undergraduate
Mechanical Engineering (BS) - Aerospace Track (p. 626)	Bachelors	Science and Technology	Undergraduate
Mechanical Engineering (BS) - Biomedical Engineering Track (p. 628)	Bachelors	Science and Technology	Undergraduate
Mechanical Engineering (MS) (p. 631)	Masters		Graduate
Mechanical Engineering - Accelerated Bachelor's to Master's Program (p. 632)	Accelerated Bachelor's to Master's Program		Graduate
Meteorology (BS) - Broadcast Met Track (p. 184)	Bachelors	Science and Technology	Undergraduate
Meteorology (BS) - Graduate School Track (p. 186)	Bachelors	Science and Technology	Undergraduate
Meteorology (BS) - Professional Track (p. 187)	Bachelors	Science and Technology	Undergraduate
Meteorology Minor (p. 188)	Minor		Undergraduate
Military Science Minor (p. 272)	Minor		Undergraduate
Modern Languages and Literature (BA) - French Concentration (p. 282)	Bachelors	Language, Arts, and Design	Undergraduate
Modern Languages and Literature (BA) - German Concentration (p. 283)	Bachelors	Language, Arts, and Design	Undergraduate

Modern Languages and Literature (BA) - Russian Concentration (p. 285)	Bachelors	Language, Arts, and Design	Undergraduate
Modern Languages and Literature (BA) - Spanish Concentration (p. 286)	Bachelors	Language, Arts, and Design	Undergraduate
Museum Studies Minor (p. 291)	Minor		Undergraduate
Music (BM) - Elective Studies in Business Concentration (p. 310)	Bachelors	Business	Undergraduate
Music (BM) - Vocal Music Education Concentration (p. 312)	Bachelors	Education	Undergraduate
Music (BM) – Elective Studies in Specific Outside Fields Concentration (p. 314)	Bachelors	Language, Arts, and Design	Undergraduate
Music (BM) – Instrumental Music Education Concentration (p. 316)	Bachelors	Education	Undergraduate
Music (BM) – Instrumental Performance Concentration (p. 319)	Bachelors	Language, Arts, and Design	Undergraduate
Music (BM) – Vocal Performance Concentration (p. 321)	Bachelors	Language, Arts, and Design	Undergraduate
Music (MM) - Brass Performance Concentration ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/music/music-mm-performance-concentration-brass/">http://bulletin.southalabama.edu/programs-az/arts-sciences/music/music-mm-performance-concentration-brass/</a> )	Masters		Graduate
Music (MM) - Collaborative Keyboard Masters Concentration (p. 323)			Graduate
Music (MM) - Music Education Concentration (p. 324)	Masters		Graduate
Music (MM) - Music Education Concentration - (Alternative Choral or Instrumental) (p. 325)	Masters		Graduate
Music (MM) - Percussion Performance Concentration ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/music/music-mm-performance-concentration-percussion/">http://bulletin.southalabama.edu/programs-az/arts-sciences/music/music-mm-performance-concentration-percussion/</a> )	Masters		Graduate
Music (MM) - Piano Performance Concentration ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/music/music-mm-performance-concentration-piano/">http://bulletin.southalabama.edu/programs-az/arts-sciences/music/music-mm-performance-concentration-piano/</a> )	Masters		Graduate
Music (MM) - Vocal Performance Concentration ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/music/music-mm-performance-concentration-voice/">http://bulletin.southalabama.edu/programs-az/arts-sciences/music/music-mm-performance-concentration-voice/</a> )	Masters		Graduate
Music (MM) - Woodwinds Performance Concentration ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/music/music-mm-performance-concentration-woodwinds/">http://bulletin.southalabama.edu/programs-az/arts-sciences/music/music-mm-performance-concentration-woodwinds/</a> )	Masters		Graduate

Music Minor (p. 326)	Minor		Undergraduate
Native American Studies Minor (p. 330)	Minor		Undergraduate
Nursing (BS) - Accelerated (p. 679)	Bachelors	Health and Human Studies	Undergraduate
Nursing (BSN) - LPN-BSN ( <a href="http://bulletin.southalabama.edu/programs-az/nursing/nursing/nursing-lpn-bsn/">http://bulletin.southalabama.edu/programs-az/nursing/nursing/nursing-lpn-bsn/</a> )	Bachelors	Health and Human Studies	Undergraduate
Nursing (BSN) - RN-BSN (p. 682)	Bachelors	Health and Human Studies	Undergraduate
Nursing (BSN) - Traditional (p. 686)	Bachelors	Health and Human Studies	Undergraduate
Nursing (MSN) - BSN-Prepared RNs (p. 693)	Masters		Graduate
Nursing (MSN) - RN-MSN with Non-Nursing Baccalaureate (p. 698)	Masters		Graduate
Nursing Post-Graduate Certificate (p. 702)	Post-Graduate Certificate		Graduate
Nursing Practice (DNP) - BSN to DNP (p. 705)	Doctoral		Graduate
Nursing Practice (DNP) - MSN Clinical Nurse Leader Bridge to DNP Executive Nursing Administration Pathway (p. 711)	Doctoral		Graduate
Nursing Practice (DNP) - MSN to DNP Adding a New Concentration Area (p. 714)	Doctoral		Graduate
Nursing Practice (DNP) - MSN to DNP for Advanced Practice Nursing Roles (p. 720)	Doctoral		Graduate
Nursing Subspecialty Options (p. 724)	Subspecialty		Graduate
Occupational Therapy (MS) (p. 865)	Masters		Graduate
Occupational Therapy (OTD) (p. 867)	Doctoral		Graduate
Organizational Leadership (BS) (p. 506)	Bachelors		Undergraduate
Paramedic Certificate Program (p. 854)	Certificate 30+		Undergraduate
Performance Nutrition Minor (p. 477)	Minor		Undergraduate
Philosophy (BA) Classics Concentration (p. 337)	Bachelors	Language, Arts, and Design	Undergraduate
Philosophy (BA) Philosophy Concentration (p. 338)	Bachelors	Health and Human Studies	Undergraduate
Philosophy (BA) Religion Concentration (p. 339)	Bachelors	Society and Public Service	Undergraduate
Philosophy and Medicine Minor (p. 340)	Minor		Undergraduate
Philosophy Minor (p. 340)	Minor		Undergraduate
Physical Education (BS) - P-12 Teacher Certification (p. 477)	Bachelors	Education	Undergraduate
Physical Education (M.Ed.) - Health Education 6-12 Teacher Certification (p. 480)	Masters		Graduate
Physical Education (M.Ed.) - P-12 Teacher Certification (p. 481)	Masters		Graduate
Physical Therapy (DPT) (p. 873)	Doctoral		Graduate

Physician Assistant Studies (MHS) (p. 882)	Masters		Graduate
Physics (BS) - General Physics (p. 344)	Bachelors	Science and Technology	Undergraduate
Physics (BS) - Graduate School Prep (p. 346)	Bachelors	Science and Technology	Undergraduate
Physics (BS) - Meteorology Double Major (p. 347)	Bachelors	Science and Technology	Undergraduate
Physics (BS) - Premedical Option (p. 349)	Bachelors	Health and Human Studies	Undergraduate
Physics Minor (p. 350)	Minor		Undergraduate
Political Science (BA) (p. 362)	Bachelors	Society and Public Service	Undergraduate
Political Science Minor (p. 364)	Minor		Undergraduate
Process Technology Certificate Non-Degree Program (p. 972)	Non-Degree Certificate		Undergraduate
Professional Health Sciences (BS) (p. 855)	Bachelors	Health and Human Studies	Undergraduate
Psychology (BA) (p. 372)	Bachelors	Health and Human Studies	Undergraduate
Psychology (MS) - Non-Thesis Concentration ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/psychology/psychology-ms-nonthesis-concentration/">http://bulletin.southalabama.edu/programs-az/arts-sciences/psychology/psychology-ms-nonthesis-concentration/</a> )	Masters		Graduate
Psychology (MS) - Thesis Concentration (p. 374)	Masters		Graduate
Psychology Minor (p. 376)	Minor		Undergraduate
Public Administration (MPA) - Criminal Justice Concentration ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/political-science-criminal-justice/public-administration-mpa-criminal-justice-concentration/">http://bulletin.southalabama.edu/programs-az/arts-sciences/political-science-criminal-justice/public-administration-mpa-criminal-justice-concentration/</a> )	Masters		Graduate
Public Administration (MPA) - GEIS Technology Concentration ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/political-science-criminal-justice/public-administration-geis-technology-concentration/">http://bulletin.southalabama.edu/programs-az/arts-sciences/political-science-criminal-justice/public-administration-geis-technology-concentration/</a> )	Masters		Graduate
Public Administration (MPA) - Healthcare Administration Concentration ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/political-science-criminal-justice/public-administration-mpa-healthcare-admin-concentration/">http://bulletin.southalabama.edu/programs-az/arts-sciences/political-science-criminal-justice/public-administration-mpa-healthcare-admin-concentration/</a> )	Masters		Graduate
Public Administration (MPA) - Non-Thesis Concentration ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/political-science-criminal-justice/public-administration-mpa-nonthesis-concentration/">http://bulletin.southalabama.edu/programs-az/arts-sciences/political-science-criminal-justice/public-administration-mpa-nonthesis-concentration/</a> )	Masters		Graduate
Public Administration (MPA) - Thesis Concentration (p. 364)	Masters		Graduate

Public Health Minor ( <a href="http://bulletin.southalabama.edu/programs-az/allied-health/biomedical-sciences/public-health-minor/">http://bulletin.southalabama.edu/programs-az/allied-health/biomedical-sciences/public-health-minor/</a> )	Minor			Undergraduate
Radiation Therapy Certificate ( <a href="http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-therapy-cert/">http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-therapy-cert/</a> )	Certificate <30			Undergraduate
Radiologic Sciences (BS) (p. 892)	Bachelors		Health and Human Studies	Undergraduate
Radiologic Sciences (BS) - Computed Tomography (CT) ( <a href="http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/radiologic-sciences-bs-ct/">http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/radiologic-sciences-bs-ct/</a> )	Bachelors		Health and Human Studies	Undergraduate
Radiologic Sciences (BS) - Magnetic Resonance Imaging (MRI) ( <a href="http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/radiologic-sciences-bs-mri/">http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/radiologic-sciences-bs-mri/</a> )	Bachelors		Health and Human Studies	Undergraduate
Radiologic Sciences (BS) - Mammography ( <a href="http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/radiologic-sciences-bs-mammogr/">http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/radiologic-sciences-bs-mammogr/</a> )	Bachelors		Health and Human Studies	Undergraduate
Radiologic Sciences (BS) - Radiation Therapy ( <a href="http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/radiologic-sciences-bs-rad-therapy/">http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/radiologic-sciences-bs-rad-therapy/</a> )	Bachelors		Health and Human Studies	Undergraduate
Radiologic Sciences (BS) - Radiology Administration ( <a href="http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/radiologic-sciences-bs-rad-admin/">http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/radiologic-sciences-bs-rad-admin/</a> )	Bachelors		Health and Human Studies	Undergraduate
Radiologic Sciences (BS) - Ultrasound ( <a href="http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/radiologic-sciences-bs-ultrasound/">http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/radiologic-sciences-bs-ultrasound/</a> )	Bachelors		Health and Human Studies	Undergraduate
Radiologic Sciences (BS) - Vascular Radiography ( <a href="http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/radiologic-sciences-bs-vr/">http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/radiologic-sciences-bs-vr/</a> )	Bachelors		Health and Human Studies	Undergraduate
Radiology Administration ( <a href="http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-admin-cert/">http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-admin-cert/</a> )	Certificate <30			Undergraduate
Reading Specialist Certification (p. 547)	Educational Specialist			Undergraduate

Real Estate for Business Majors Minor (p. 771)	Minor		Undergraduate
Real Estate for Non-Business Majors Minor (p. 771)	Minor		Undergraduate
Recreational Therapy (BS) (p. 482)	Bachelors	Health and Human Studies	Undergraduate
Related Science Minor (p. 232)	Minor		Undergraduate
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Vascular Radiography Certificate ( <a href="http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-vr-cert/">http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-vr-cert/</a> )	Certificate <30		Undergraduate
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  - Computed Tomography Certificate (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-ct-cert/>)
  - Magnetic Resonance Imaging Certificate (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-mri-cert/>)
  - Mammography Certificate (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-mammography-cert/>)
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  - Radiologic Sciences (BS) - Radiation Therapy (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/radiologic-sciences-bs-rad-therapy/>)
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## College of Arts and Sciences

### General Information

(251) 460-6280

College of Arts and Sciences website <https://www.southalabama.edu/colleges/artsandsci/>

### Arts & Sciences Administrative Staff

Title	Name
Dean	Andrzej Wierzbicki
Associate Dean	Eric J. Loomis
Assistant Dean	Robert L. Coleman
Manager, Instructional Support	Sangela King
Assistant Director, A&S Academic Services	Kelly R. Taylor
Graduation Specialist	Shylonda Stewart

### College Mission Statement

The College of Arts and Sciences is the intellectual center of the University of South Alabama and is the foundation for establishing and building the quality of the University's academic programs. In the College of Arts and Sciences, students receive broad exposure to all areas of academic inquiry, as well as in-depth knowledge in their chosen field of study. The College provides every undergraduate student at the University, regardless of major, with the fundamentals of a liberal arts education to enhance students' knowledge and create an atmosphere in which students develop their own critical thinking, communication skills, and the tools with which to carry out independent inquiry. Such an education promotes a heightened sense of intellectual curiosity, an appreciation of the values and accomplishments of the sciences, arts and humanities, and a sense of awareness and responsibility for the well-being of their society.

In achieving these educational goals, the College of Arts and Sciences will:

- offer a full range of subjects in the humanities, fine arts, social sciences, mathematics, and the natural sciences
- encourage breadth of learning and training in the fundamentals of scholarship
- create and apply knowledge in the arts and sciences through dedicated research, teaching, scholarship, and creative works
- maintain a community of teachers and scholars devoted to the preservation and discovery of knowledge and its transmission to students and to the public
- encourage and support the application of knowledge in service to the University, the Mobile metropolitan area, and the wider society
- emphasize the regional uniqueness of southwest Alabama, including its cultural heritage, its natural environment, and its strategic location as a port city on the Gulf of Mexico
- prepare students to participate in the larger world beyond the region by giving them an awareness of the complexity of global issues and contexts
- prepare students for meaningful and productive careers and contribute to the development of an educated work force responsive to the needs of the region

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## Requirements for Admission

Each applicant to a graduate program must meet the general Graduate School standards stated in the Graduate School Admission Requirements and Procedures. Individual programs may have additional requirements for admission and may be restricted because of capacity limitations. Consult departmental descriptions for additional information.

## College Requirements

### Undergraduate

Options exist for students to earn dual degrees, double majors, or complete more than one minor. Students interested in these options should contact the A&S Student Academic Services at (251) 460-7233 for details.

Degree requirements are to be satisfied with Arts and Sciences courses unless otherwise specified. Credits earned in the Developmental Studies Program or the Department of English as a Second Language (ESL) cannot be used to satisfy degree requirements.

**At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area.** If a minor is required in the particular degree program, **at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.**

An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise.

### Designated Writing Course Requirement

Majors in Arts and Sciences must complete two designated writing ("W") courses with at least one course chosen from offerings in the student's major or minor. Courses carrying this required credit are identified in the University Bulletin with a "W" after the course title.

### Mathematics Proficiency

All incoming students who do not have ACT scores and require MA 112 or higher for their major must take the Mathematics Placement Test administered in the department.

Calculators and other outside resources are not permitted during this exam.

Students should complete the exam at least 48 hours prior to coming to campus for orientation. If the exam is not taken, the students will be blocked from registering for all mathematics courses. To take the test, students will need their JAG number and the e-mail address provided by the USA Office of Admissions. The result of the test will be e-mailed to the student's JagMail e-mail address. Students should keep a copy of their Mathematics Placement Test results to take to their academic advisor. Students should anticipate a 48 hour lag time between the time they take the Math Placement Test and the time they register.

Required ACT, SAT, or Math Placement Exam scores for entry into MA 112 or higher are viewable at the following link:

<https://www.southalabama.edu/colleges/artsandsci/mathstat/placementinfo.html>

The Math Placement Exam schedule and sign-up instructions are available at:

<https://www.southalabama.edu/colleges/artsandsci/mathstat/placementschedule.html>

Questions concerning the Math Placement Exam should be directed to the Math/Statistics Department (251) 460-6264. The PAWS registration system will enforce the placement and course prerequisites.

### CAS 100: First Year Experience (2cr)

A course for first-year students majoring in the College of Arts and Sciences that assists with maximizing the student's potential to achieve academic success and to adjust responsibility to the individual and interpersonal challenges presented by college life. Taught in small groups, the course provides an introduction to the nature of higher education and a general orientation to the functions and resources of the University.

All first-time freshmen must successfully complete CAS 100 as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who may enroll in CAS 100 during their first summer or fall term.

### Bachelor of Arts and Bachelor of Science

A minimum of 120 hours in prescribed and elective courses is required for the Bachelor of Arts or Bachelor of Science degrees in the College of Arts and Sciences.

Candidates for these degrees must meet the general education requirements listed below, as well as completing the requirements for a major and minor field. All Bachelor of Arts and Bachelor of Science degrees within the College of Arts and Sciences require a minor. Requirements for a major or minor are listed under the departmental headings. Major programs may require no more than 47 hours in a single discipline. A student may count no more than eight hours of directed study toward a degree. Two courses (6 semester hours) may count toward both the major and minor only after approval of the student's advisor, chair of the major department, chair of the minor department, and the dean.

### Majors and Minors in the College of Arts and Sciences

Undergraduate students pursuing a Bachelor of Arts or a Bachelor of Science degree in the College of Arts and Sciences are required to have a major and a minor. The exceptions to the minor requirement are: students pursuing a Bachelor of Fine Arts degree, or a Bachelor of Music degree.

Requirements for a major are determined by the department and are listed under the departmental listing in this Bulletin. **At least 15 hours of upper-division course work in the major must be satisfactorily completed in residence at the University of South Alabama.** Courses are chosen in consultation with departmental advisors. Substitutions for stated requirements must be approved by the Chair of the department and the Dean of the college.

Requirements for a minor are determined by the department and are published in this Bulletin. **At least 9 hours of (lower and/ or upper-division) course work in the minor must be satisfactorily completed in residence at the University of South Alabama.**

Students may not choose a major and a minor in the same department unless they are clearly separate disciplines that fall administratively under a single department and have been approved by the Dean. Two courses (6 semester hours) may count toward both the major and minor only after approval of the student's advisor, chair of the major department, chair of the minor department, and the Dean.

Minors offered by Arts and Sciences students include: Air Force Studies, Anthropology, Applied Linguistics, Art, Art History, Biology, Classics Communication, Chemistry, Composite Sciences, Criminal Justice, Dramatic Arts, English, Foreign Languages and Literatures, Forensic Sciences, Geography, Geology, History, Interdisciplinary Studies (African-American Studies, Gender Studies, Gerontology, Jewish and Holocaust Studies), International Studies, Marine Science, Mathematics, Meteorology, Military Science, Music, Museum Studies, Philosophy, Philosophy and Medicine, Physics, Political Science, Psychology, Related Sciences, Religion, Sociology, and Statistics.

Students who take two minors cannot count the same or equivalent courses toward both minors.

### Double Major

Undergraduate students pursuing a Bachelor of Arts or Bachelor of Science degree may elect to fulfill the requirements for two majors simultaneously. To do so, the student must declare a primary major and a secondary major on the Declaration of Major form that is filed with the Registrar's Office. The student's academic file will be maintained in the department of the primary major. Students who complete the requirements for a second major are not required to complete a minor.

Students may count related courses from one major toward the fulfillment of the requirements for the other major, provided that the total number of credit hours counted toward both majors does not exceed twelve. Required courses for a major that are not in the major discipline do not count toward the twelve hour limit. At least one major must be in the College of Arts and Sciences. Written permission of the student's academic advisors, the Chair or Director of each major department or program and the Deans of all involved colleges is required for all courses double-counted.

### Bachelor of Fine Arts in Studio Art

The degree requirements and admission requirements to the B.F.A. program in studio art are listed under the Department of Visual Arts.

### Bachelor of Music

The requirements for the B.M. degree in performance and music education are listed under the Department of Music.

### Bachelor of Social Work

The requirements for the B.S.W. degree in social work are listed under the Department of Sociology, Anthropology, and Social Work.

### Programs in Other Colleges and Divisions

Students in the College of Arts and Sciences may elect to pursue a second major or a minor in other colleges and divisions of the University.

Students seeking dual degrees or second degrees must have a course of study approved in advance by the student's advisor, department Chair, and the Dean.

## Transient Course Credit

Students enrolled in the College of Arts and Sciences who wish to take a course at another institution for transfer credit while remaining enrolled at the university must be in good academic standing (a cumulative GPA of 2.0 or higher) and complete a transient request form available through this website (<https://www.southalabama.edu/departments/registrar/records/transferenceassistance/transientpolicy.html>).

Before completing the transient request form, meet with your academic advisor to make sure that the course you intend to take will apply to your degree.

## International Programs

The College participates in a number of international programs: summer sessions in England, and Mexico; student exchange programs and seminars in France, Germany, Russia and Greece; as well as the International University Consortium.

For further information about these programs, contact the Department of Foreign Languages and Literatures, or the Study Abroad (<https://www.southalabama.edu/departments/studyabroad/>) office.

## Teacher Certification for Arts and Sciences Students

Students in the College of Arts and Sciences may participate in the program leading to teacher certification in middle and high school education.

See College of Education and Professional Studies for Teacher Certification Requirements.

Arts and Sciences STEM majors interested in a teaching career may also be eligible for the UTeach program (<https://www.southalabama.edu/colleges/ceps/lte/uteachsouth/>).

## Cooperative Education Program

Students in the College of Arts and Sciences may participate in the Cooperative Education Program, which is described in a later section of the Bulletin. For further information contact the Career Development Office (<https://www.southalabama.edu/departments/careerservices/co-op.html>).

## Graduate Studies

The College of Arts and Sciences offers programs leading to a Master of Arts degree in Communication, English, or History; a Master of Public Administration degree; a Master of Science degree in Biology, Marine Sciences, Environmental Sciences, Marine Conservation and Resource Management, Mathematics, or Psychology; a Master of Music degree in Music, a Master of Science in Environmental Toxicology, a Master of Fine Arts degree in Art, and to Doctor of Philosophy degrees in Marine Sciences and Clinical and Counseling Psychology.

## General Education Requirements

Code	Title	Hours
<b>Area I - Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II - Humanities &amp; Fine Arts</b>		
A. Complete the following:		

CA 110	Public Speaking	3
B. Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/footnote1/">http://bulletin.southalabama.edu/programs-az/footnote1/</a> ) <sup>1</sup>		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
C. Select one of the following:		
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	
D. Select six hours from the following:		
AFR 101	Intro to African Amer Studies	6
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARH 203	Survey of Non-Western Art	
ARS 101	Art Appreciation	
CLA 110	Intro Anc Greek Roman Culture	
DRA 110	Introduction to Theatre	
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
JHS 101	Intro to Jewish Studies	
JOU 252	Media Literacy Digital Age	
LG 201	Intermediate Latin I	
LG 202	Intermediate Latin II	
LG 211	Intermediate French I	
LG 212	Intermediate French II	
LG 213	Accelerated Inter French - H	
LG 221	Intermediate Chinese I	
LG 222	Intermediate Chinese II	
LG 231	Intermediate Spanish I	
LG 232	Intermediate Spanish II	
LG 234	Inter Spanish Accel -H	
LG 251	Intermediate German I	
LG 252	Intermediate German II	
LGS 110	Intro American Sign Language I	
LGS 111	Intro American Sign Lang II	
LGS 201	Intermediate Japanese I	
LGS 202	Intermediate Japanese II	
LGS 206	Intermediate Arabic I	
LGS 207	Intermediate Arabic II	
LGS 271	Intermediate Korean I	

LGS 272	Intermediate Korean II
MUL 101	Introduction to Music
PHL 110	Introduction to Philosophy
PHL 120	Critical Thinking
PHL 121	Introduction to Logic
PHL 131	Introduction to Ethics
PHL 220	Medical Reasoning
PHL 231	Social Ethics
PHL 240	Western Philosophy: Classical
REL 100	Intro to the Study of Religion
REL 200	Old Testament/Hebrew Bible
REL 201	Survey of the New Testament

**Area III – Natural Sciences & Mathematics**

A. Select 3-4 hours from the following: 3-4

MA 110	Finite Mathematics
MA 111	Math in Society
MA 112	Precalculus Algebra
MA 113	Precalculus Trigonometry
MA 115	Precal Algebra-Trigonometry
MA 120	Calculus and Its Applications
MA 125	Calculus I
MA 126	Calculus II
MA 227	Calculus III
MA 237	Linear Algebra I
MA 238	Differential Equations I

B. Select 8-10 hours from the following: 8-10

Students cannot receive credit for both BLY 101 and BLY 121 or for both BLY 102 and BLY 122.

AN 121 & 121L	Biological Anthropology and Biological Anthropology Lab
BLY 101 & 101L	Life Science I and Life Science I Laboratory
or BLY 121 & 121L	General Biology I and General Biology I Lab
BLY 102 & 102L	Life Science II and Life Science II Lab
or BLY 122 & 122L	General Biology II and General Biology II Laboratory
BLY 205	Intro Environmental Sci
BMD 110	Introduction to A & P I
BMD 111	Introduction to A & P II
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab
CH 131 & 131L	General Chemistry I and General Chemistry I Lab
CH 132 & 132L	General Chemistry II and General Chemistry II Lab
ENV 101	Environment & Society
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab
GY 111 & 111L	Physical Geology and Physical Geology Lab

GY 112 & 112L	Earth History and Earth History Lab
MAS 134 & 134L	Ocean Science and Ocean Science Lab
MET 140 & 140L	Introduction to Meteorology and Intro to Meteorology Lab
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab

**Area IV – History, Social & Behavioral Sciences (<http://bulletin.southalabama.edu/programs-az/footnote1/>)**

A. Select one of the following: 3

HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 121	World Civilization I
HY 122	World Civilization II
HY 135	US History to 1877
HY 136	US History since 1877

B. Select three of the following: 9

AN 100	Intro to Cultural Anthropology
AN 101	Intro Archaeology-Bio Anthro
CA 100	Intro to Communication
CA 211	Interpersonal Comm
CJ 105	Introduction to Criminal Justice
ECO 215	Prin of Microeconomics
ECO 216	Prin of Macroeconomics
GEO 114	People, Places, Environment
GEO 115	World Regional Geography
GS 101	Intro to Gender Studies
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 121	World Civilization I
HY 122	World Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
IS 100	Global Issues
IST 201	Seasons of Life
NAS 101	Intro Native American Studies
PSC 130	Intro to US Government
PSY 120	Introduction to Psychology
PSY 250	Life Span Development
SY 109	Introductory Sociology
SY 112	Social Problems

**Area V**

A. Foreign Language - Select six hours from any one group of the following: (<http://bulletin.southalabama.edu/programs-az/footnote1/>)<sup>2</sup> 6

LG 101 & LG 102	Introductory Latin I and Introductory Latin II
LGS 106 & LGS 107	Introductory Arabic I and Introductory Arabic II
LG 111 & LG 112	Introductory French I and Introductory French II (or proficiency test)
LG 121 & LG 122	Introductory Chinese I and Introductory Chinese II
LG 131 & LG 132	Introductory Spanish I and Introductory Spanish II (or proficiency test)
LG 141 & LG 142	Intro Classical Greek I and Intro Classical Greek II
LG 151 & LG 152	Introductory German I and Introductory German II (or proficiency test)
LGS 171 & LGS 172	Introductory Korean I and Introductory Korean II

B. Natural Sciences/Math - Select 3-4 hours lab science or math/stat courses from the following: 3-4

AN 121 & 121L	Biological Anthropology and Biological Anthropology Lab
BLY 101 & 101L	Life Science I and Life Science I Laboratory
or BLY 121 & 121L	General Biology I and General Biology I Lab
BLY 102 & 102L	Life Science II and Life Science II Lab
or BLY 122 & 122L	General Biology II and General Biology II Laboratory
BMD 110	Introduction to A & P I
BMD 111	Introduction to A & P II
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab
CH 131 & 131L	General Chemistry I and General Chemistry I Lab
CH 132 & 132L	General Chemistry II and General Chemistry II Lab
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab
GY 111 & 111L	Physical Geology and Physical Geology Lab
GY 112 & 112L	Earth History and Earth History Lab
MAS 134 & 134L	Ocean Science and Ocean Science Lab
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab

PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab
ST 210	Stat Reason and Application
MA 112 - MA 299 (except MA 201 and MA 202)	

**Total Hours** 53-57

## Footnote

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 121 & HY 122 or HY 135 & HY 136)

<sup>2</sup> The Department of Modern and Classical Languages recognizes AP (Advanced Placement) and CLEP (College Level Examination Program) scores at the equivalent to the second semester of the foreign language sequence as fulfilling the foreign language requirement. Other proficiency tests (Avant STAMP 4 and tests offered by the BYU FLATS) are also accepted. Students who score on a proficiency test at the level equivalent to first semester of the foreign language sequence are required to complete only the second semester and will fulfill the foreign language requirement with 3 credit hours of course work.

# African American Studies

## Department Information

The minor in African American Studies provides an interdisciplinary investigation of the experiences, conditions, origins, accomplishments, and contributions of people of African ancestry in the United States. Students may deepen their appreciation and understanding of African Americans by studying their earlier history in Africa, their transition to the New World, and their diasporic experiences in other parts of the world. The African American Studies Program is comprised of eighteen courses offered through seven departments of instruction within the College of Arts and Sciences.

The minor in African American Studies takes advantage of those characteristics of the African American experience that make it uniquely valuable for serious academic study and teaching, for it exposes students to the diversity and unity of the African American experience as well as to the similarities and differences among the cultures of Africa.

## Degrees, Programs, or Concentrations

- African American Studies Minor (p. 102)

## Courses

### African-American Studies (AFR)

#### AFR 101 Intro to African Amer Studies 3 cr

An interdisciplinary investigation of the origins, experiences, conditions, accomplishments and contributions of people of African ancestry in the United States.

## College of Arts/Sciences (CAS)

### CAS 100 First Yr Exp - 2 cr

A course for first-year students majoring in the College of Arts & Sciences that assists with maximizing the student's potential to achieve academic success and to adjust responsibly to the individual and interpersonal challenges presented by college life. Taught in small groups, the course provides an introduction to the nature of higher education and a general orientation to the functions and resources of the University.

### CAS 190 Special Topics - 1-3 cr

This variable content course deals with selected topics from any of the disciplines in the College of Arts and Sciences. Topics will focus on current and relevant issues and may contain a service-learning component. The course may be repeated for credit when the topic varies for a maximum of six credit hours.

## Gerontology (GRN)

### GRN 272 Gender and Aging 3 cr

This course examines the dynamics of gender and aging within society from an interdisciplinary perspective. Students will be introduced to controversies in gender over the life course. These include, but are not limited to, definitions and cultural boundaries, gender in childhood, gender and relationships, gender in education and the workplace, gender and sexuality, as well as gender in late life.

### GRN 290 Special Topics - 3 cr

This designation is used for interdisciplinary courses on aging on a variety of subjects. This course does not replace any course in a single discipline. May be repeated as long as the topic changes, to maximum of six semester hours.

### GRN 435 Health Disparities Life Span 3 cr

This course examines differences in health status across the life span. The course will focus heavily on racial/ethnic and socioeconomic disparities in health applying a social determinants' of health framework. Issues that will be considered include how income, education, neighborhood conditions, access to health care, and other community factors shape opportunities to be healthy. The course is cross-listed as SY 435 and GRN 435 and has been approved as an elective for the Undergraduate Certificate in Gerontology and the interdisciplinary minor in Gerontology.

**Prerequisite:** SY 109 Minimum Grade of D

**Cross-Listed:** SY 435

### GRN 490 Special Topics 3 cr

This course is designated for upper division students and graduate students, particularly those pursuing studies for the Certificate of Gerontology. The course content focuses on interdisciplinary treatments on various topics on aging. This course does not replace any course in a single discipline. (Examples of special topics: Trends and Issues in Gerontology; Leadership and Advocacy in Gerontology; Housing and Lifestyle Changes over the Life Course). May be repeated as long as the topic changes, to maximum of six semester hours.

**Prerequisite:** SY 372 Minimum Grade of D

### GRN 494 Directed Studies 1-3 cr

Under the guidance of a faculty member, the student will pursue directed research on readings of an approved topic in Gerontology. May be repeated as long as the topic changes, to a maximum of six semester hours. Requires permission of Director of Gerontology.

**Prerequisite:** SY 372 Minimum Grade of D

### GRN 496 Internship - Gerontology 3,6 cr

This course is to provide a practicum experience in gerontology in a setting selected by the student and approved by the Program Director. The course emphasis is on the experiential learning process and outcomes. The undergraduate student will apply theoretical concepts in specific areas of interest related to aging and intergenerational relations. Interns will meet as a group three times during the semester for orientation, professional development, and evaluation activities. The 3-hour internship requires 100 contact hours; the 6-hour internship requires 200 hours. Permission of Director of Gerontology is required.

**Prerequisite:** SY 372 Minimum Grade of C

### GRN 535 Health Disparities Life Span 3 cr

The main purpose of this seminar is to provide students with an understanding of how social factors contribute to racial/ethnic, socioeconomic and gender disparities in health and health care. We will examine how dyadic relationships such as interpersonal forms of discrimination, marriage, and social ties may contribute to health disparities. We will also examine the ways in which neighborhood and community context, as well as inequalities in socioeconomic status materially shape health and access to health care services. The course is cross-listed as GRN 435/535 and SY 435/535 and has been approved as an elective for the Undergraduate/Graduate Certificate in Gerontology and the interdisciplinary minor in Gerontology.

**Cross-Listed:** SY 535

### GRN 594 Dir St in Gerontology - 1-3 cr

Under the guidance of a faculty member, the student will pursue directed research or readings of an approved topic in Gerontology. May be repeated as long as the topic changes, to maximum of six credit hours. Requires permission of the Director of Gerontology.

### GRN 596 Internship - Gerontology 3,6 cr

This course is to provide a practicum experience in gerontology in a setting selected by the student and approved by the Program Director. The course emphasis is on the experiential learning process and outcomes. The graduate student will apply theoretical concepts to leadership roles, conducting research and influencing social and health care policies related to aging and intergenerational relationships. Interns will meet as a group three times during the semester for orientation, professional development, and evaluation activities. The 3-hour internship requires 100 contact hours; the 6-hour internship requires 200 hours. Permission of Director of Gerontology is required.

**Prerequisite:** SY 523 Minimum Grade of B

### GRN 597 GRN Teaching Apprenticeship 1-3 cr

Directed Studies/Apprenticeship that focuses on teaching Gerontology. The student will work directly with a member of the Gerontology graduate faculty to learn pedagogy, innovation in teaching, and course content that will equip the student for future teaching assignments. Many PhD programs offer both Teaching Assistantships and Research Assistantships. Gerontology students need to show evidence that they have had some teaching-related experience to compete strongly for the TA position. This course is also appropriate for students who anticipate careers in teaching within the field of Gerontology (aging or intergenerational studies). Arrangements must be made prior to registration. Permission of the Program Director is required.

**Prerequisite:** SY 372 Minimum Grade of C

## Gender Studies (GS)

### GS 101 Intro to Gender Studies 3 cr

This course provides an interdisciplinary, multicultural overview of the concept of gender and gender roles in patriarchal society. This course examines the social construction of gender in our society and how that has shaped such areas as economics, politics, cultural/social values, and the impact upon women and men in historical and contemporary terms.

### GS 290 Sp Tp-#MeToo, Black Lives Matter & Beyond 3 cr

Study of selected topics with an area in gender studies. May be repeated for credit when content varies.

### GS 301 Moving Beyond Diversity 3 cr

This course explores ways of fighting injustice and dismantling systemic oppression for those who are being disproportionately impacted generationally. The course offers a framework for activism that focuses on creating a culture that stands up for what is right by fighting against normalizing cycles of perpetuated injustices. Students will examine diverse perspectives that center on the capacity to mobilize solidarity for those efforts, strategies, and practices that negate performative allyship with systems-changing action for today's realities.

### GS 302 Black Women and Activism 3 cr

This fully online three-hour credit course is interdisciplinary in nature and addresses the need to recognize and validate contributions made by Black women that sought and continue to uplift Black America throughout the late 19th and early 21st centuries. This cadre of activism will be contextualized through both womanist and feminist theories. Central to these works will be an examination for how multiple oppressions have shaped Black women's lives throughout their ongoing efforts to redefine self and bring empowerment to their communities through racial solidarity and advancement as a people. These women's underlying resistance strategies and intellectual discourse for offsetting the negative effects of racism and other oppressive measures will be mirrored through the use of race and gender as a socio-political construct. A postmodern response depicted through the lens of contemporary Black feminists for how both mainstream feminism and Black America have responded to these heroic forms of activism will be analyzed. These activists' contributions will unfold through the following curricula foci: 1) early roots of nationalism, 2) the emergence of both Black Feminist and Womanist Thought, and 3) political movements involving Black women activists. Additional cornerstones for learning will include participating in a posting process that involve sharing research and writing projects which in return will facilitate lively discussions on today's black women activism from their own respective domain (e.g. music, spirituality, film, arts and letters, judicial system, the intellectual and socio-political arenas).

### GS 304 #Me Too, Black Lives Matter & 3 cr

The velocity of national protests fighting for human rights across the constitutional continuum of justice, dignity, and safety have evolved into an epidemic throughout American infrastructures. This course will plunge into the #MeToo Era, Black Lives Matter, and Woke Movements. Significant visibility for how social constructs of gender, race, and sexuality intersect with these protesters' outcries will be examined. Further considerations will be given to exposing those accused of sexual violence on various fronts as well as existing allegations of wrongful deaths will be a part of the course curriculum. An added dimension to the curriculum will include also focusing on political strategies and an operative activism model that are being used to effectively penetrate these existing cultures of power and dominance.

### GS 390 Special Topics 3 cr

Advanced study of selected topics with an area in gender studies. May be repeated for credit when content varies.

### GS 490 Special Topics 3 cr

Advanced study of selected topics within an area in Gender Studies. May be repeated for credit when content varies for a total of six hours.

### GS 492 Gender Studies Seminar - 3 cr

Advanced study of selected topics in Gender Studies. May be repeated for credit when content varies for a total of six hours.

### GS 494 Directed Studies 1-3 cr

Directed research under the guidance of a Gender Studies faculty member. Requires permission of instructor. Student is restricted to taking a maximum of six hours of Directed Studies.

**Prerequisite:** GS 101 Minimum Grade of D

### GS 496 Internship - 3-6 cr

Practical learning through occupational or community work with an approved agency dealing with gender-related issues. Readings and final report supervised by gender studies faculty. Special Permission required.

**Prerequisite:** GS 101 Minimum Grade of D

## Interdisciplinary Programs (IDS)

### IDS 290 Special Topics 1-3 cr

A study of selected topics of an interdisciplinary nature. May be repeated for credit when content varies. Requires permission of instructor.

### IDS 490 Special Topics 1-3 cr

Advanced study of selected topics of an interdisciplinary nature. May be repeated for credit when content varies. Requires permission of instructor.

### IDS 590 Sp Top 1-9 cr

Specialized topics not generally listed in the course offerings. Requires consent of Graduate Director.

## International Studies (IS)

### IS 100 Global Issues 3 cr

This course introduces students to the basic structural components of the global system, including the nation-state system and the world economy, and explores the major schools of thought in such areas as security, economic prosperity and development, international law, gender and environmental studies. The course helps students understand the complex and interlinked issues facing global society, and current problems, and view the U.S. within a broader global context.

### IS 193 Study Abroad 1-6 cr

This course is an introductory International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

### IS 200 People-Nations - 3 cr

Variable content course focusing on particular nation or region of the world. Course offers a multi-disciplinary introduction to the people, society and politics. May be repeated for credit when content varies up to a total of 6 hours.

### IS 210 Global Engagement Orientation 1 cr

This course introduces students to international global issues, allows students to identify opportunities for active engagement in these issues, and provides the framework for successful completion of the Global Engagement Certificate.

**IS 290 Special Topics - 3 cr**

Study of selected topics within a particular Area Studies Concentration. May be repeated for credit when content varies.

**Prerequisite:** IS 100 Minimum Grade of D

**IS 293 Study Abroad 1-6 cr**

This course is an introductory International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**IS 363 Crime and Politics in LatinAm 3 cr**

An examination of the violent crime epidemic affecting many parts of Latin America, with specific focus on the themes of democratic transition, political economy, and foreign relations with the United States. Same as PSC 363 and CJ 363.

**Prerequisite:** (PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or IS 100 Minimum Grade of C)

**Cross-Listed:** CJ 363, PSC 363

**IS 371 Studies in Russia 3-6 cr**

This course will cover specific topics in the history, politics, and culture of modern Russian civilization. May be repeated for credit when content varies.

**IS 372 Studies in E. Europe & C. Asia 3-6 cr**

This course will cover specific topics in the history, politics, and culture of modern Eastern European and Central Asian civilizations. May be repeated for credit when content varies.

**IS 390 Sp Top- 1-3 cr**

Advanced study of selected topics within a particular concentration. May be repeated for credit when content varies.

**IS 391 Study Abroad - 18 cr**

Study of selected topics within a particular Area Studies Concentration. May be repeated.

**IS 393 Study Abroad 1-6 cr**

This course is an advanced International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**IS 410 Global Engagement Capstone 1 cr**

Global Engagement Capstone is required for students completing the Global Engagement Certificate (GEC), and is a one hour course designed to help students reflect on the 16 hours of coursework and nine hours of globally engaged activities they have completed. Students will create a portfolio during the course, which will be presented to students and affiliated faculty at its conclusion.

**Prerequisite:** IS 210 Minimum Grade of P

**IS 473 International Law 3 cr**

This course covers major issues, cases and topics in public and private international law. Course coverage includes individuals and corporations, diplomatic relations, jurisdiction, human rights, economic relations, treaties, environmental law, and more.

**Prerequisite:** (IS 100 Minimum Grade of C or PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C)

**Cross-Listed:** CJ 473, PSC 473

**IS 489 Leadership and World Leaders 3 cr**

An overview of the definitions, characteristics, and typologies of leadership, with a focus on lives and legacies of global influential political leaders over the past century.

**Prerequisite:** PSC 130 Minimum Grade of D or PSC 250 Minimum Grade of D or IS 100 Minimum Grade of D

**Cross-Listed:** PSC 251, PSC 489

**IS 490 Special Topics 3 cr**

Advanced study of selected topics within a particular Area Studies Concentration. May be repeated for credit when content varies.

**Prerequisite:** IS 100 Minimum Grade of D

**IS 491 Seminar on Terrorism 3 cr**

Study of a terrorism from a sociopolitical perspective with an emphasis on causes, policy, tactics and operational characteristics and counter-terrorism operations. Cross-listed with CJ 491 and PSC 491.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or PSC 130 Minimum Grade of C or IS 100 Minimum Grade of C

**Cross-Listed:** CJ 491, PSC 491

**IS 492 Seminar - 3 cr**

Advanced study of selected topics in international studies from a comparative perspective. May be repeated for credit when content varies.

**Prerequisite:** IS 100 Minimum Grade of D

**IS 493 Study Abroad 1-6 cr**

This course is an advanced International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**IS 494 Directed Studies 1-3 cr**

Directed research in the field of international studies. May be repeated or credit up to a total of 9 hours. Prerequisite: permission of IS Director

**IS 495 Senior Seminar - W 3 cr**

The course seeks to provide an interdisciplinary and cross-regional overview of the fields and research opportunities within international studies.

**Prerequisite:** EH 102 Minimum Grade of C

**IS 496 Prof St Internship - 3-9 cr**

Practical learning experiences through occupational or professional work with an approved international organization, governmental agency, or international business Prerequisite: Permission of IS Director

**IS 499 Senior Honors Thesis 3 cr**

The course covers major theoretical perspectives in organizational psychology based on empirical research and case studies. Students will explore learning theory, group dynamics, and change in different types of learning organizations.

**Prerequisite:** (EH 102 Minimum Grade of D or EH 105 Minimum Grade of D)

**IS 591 Study Abroad 12 cr**

Graduate level international exchange programs for University of South Alabama students.

**Museum Studies (MUM)****MUM 201 Intro to Museum Studies 3 cr**

This course is designed to provide a general introduction to museum history, practice, and the role of museums in contemporary society. The class will explore a range of museum positions, curatorial practices, collection management, museum administration, and the academic and public roles museums play in society.

**Prerequisite:** EH 102 Minimum Grade of C

**MUM 290 Special Topics - 3 cr**

Different subjects or themes in museum studies as announced. This course may be repeated twice when content varies, for a maximum of nine credit hours. Prerequisite: To be announced.

**MUM 390 Special Topics - 3 cr**

Different subjects or themes in museum studies as announced. This course may be repeated twice when content varies. for a maximum of nine credit hours. Prerequisite: To be announced.

## African American Studies Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Minor in African American Studies

#### Core Requirements

1. AFR 101 (three semester hours). This course is to be taken immediately after the African American Studies minor is declared.
2. At least one course from Group #1 and one from Group #2 course selected from the offerings below.
3. The election of additional courses to bring the total credits to at least 21 hours.

#### African American Studies Course Offerings

Code	Title	Hours
<b>Required</b>		
AFR 101	Intro to African Amer Studies	3
<b>Group (<a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/african-american-studies/1/">http://bulletin.southalabama.edu/programs-az/arts-sciences/african-american-studies/1/</a>)</b>		<b>3</b>
EH 390	Sp Top -	
EH 468	Contemporary Black Fiction	
EH 477	Genre	
EH 492	Seminar -	
PHL 331	Constitutional Law	
<b>Group (<a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/african-american-studies/2/">http://bulletin.southalabama.edu/programs-az/arts-sciences/african-american-studies/2/</a>)</b>		<b>3</b>
GS 290	Sp Tp-#MeToo, Black Lives Matter & Beyond	
GS 492	Gender Studies Seminar -	
HY 362	History of Africa since 1500	
HY 377	African American Experiences	
HY 435	Civil War and Reconstruction	
HY 477	The Old South	
HY 478	The New South	
PSY 270	Psy of Black Experience	
SY 220	Marriage and the Family	
SY 315	African American Families	
SY 435	Health Disparities Life Span	
SY 445	Majority-Minority Relations-W	
PSC 340	Race, Gender, & Politics	
<b>Other Electives</b>		<b>12</b>
Choose Electives from any course listed above and below.		
ARH 250	African Art	
ARH 343	African-American Art	
IST 320	Cultural Competency	
<b>Total Hours</b>		<b>21</b>

A description of these courses may be found under the appropriate departments.

## Air Force Studies

### Department Information

Department of Air Force Studies website  
<https://www.southalabama.edu/colleges/artsandsci/afrotc/>

Air Force ROTC offers students a course of study leading to a commission as a second lieutenant. Designed to complement individual academic majors, AFROTC courses can be applied toward minor requirements. Cadets enrolled in the program represent a broad cross section of the student body. The student/cadet has an opportunity to explore and evaluate Air Force and Space Force career opportunities while earning a college degree. Completion of the AFROTC curriculum is the initial step in the education of the professional officer and provides a firm understanding of basic aerospace doctrine and the Air Force missions, organization, and operation.

The Air Force ROTC program consists of two phases: the General Military Course (GMC) and the Professional Officer Course (POC). Each phase requires four (4) semesters of study.

#### General Military Course (The Basic Course)

Students may enroll in the General Military Course with no military obligation. The GMC courses focus on Air Force organizations and their missions, Air Force history, and basic leadership skills. Communication skills are also emphasized.

#### Professional Officer Course (The Advanced Course)

Enrollment in the POC is limited to those students who have applied and been accepted for the course. Selection is based on interest in the Air Force or Space Force together with academic records, observed leadership abilities, physical fitness, and Air Force Officer Qualification Test (AFOQT) scores. Application is normally made while a member of the GMC. Individuals entering the POC must have two academic years remaining in college as full-time students at the undergraduate level. Upon completion, all POC students are obligated to accept a commission and enter the active-duty Air Force or Space Force.

Junior-year materials emphasize student involvement in learning and practicing management and leadership techniques. Leadership and management skills as they apply to a Junior officer in the Air Force are emphasized, and communication skills are stressed throughout the entire AFROTC curriculum. The senior-year course deals extensively with the political, economic, and social factors relating to the formulation and implementation of national security policy as well as preparation for entrance into active duty life.

Cadets receive a nontaxable allowance monthly while on contract (normally during the two academic years in the POC). This stipend is in addition to any other scholarship benefits.

#### Field Training Course

All students must complete one field training course, conducted at an active Air Force base during the summer months. The program requires a three-week course to be completed, normally, between the sophomore and junior years.

While attending field training, a student is furnished transportation or payment for travel plus pay at the current rate of approximately \$400

per month. Uniforms and free medical care are provided while at field training.

## AFROTC College Scholarship Program

The Professor of Air Force Studies (PAS) can nominate qualified freshmen, sophomores, and juniors to compete for three and two-year scholarships. The scholarship entitlement pays full tuition and fees at USA, a textbook allotment, and the monthly allowance mentioned above. Scholarship consideration is predicated on student ability, performance, and potential needs of the Air Force. Interested students need to contact the Department of Air Force Studies.

All individuals that complete field training, contracted into POC, and not already on scholarship with AFROTC will receive the Brig Gen Charles McGee Leadership Award which provides either \$18,000 per year in tuition or \$10,000 in housing assistance. This award is only available for undergraduate studies.

Three and four-year scholarships are also available to high school students. High school students interested in applying should call the Department of Air Force Studies at (251) 460-7211 or write the:

Department of Air Force Studies (AFROTC),  
University of South Alabama, AHS Rm 147,  
Mobile, AL 36688-0002.

Also, you can apply via the Internet at <http://www.afrotc.com>.

## Air Force ROTC Uniforms

Students in Air Force ROTC will be issued uniforms to wear to class and leadership laboratory. They must be turned in upon completion of the year or when the cadet drops or is dropped from the program. Those individuals in the GMC will wear khakis and a black polo for class unless issued uniforms. All POC cadets will wear issued uniforms.

## Courses of Instruction

The GMC course is normally completed during the freshman and sophomore years. This basic course consists of four semesters of study with one hour of classroom work and two hours of leadership laboratory per week.

The POC consists of four semesters of study, and this advanced course leads to a commission in the United States Air Force. Three classroom hours and two hours of Leadership Laboratory are required weekly. Students interested in this program should contact the Professor of the Air Force Studies.

All students enrolled in GMC or POC are also required to attend physical training events three days a week. These sessions run approximately one hour.

## Degrees, Programs, Or Concentrations

- Air Force Studies Minor (p. 105)

## Courses

### AS 101 Foundations of USAF I 1 cr

AS 101 is a survey course designed to introduce students to the United States Air Force and encourage participation in Air Force Reserve Officer Training Corps. Featured topics include: overview of ROTC, special programs offered through ROTC, mission and organization of the Air Force, brief history of the Air Force, introduction to leadership and leadership related issues, Air Force Core Values, Air Force officer opportunities, and an introduction to communication studies. Leadership Laboratory is mandatory for AFROTC cadets and complements this course by providing cadets with followership experiences.

**Corequisite:** AS 101L

### AS 101L Foundation of USAF I Lab 0 cr

Provides an introduction to the military profession, including applications in leadership, drill and ceremony, customs and courtesies and community service.

**Corequisite:** AS 101

### AS 102 Heritage and Values II 1 cr

AS 102 is a survey course designed to introduce students to the United States Air Force and encourage participation in Air Force Reserve Officer Training Corps. Featured topics include: overview of ROTC, special programs offered through ROTC, mission and organization of the Air Force, brief history of the Air Force, introduction to leadership and leadership related issues, Air Force Core Values, Air Force officer opportunities, and an introduction to communication studies. Leadership Laboratory is mandatory for AFROTC cadets and complements this course by providing cadets with followership experiences.

**Corequisite:** AS 102L

### AS 102L Heritage and Values II Lab 0 cr

Provides an introduction to the military profession, including applications in leadership, drill and ceremony, customs and courtesies and community service.

**Corequisite:** AS 102

### AS 201 Team/Leadership Fund I 1 cr

AS 201 is designed to provide a fundamental understanding of both leadership and team building. Students will apply leadership perspectives when completing team building activities and discussing things like conflict management. Students should demonstrate basic verbal and written communication skills. Cadets will apply these lessons at Field Training, which follows AS 201 and AS 202. Co-requisite: AS 201L

**Corequisite:** AS 201L

### AS 201L Team/Leadership Fund I lab 0 cr

Provides an introduction to the military profession, including applications in leadership, drill and ceremony, customs and courtesies and community service.

**Corequisite:** AS 201

### AS 202 Team/Leadership Fund II 1 cr

AS 202 is designed to provide a fundamental understanding of both leadership and team building. Students will apply leadership perspectives when completing team building activities and discussing things like conflict management. Students should demonstrate basic verbal and written communication skills. Cadets will apply these lessons at Field Training, which follows AS 201 and 202L. Co-requisite: AS 202L

**Corequisite:** AS 202L

**AS 202L Team/Leadership Fund II Lab 0 cr**

Provides an introduction to the military profession, including applications in leadership, drill and ceremony, customs and courtesies and community service.

**Corequisite:** AS 202

**AS 301 Lead People/Effect Comm I 3 cr**

AS 301 is a study of leadership, management fundamentals, professional knowledge, Air Force personnel and evaluation systems, leadership ethics, and communication skills required of an Air Force junior officer. Case studies are used to examine Air Force leadership and management situations as a means of demonstrating and exercising practical application of the concepts being studied. A mandatory Leadership Laboratory complements this course by providing advanced leadership experiences in officer-type activities, giving students the opportunity to apply leadership and management principles of this course.

**Corequisite:** AS 301L

**AS 301L Leading People/Effective Communication I Lab 0 cr**

Provides an introduction to the military profession, including applications in leadership, drill and ceremony, customs and courtesies and community service.

**Corequisite:** AS 301

**AS 302 Leading People/Eff Comm II 3 cr**

AS 302 is designed to build on the leadership fundamentals taught in AS 200. Cadets will have the opportunity to utilize their skills as they begin more of a leadership role in the detachment. The course continues into advanced skills and ethics training that will prepare them for becoming an officer and supervisor. Case studies are used to examine Air Force leadership and management situations as a means of demonstrating and exercising practical application of the concepts being studied. A mandatory Leadership Laboratory complements this course by providing advanced leadership experiences in officer type activities, giving student the opportunity to apply leadership and management principles of the course. Co-requisite: AS 301L

**Corequisite:** AS 302L

**AS 302L Lead People/Eff Comm 11 Lab 0 cr**

Provides an introduction to the military profession, including applications in leadership, drill and ceremony, customs and courtesies and community service.

**Corequisite:** AS 302

**AS 401 Sec/Lead/Comm Prep I 3 cr**

AS 401 examines the national security process, regional studies, advanced leadership ethics, and Air Force doctrine. Special topics of interest focus on the military as a profession, 'officership', military justice, civilian control of the military, preparation for active duty, and current issues affecting military professionalism. Within this structure, continued emphasis is given to refining communication skills.

**Corequisite:** AS 401L

**AS 401L Sec/Lead/Comm Prep 1 Lab 0 cr**

Provides an introduction to the military profession, including applications in leadership, drill and ceremony, customs and courtesies and community service.

**Corequisite:** AS 401

**AS 402 Sec/Lead/Comm Prep II 3 cr**

Course examines the national security process, regional studies, advanced leadership ethics, and Air Force doctrine. Special topics of interest focus on the military as a profession, officership, military justice, civilian control of the military, preparation for active duty, and current issues affecting military professionalism. Within this structure, continued emphasis is given to refining communication skills.

**Corequisite:** AS 402L

**AS 402L Sec/Lead/Comm Prep II Lab 0 cr**

Provides an introduction to the military profession, including applications in leadership, drill and ceremony, customs and courtesies and community service.

**Corequisite:** AS 402

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
ARMSTEAD, THOMAS (armstead@southalabama.edu)	Air Force Studies	Assistant Professor	BA, Univ of Arizona Global Campus
CLARK, ROSS E.	Air Force Studies	Professor	BS, Texas A & M University MS, Kansas State University
FAIR, HENRY W	Air Force Studies	Assistant Professor	BS, University of West Florida MS, University of West Florida
GORDON, AARON R. (aarongordon@southalabama.edu)	Air Force Studies	Assistant Professor	AS, Embry-Riddle Aeronautical U BS, Embry-Riddle Aeronautical U
MULLINS, DOUGLAS E	Air Force Studies		BA, Ohio University MA, Webster University
PAYTON, ELSA MAE (empayton@southalabama.edu)	Air Force Studies	Assistant Professor	BS, US Air Force Academy MS, American Public University CERT, Auburn University
RANDOLPH, RUTH (ruthrandolph@southalabama.edu)	Air Force Studies	Professor	BA, Augustana College MA, Norwich University
SCHILL, NOAH P.	Air Force Studies	Assistant Professor	BA, Rhodes College

## Air Force Studies Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

#### Minor in Air Force Studies

Code	Title	Hours
<b>Requirements</b>		
Completion of the 16 hours of Arts and Sciences course work included in the GMC (Basic Course) and the POC (Advanced Course) are required for a minor in Air Force Studies.		
AS 101	Foundations of USAF I	1
AS 102	Heritage and Values II	1
AS 201	Team/Leadership Fund I	1
AS 202	Team/leadership Fund II	1
AS 301	Lead People/Effect Comm I	3
AS 302	Leading People/Eff Comm II	3
AS 401	Sec/Lead/Comm Prep I	3
AS 402	Sec/Lead/Comm Prep II	3
<b>Total Hours</b>		<b>16</b>

In addition, students must complete all commissioning requirements.

## Art & Art History

### Department Information

Department of Art & Art History website  
<https://www.southalabama.edu/art> (<https://www.southalabama.edu/art/>)

The Department of Art & Art History's goals include preparing students for graduate work or careers in the visual arts; providing suitable programs and courses for persons who want to study or practice the arts for personal development and cultural enrichment; and introducing students to their cultural tradition.

The Department of Art & Art History offers a Bachelor of Arts and a Bachelor of Fine Arts degree with concentrations in Animation, Art History, Ceramics, Glass, Graphic Design, Painting, Photography, Printmaking, and Sculpture.

These degree programs are intended for students who plan to pursue careers in Art or Art History, which typically requires continuing their studies at the graduate level. The Department offers minors in Studio Art and in Art History.

All first-time freshmen must successfully complete CAS 100 as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry.

### Graduate Studies

The University of South Alabama offers a Masters of Fine Arts degree (MFA) in Creative Technologies and Practice, which is the terminal, or highest, degree available in the field. It is a cross-disciplinary degree program appealing to creatives who are interested in a variety of media technologies. The program emphasizes interdisciplinary practice that

spans multiple concentrations within Art & Art History with technology serving to inform or facilitate the creative process.

The MFA in Creative Technologies and Practice will equip individuals to enter the workforce in various creative technology areas, manage creative teams, pursue careers as visual artists, advance knowledge in the field through research or creative input, and teach at the university level.

The University of South Alabama offers a Master in Art Education and an Alternative Master in Art Education which are housed in the College of Education and Professional Studies. Coursework in the visual arts is within the Department of Art & Art History. Further information regarding these degree programs is listed in the Bulletin under graduate programs in the College of Education and Professional Studies.

## Degrees, Programs, Or Concentrations

- Art History Minor (p. 116)
- Studio Art (BFA) - Animation Concentration (p. 116)
- Studio Art (BFA) - Art History Concentration (p. 117)
- Studio Art (BFA) - Ceramics Concentration (p. 119)
- Studio Art (BFA) - Glass Concentration (p. 120)
- Studio Art (BFA) - Graphic Design Concentration (p. 121)
- Studio Art (BFA) - Painting Concentration (p. 123)
- Studio Art (BFA) - Photography Concentration (p. 124)
- Studio Art (BFA) - Printmaking Concentration (p. 126)
- Studio Art (BFA) - Sculpture Concentration (p. 127)
- Studio Art Minor (p. 128)
- Visual Art (BA) - Art History Concentration (p. 128)
- Visual Art (BA) - Studio Art Concentration (p. 130)
- Visual Art (MFA) - Creative Technologies and Practice (p. 131)

## General Education Requirements

Code	Title	Hours
<b>Area I - Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II - Humanities &amp; Fine Arts</b>		
A. Complete the following:		
CA 110	Public Speaking	3
B. Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/footnote1/">http://bulletin.southalabama.edu/programs-az/arts-sciences/footnote1/</a> ) <sup>1</sup>		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
C. Complete the following:		
ARH 103	Art History I	3
ARH 123	Art History II	3
ARH 344	Contemporary Art	3
Elective Art History courses		6
<b>Area III – Natural Sciences &amp; Mathematics</b>		

A. Select 3-4 hours from the following:	3-4
MA 110	Finite Mathematics
MA 111	Math in Society
MA 112	Precalculus Algebra
MA 113	Precalculus Trigonometry
MA 115	Precal Algebra-Trigonometry
MA 120	Calculus and Its Applications
MA 125	Calculus I
MA 126	Calculus II
MA 227	Calculus III
MA 237	Linear Algebra I
MA 238	Differential Equations I
B. Select 8-10 hours from the following:	8-10
AN 121 & 121L	Biological Anthropology and Biological Anthropology Lab
BLY 101 & 101L	Life Science I and Life Science I Laboratory (see footnote table below (p. 106)) <sup>2</sup>
or BLY 121 & 121L	General Biology I and General Biology I Lab
BLY 102 & 102L	Life Science II and Life Science II Lab (see footnote table below (p. 106)) <sup>2</sup>
or BLY 122 & 122L	General Biology II and General Biology II Laboratory
BMD 110	Introduction to A & P I
BMD 111	Introduction to A & P II
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab
CH 131 & 131L	General Chemistry I and General Chemistry I Lab
CH 132 & 132L	General Chemistry II and General Chemistry II Lab
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab
GY 111 & 111L	Physical Geology and Physical Geology Lab
GY 112 & 112L	Earth History and Earth History Lab
MAS 134 & 134L	Ocean Science and Ocean Science Lab
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab

#### Area IV – History, Social & Behavioral Sciences (<http://bulletin.southalabama.edu/programs-az/arts-sciences/footnote1/>)<sup>1</sup>

A. Select one of the following sequences:	6
HY 101 & HY 102	HY of Western Civilization I and HY of Western Civilization II
HY 121 & HY 122	World Civilization I and World Civilization II
HY 135 & HY 136	US History to 1877 and US History since 1877
B. Select two of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/footnote1/">http://bulletin.southalabama.edu/programs-az/arts-sciences/footnote1/</a> ) <sup>3</sup>	6
AN 100	Intro to Cultural Anthropology
AN 101	Intro Archaeology-Bio Anthro
CA 100	Intro to Communication
CA 211	Interpersonal Comm
CJ 105	Introduction to Criminal Justice
ECO 215	Prin of Microeconomics
ECO 216	Prin of Macroeconomics
GEO 114	People, Places, Environment
GEO 115	World Regional Geography
GS 101	Intro to Gender Studies
IST 201	Seasons of Life
IS 100	Global Issues
NAS 101	Intro Native American Studies
PSC 130	Intro to US Government
PSY 120	Introduction to Psychology
PSY 250	Life Span Development
SY 109	Introductory Sociology
SY 112	Social Problems

#### Area V

A. Complete the following:		
CAS 100	First Yr Exp -	2
<b>Total Hours</b>		<b>52-55</b>

### Footnote

- <sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 121 & HY 122 or HY 135 & HY 136).
- <sup>2</sup> BLY 121 and BLY 122 are restricted to Arts and Sciences science majors, Allied Health science majors, Engineering majors, and Computer Science majors. Students cannot receive credit for both BLY 101 and BLY 121 or for both BLY 122 and BLY 102.
- <sup>3</sup> No more than 6 hours in any one discipline may be counted.

## Courses

### Art History (ARH)

#### ARH 100 Survey of Art 3 cr

A survey of major periods of artistic development from prehistoric times to the present. Note: this course cannot be counted toward fulfilling degree requirements for majors in Studio Art, Art, or Art History. Core course

**ARH 103 Art History I 3 cr**

An examination of the history of the Western tradition of art from cave painting through the Middle Ages including but not limited to Ancient Egypt, Ancient Greece, Ancient Rome, and Romanesque, and Gothic Europe. Students will be introduced to the descriptive and critical analysis of works of art and architecture as well as their cultural, economic, religious, and historical context.

**Cross-Listed:** CLA 103

**ARH 123 Art History II 3 cr**

An examination of the history of the Western tradition of art from the late Middle Ages to the 20th century including but not limited to the periods of the Renaissance, the Baroque, Neo-Classicism, Romanticism, Impression, Cubism, and Pop Art. Students will be introduced to the descriptive and critical analysis of works of art and architecture as well as their cultural, economic, religious, and historical context.

**ARH 203 Survey of Non-Western Art 3 cr**

Survey of the visual arts from five broad geographic areas of the world outside of Europe: Asia, Middle East, Africa, Oceania (the islands of the Pacific Ocean), and the Americas (North, Central, and South).

**ARH 245 History of Graphic Design 3 cr**

A survey of graphic design from the ancient Sumerians to the present day.

**Prerequisite:** ARH 123 Minimum Grade of D

**ARH 248 History of Photography 3 cr**

A comprehensive study of the medium of photography. The course traces chronologically and thematically the evolution of an independent art form. The focus of the course is the growth of this contribution to the visual arts, through the inseparable aspects of science and art.

**Prerequisite:** ARH 123 Minimum Grade of D

**ARH 250 African Art 3 cr**

This course is designed as a basic orientation to the arts of Africa and the interpretation of experience as witnessed in various African visual art forms. The course will focus on the major civilization and/or nations south of the Sahara Desert and their stylistic developments. Emphasis will be placed on the aesthetic approach of African artists and the influence of their art on western culture.

**ARH 290 Special Topics - 3 cr**

Different subjects or themes in art or architectural history as announced. This course may be repeated twice when content varies, for a maximum of nine credit hours.

**ARH 304 Ancient Grk Art and Architect 3 cr**

Architecture, sculpture, and painting in Ancient Greece and the expansion and influence of Greek culture in the Ancient World. Identical to CLA 304. Credit cannot be received for both ARH 304 and CLA 304.

**Prerequisite:** (ARH 103 Minimum Grade of D or CLA 103 Minimum Grade of D) or CLA 110 Minimum Grade of D

**Cross-Listed:** CLA 304

**ARH 306 Roman Art 3 cr**

Architecture, sculpture, and painting in Ancient Rome and its empire. Identical to CLA 306. Credit cannot be received for both ARH 306 and CLA 306.

**Prerequisite:** (ARH 103 Minimum Grade of D or CLA 103 Minimum Grade of D) or CLA 110 Minimum Grade of D

**Cross-Listed:** CLA 306

**ARH 312 Medieval Art and Architecture 3 cr**

This course is a survey of the art and architecture of the Medieval world from the legalization of Christianity in AD 313 to the end of the Gothic Period.

**Prerequisite:** (ARH 103 Minimum Grade of D or CLA 103 Minimum Grade of D)

**ARH 320 Renaissance Art & Arch. 3 cr**

A study of the art and architecture of Italy, Flanders, Germany, and France in the 14th, 15th, and 16th centuries. Prerequisite: ARH 123.

**Prerequisite:** ARH 123 Minimum Grade of C

**ARH 322 Northern Renaissance Art 3 cr**

Art of Flanders, Germany, and France in the 14th, 15th, and 16th centuries.

**Prerequisite:** ARH 123 (may be taken concurrently) Minimum Grade of D

**ARH 324 Italian Early Renaissance 3 cr**

Art of 14th and 15th century Italy. Fee

**Prerequisite:** ARH 123 (may be taken concurrently) Minimum Grade of D

**ARH 326 16th Century Italian Art 3 cr**

Art of the Italian High Renaissance and Mannerist Periods.

**Prerequisite:** ARH 123 (may be taken concurrently) Minimum Grade of D

**ARH 330 Baroque Art of Southern Europe 3 cr**

A study of painting, sculpture, and architecture in Italy and Spain during the 17th and early 18th centuries.

**Prerequisite:** ARH 123 (may be taken concurrently) Minimum Grade of D

**ARH 332 Baroque Art and Architecture 3 cr**

This course is a survey of the art and architecture of Seventeenth Century Europe.

**Prerequisite:** ARH 123 Minimum Grade of D

**ARH 335 18th Century Art and Arch 3 cr**

Survey of the art and architecture of the Eighteenth Century.

**Prerequisite:** ARH 123 Minimum Grade of D

**ARH 340 Early Modern Art 3 cr**

A study of art developments in the 19th and early 20th centuries.

**Prerequisite:** ARH 123 Minimum Grade of D

**ARH 343 African-American Art 3 cr**

Investigation of the art of African-Americans and the historical and social contexts in which the works were produced. Major periods of concentration include slavery, post-slavery, and the 20th century.

**ARH 344 Contemporary Art 3 cr**

A study of art developments since 1960.

**ARH 345 American Arts 1600 - 1940 3 cr**

American painting, graphics and sculpture from the Colonial period to 1940.

**Prerequisite:** ARH 123 Minimum Grade of D

**ARH 346 Amer Architecture 1600-1940 -W 3 cr**

American architecture from the colonial period to 1940.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and ARH 123 Minimum Grade of D

**ARH 348 Native American Art 3 cr**

This class will address key issues in Native American Art including symbolism and spirituality, the role of patronage and museum practices, and the politics of art criticism.

**ARH 360 Traineeship in Museum Work 3 cr**

This course is evaluated experience in museum work at an accredited institution of art. It may be repeated once if the experience differs.

Prerequisites: Fifteen hours of Art History with a grade of C or above and permission of the course director.

**ARH 362 Internshp Architect Preservatn 3 cr**

Evaluated experience in architectural preservation at the Mobile Historic Development Commission. Cannot be used to fulfill requirements for the Art History major or minor. The course may not be repeated.

Prerequisite: ARH 304 (may be taken concurrently) Minimum Grade of D or ARH 346 (may be taken concurrently) Minimum Grade of D or ARH 406 (may be taken concurrently) Minimum Grade of D or ARH 415 (may be taken concurrently) Minimum Grade of D

**ARH 370 Philosophy of Art 3 cr**

Acquaints students with main issues in aesthetics. Includes such issues as the nature and function of art and the criteria of aesthetic judgment. Identical with PHL 370. Credit cannot be received for both ARH 370 and PHL 370.

Cross-Listed: PHL 370

**ARH 390 Special Topics - 3 cr**

Different subjects or themes in art or architectural history as announced. This course may be repeated twice when content varies, for a maximum of nine credit hours.

**ARH 415 Gothic Architecture 3 cr**

A study of art, architecture and sculpture during the Gothic Age, with special emphasis on France, Germany, England, Italy, and Scandinavia.

Prerequisite: ARH 103 (may be taken concurrently) Minimum Grade of D

**ARH 434 Baroque Art Flanders-Holland 3 cr**

A study of the painting of the major artists of Baroque Flanders and Holland; the work of Rubens, Hals, Rembrandt, Vemeer, and others will be studied.

Prerequisite: ARH 123 (may be taken concurrently) Minimum Grade of D

**ARH 480 Women in Art-W 3 cr**

A study of women throughout art history as both the subject and the creator of art. Prerequisite: Nine hours of Art History above the 200 level.

Prerequisite: (EH 101 Minimum Grade of D or EH 102 Minimum Grade of D)

**ARH 492 Seminar - W - 3 cr**

This seminar will treat variable subjects. This course may be repeated twice when content varies, for a maximum of nine credit hours.

Prerequisite: (ARH 103 Minimum Grade of D or CLA 103 Minimum Grade of D) and ARH 123 Minimum Grade of D and (ARH 344 Minimum Grade of D or ARH 244 Minimum Grade of D) and (EH 102 Minimum Grade of D or EH 105 Minimum Grade of C)

**ARH 493 Methodology of Art History-W 3 cr**

An investigation of methodologies used by art historians in their examination of artistic production. Prerequisite: 9 hours of ARH courses above the 200 level.

**ARH 494 Directed Studies 3 cr**

Research in a selected topic in art or architectural history under the direction of a faculty member, resulting in a scholarly paper.

Prerequisites: Nine hours in Art History numbered 300 or higher and permission of the instructor. This course may be repeated twice for a total of nine credit hours.

**ARH 498 Art History Senior Thesis 3 cr**

Art History B.F.A. students will identify and carry out independent scholarly research on an art history topic over two semesters with the guidance of a faculty committee. At the end of the second semester, the project will be concluded with submission of the polished thesis and a thesis defense presented through a formal session given to the Visual Arts faculty. This course is to be taken as two sequential, three-credit units.

Prerequisite: ARH 493 (may be taken concurrently) Minimum Grade of C

**ARH 499 Honors Senior Thesis - H (W) 3 cr**

Honors students will identify and carry out independent scholarly research on an art history topic over two semesters with the guidance of a faculty mentor. At the end of the first semester, the project will be concluded with a formal oral presentation to the Visual Arts Faculty. At the end of the second semester, the students will submit the senior thesis. The work from both semesters will be graded by a three-member faculty committee, chaired by the mentor. This course is to be taken as two sequential, three-credit course units.

Prerequisite: HON 301 Minimum Grade of D

**ARH 544 Graduate Contemporary Art 3 cr**

A survey of art developments since 1960.

Cross-Listed: ARH 344

**ARH 560 Graduate Museum Internship 3 cr**

This course is evaluated experience in museum work at an accredited institution of art. It may be repeated once if the experience differs.

Prerequisites: ARH 103 or ARH 123 as relevant and Instructor Permission.

Prerequisite: ARH 103 Minimum Grade of C or ARH 123 Minimum Grade of C

**ARH 590 Special Topics - 3 cr**

Different subjects or themes in art or architectural history as announced. This course may be repeated twice when content varies, for a maximum of nine credit hours.

Prerequisite: ARS 103 (may be taken concurrently) Minimum Grade of D and ARS 123 (may be taken concurrently) Minimum Grade of D

**ARH 594 Directed Study 3 cr**

Directed individual study. A maximum of nine credit hours of ARH 594 may count toward degree requirements. Must have permission of instructor.

**Art Studio (ARS)****ARS 101 Art Appreciation 3 cr**

A broad introduction to the nature, vocabulary, and media of the visual arts of drawing, painting, prints, the camera arts, graphic design, sculpture, crafts, and architecture.

**ARS 121 Perceptual Drawing I 3 cr**

An introductory course with emphasis on the development of drawing skills to realistically represent natural and man-made forms using dry drawing media.

**ARS 122 Perceptual Drawing II 3 cr**

A continuation of ARS 121 using wet and mixed drawing media.

Prerequisite: ARS 121 Minimum Grade of D

**ARS 123 Two-Dimensional Design 3 cr**

The study and application of art elements and principles, and principles of perception, for the purpose of increasing the student's skill in communicating visually with paints and other two-dimensional media.

**ARS 124 Three-Dimensional Design 3 cr**

A study and application of art principles to three-dimensional problems.

**ARS 155 Introduction to Print Media 3 cr**

This course will provide students with an introductory education in the materials, methods, and history of the varied printmaking techniques. Students will gain a basic knowledge of the print processes and issues through the development of a body of original work.

**ARS 200 Intro to Animation 3 cr**

This course introduces the student to the basic concepts of animation. Emphasis will be on the processes involved in creation of animation stressing teamwork, storyboarding, hand drawing, clay animation, motion, and balance. Digital camera, scanning and computer editing are critical skills that make the foundation for this class. Study of the history of animation and terminology will be included in this curriculum. Prerequisite: ARS 121.

**Prerequisite:** ARS 121 Minimum Grade of C

**ARS 201 Two Dimensional Animation I 3 cr**

This course will offer skill development in the use of software to develop storyboards and 2-dimensional animation including creating, importing and sequencing media elements to create interactive motion graphics. Emphasis will be on conceptualization, creativity, and visual aesthetics. This course takes the students through various aspects of animation using 2 dimensional software. Developing concepts, storyboarding and production of several 2 dimensional animations will be accomplished.

**Prerequisite:** ARS 122 Minimum Grade of D and ARS 121 Minimum Grade of D and ARS 123 Minimum Grade of D and ARS 200 Minimum Grade of D

**ARS 202 Three Dimensional Animation I 3 cr**

This course focuses on storytelling techniques through animation and the principles of animation. It covers the fundamentals of scene navigation, modeling, cameras, and lighting. Students will be introduced to 3D technology and how it is used to film and video game production.

**Prerequisite:** ARS 200 Minimum Grade of D and ARS 201 Minimum Grade of D

**ARS 204 Experimental Animation 3 cr**

This course offers a framework in which students will explore and develop aesthetically progressive concepts and professional practices in their personal animation art-making. The students will develop a unique artistic voice in the creation of visually based animation using experimentation, exploration, traditional and non-traditional mediums.

**Prerequisite:** ARS 200 Minimum Grade of C and ARS 122 Minimum Grade of C and ARS 123 Minimum Grade of C

**ARS 211 Glass Art, Science, History 3 cr**

A survey of glass objects from 5,000 years ago, leads to a focus on the contemporary and international Studio Glass Movement in art. Methodologies of glass making and the work of artists utilizing the medium will be explored. The physical properties of glass including coloration and transition range (heating and cooling) will be discussed and demonstrated with hands-on instruction.

**ARS 212 Intro to Glass Blowing 3 cr**

The manipulation, construction, and experimentation with glass as a sculptural and craft medium. Emphasis will be on glass blowing. Other investigations may include surface design, sandblasting, painting, and enameling on glass. 3 hours minimum of additional lab time beyond class time are required per week.

**ARS 222 Figure Drawing I 3 cr**

A study of the human figure using various drawing (dry) media.

**Prerequisite:** ARS 122 Minimum Grade of D and ARS 123 Minimum Grade of D

**ARS 225 Conceptual Drawing I 3 cr**

An introduction to the developmental process of drawing as an art form using various subject matter and drawing media.

**Prerequisite:** ARS 122 Minimum Grade of D and ARS 123 Minimum Grade of D

**ARS 231 Painting I 3 cr**

An introduction to the techniques and concepts of oil painting using various subject matter.

**Prerequisite:** ARS 122 Minimum Grade of D and ARS 123 Minimum Grade of D

**ARS 232 Painting II 3 cr**

A continuation of ARS 231 with an emphasis on color, composition and technical facility in oil paint.

**Prerequisite:** ARS 231 Minimum Grade of D

**ARS 241 Intro to Ceramics 3 cr**

Introduction to the exploration of basic hand building and wheel techniques of working with clay. Included will be basic design considerations for traditional pottery forms as well as simple sculptural forms. There will be exposure to techniques for glazing and basic firing.

**ARS 250 Lithography 3 cr**

An introduction to lithography. Technical skills related to processing and printing an edition will be studied. The course will consist of studio practice, lectures, quizzes, and critiques.

**Prerequisite:** ARS 121 Minimum Grade of D and ARS 123 Minimum Grade of D

**ARS 251 Intaglio/Etching 3 cr**

An introduction to Intaglio printing techniques also known as etching. Technical skills related to drawing, processing, and printing the metal plates will be studied. The class will consist of studio problems in plate making and printing along with lectures, quizzes, and critiques.

**Prerequisite:** ARS 122 (may be taken concurrently) Minimum Grade of D and ARS 123 (may be taken concurrently) Minimum Grade of D

**ARS 252 Woodcut/Relief 3 cr**

A study of relief printmaking. Techniques may include and are not limited to relief, linoleum cut, and wood engraving. The course will consist of studio practice, lectures, quizzes, and critiques. Emphasis will be given to the skills involved in the use of hand tools to cut the image and skills used in printing and editioning the block.

**Prerequisite:** ARS 121 Minimum Grade of D and ARS 123 Minimum Grade of D

**ARS 253 Silkscreen/Serigraphy 3 cr**

An introduction to silkscreen printing as a fine art form. The class will explore various techniques used in water-based screen printing, from simple stencils of hand drawn and cut paper designs to advanced photo processes. The course will consist of studio practice, lectures, quizzes, and critiques. Technical methods involved in color use, processing, and printing will be studied.

**Prerequisite:** ARS 121 Minimum Grade of C and ARS 123 Minimum Grade of C

**ARS 255 Beginning Printmaking 3 cr**

This course will provide students with a fundamental education in the materials, methods, and history of the varied printmaking techniques. Students will gain a basic knowledge of the print processes and issues through the development of a body of original work.

**Prerequisite:** ARS 122 (may be taken concurrently) Minimum Grade of C and ARS 123 Minimum Grade of C and ARS 121 Minimum Grade of C

**ARS 261 Sculpture I 3 cr**

A basic course with additive sculpture materials dealing with problems of mass, volume, and form.

**Prerequisite:** ARS 124 Minimum Grade of D

**ARS 262 Sculpture II 3 cr**

An introduction to basic metal fabrication, including cutting, brazing, and welding both ferrous and non-ferrous materials.

**Prerequisite:** ARS 261 (may be taken concurrently) Minimum Grade of D

**ARS 271 Introduction to Graphic Design 3 cr**

An introduction to skills and techniques used in graphic design, problems in visual priorities, and use of selected materials. Restricted to Majors.

**Prerequisite:** ARS 121 Minimum Grade of D and ARS 122 Minimum Grade of D and ARS 123 Minimum Grade of D

**ARS 272 Typography 3 cr**

This class will examine typography as a visual communication tool.

Course must be completed or in progress to participate in the Sophomore Review. Restricted to majors.

**Prerequisite:** ARS 271 Minimum Grade of C and ARS 273 (may be taken concurrently) Minimum Grade of C

**ARS 273 Graphic Design Foundations 3 cr**

An introduction to skills and design principles used in graphic design, problems in visual priorities, and use of selected materials. Course must be completed or in progress to participate in the Sophomore Review. Restricted to Majors.

**Prerequisite:** ARS 122 Minimum Grade of D and ARS 121 Minimum Grade of D and ARS 123 Minimum Grade of D

**ARS 281 Intro to Photography 3 cr**

An introduction to the technical and aesthetic aspects of photography. Investigation of picture-making problems and control of photographic media. Involves the use of color transparency materials and an introduction to black and white processing enlarging. Students must have 35 mm single lens reflex cameras capable of being operated in the manual exposure mode.

**ARS 290 Special Topics - 3-6 cr**

A lower level studio, lecture, or seminar course treating a special medium, subject, or theme, as announced. This course may be repeated when the topic varies for a maximum of 6 credit hours.

**ARS 301 2D Animation II 3 cr**

This course will continue to develop skills in the use of traditional mediums as well as digital software to create storyboards and 2-dimensional animation including creating, importing and sequencing media elements. Emphasis will be on conceptualization, creativity, and visual aesthetics. This course takes the students through various aspects of animation using 2 dimensional software. Developing concepts, storyboarding and the production of several dimensional animations will be accomplished.

**Prerequisite:** ARS 201 Minimum Grade of C

**ARS 302 3D animation II 3 cr**

This course focuses on storytelling techniques through animation and the principles of animation. It will reinforce the fundamentals of scene navigation, modeling, cameras, and lighting. Students will become proficient in the use of 3D technology and how it is used for film and video game production.

**Prerequisite:** ARS 202 Minimum Grade of C

**ARS 304 Digital Modeling 3 cr**

This course introduces the concepts and techniques used in the creation of three dimensional form in a digital space. Emphasis will be on the practical use and creation of three dimensional models for animation and texturing. The course will also explore how formal choices impact meaning, and discuss contemporary artists who incorporate digital modeling into their work.

**Prerequisite:** ARS 122 Minimum Grade of C and ARS 124 Minimum Grade of C and ARS 200 Minimum Grade of C

**ARS 311 Kiln Formed Glass 3 cr**

The exploration of glass formed through a variety of kiln working methods including fusing, slumping, pate de verre, and casting.

**ARS 312 Intermediate Glass Blowing 3-6 cr**

A continuation of ARS 212 focusing on refinement of form and investigation of complex techniques in order to develop proficiency in glass blowing as a means to service individual creativity. The use of glass color is explored. A minimum of 3 additional hours of lab time outside of class time are required weekly.

**Prerequisite:** ARS 212 Minimum Grade of D and ARS 124 (may be taken concurrently) Minimum Grade of D

**ARS 322 Figure Drawing II 3 cr**

Further study of the human figure using various drawing (wet and dry) media.

**Prerequisite:** ARS 222 Minimum Grade of D

**ARS 325 Conceptual Drawing II 3 cr**

A continuation of ARS 225 with emphasis on concept driven work.

**Prerequisite:** ARS 225 Minimum Grade of D

**ARS 331 Painting III 3-12 cr**

A continuation of ARS 231 and 232 with emphasis on conceptual exploration in oil and/or water media paint. May be repeated for a maximum of 12 hours.

**Prerequisite:** ARS 231 (may be taken concurrently) Minimum Grade of D and ARS 232 (may be taken concurrently) Minimum Grade of D

**ARS 341 Intermediate Ceramics 3-9 cr**

A continuation of ARS 241 with emphasis on hand building or wheel techniques. May be repeated for a total of 9 semester hours credit.

**Prerequisite:** ARS 122 (may be taken concurrently) Minimum Grade of D and ARS 124 (may be taken concurrently) Minimum Grade of D and ARS 241 (may be taken concurrently) Minimum Grade of D

**ARS 351 Intermediate Printmaking 3-12 cr**

Further work in printmaking. Students may work in one or more of the following print media: Intaglio, lithography, relief, screen printing. Students must have taken the 200 level of the appropriate print media to move to intermediate level of that same media. The course may be repeated for a maximum of 9 semester hours.

**Prerequisite:** ARS 250 Minimum Grade of D or ARS 251 Minimum Grade of D or ARS 252 Minimum Grade of D or ARS 253 Minimum Grade of D

**ARS 352 Relief/Woodcut 3 cr**

Building on the relief techniques covered in ARS 255 Beginning Printmaking, this course will provide students with a deeper education in the materials, methods, and history of Relief/Woodcut printing. Students will gain knowledge of the print processes and issues through the development of a body of original work.

**Prerequisite:** ARS 155 Minimum Grade of C or ARS 255 Minimum Grade of C

**ARS 353 Intaglio/Etching 3 cr**

Building on the intaglio techniques covered in ARS 255 Beginning Printmaking, this course will provide students with an education in the materials, methods, and history of Intaglio/Etching. Students will gain knowledge of the print processes and issues through the development of a body of original art work.

**Prerequisite:** ARS 155 Minimum Grade of C or ARS 255 Minimum Grade of C

**ARS 354 Screenprint/Serigraphy 3 cr**

Building on the Screenprint/Serigraphy techniques covered in ARS 255 Beginning Printmaking, this course is an introductory course in water-based screen printing, designed to present the basic techniques and concepts of the medium as a fine art form.

**Prerequisite:** ARS 155 Minimum Grade of C or ARS 255 Minimum Grade of C

**ARS 355 Lithography 3 cr**

Building on the lithography techniques covered in ARS 255 Beginning Printmaking, this course will provide students with an intermediate education in the materials, methods, and history of lithography. Students will gain a knowledge of the print processes and issues through the development of a body of original art work.

**Prerequisite:** ARS 155 Minimum Grade of C or ARS 255 Minimum Grade of C

**ARS 361 Sculpture III 3-6 cr**

An introduction to direct carving processes with wood and stone. This course may be repeated for a total of 6 semester hours credit.

**Prerequisite:** ARS 262 (may be taken concurrently) Minimum Grade of D

**ARS 362 Sculpture IV 3-6 cr**

Advanced mold making techniques. This course may be repeated for a total of 6 semester hours credit.

**Prerequisite:** ARS 361 (may be taken concurrently) Minimum Grade of D

**ARS 372 Graphic Design Production 3 cr**

Design, typography, page layout, paper selection, pre-press techniques and the preparation of art for reproduction using both traditional and digital means. Prerequisites: Must have a C or above in ARS 272, ARS 273.

**Prerequisite:** ARS 272 Minimum Grade of C and ARS 273 Minimum Grade of C

**ARS 373 Graphic Design Identity Systems 3 cr**

An intermediate course developing design skills used in the production of printed materials for visual communications with an emphasis on logos, letterheads, brochures and posters.

**Prerequisite:** ARS 272 Minimum Grade of C and ARS 273 Minimum Grade of C

**ARS 374 Publication Design 3 cr**

An intermediate course developing design skills used in the production of printed materials for visual communications with an emphasis on newsletters, magazines, and newspaper graphics.

**Prerequisite:** ARS 272 Minimum Grade of C and ARS 273 Minimum Grade of C

**ARS 375 Digital Graphic Design 3 cr**

An advanced level course utilizing computers to produce graphic design work for printed and digital media.

**Prerequisite:** ARS 373 Minimum Grade of C and ARS 374 Minimum Grade of C

**ARS 376 Illustration 3 cr**

Conceptual approaches, materials and techniques used to solve problems in illustration, emphasizing developing rendering skills.

**Prerequisite:** (ARS 222 Minimum Grade of C or ARS 225 Minimum Grade of C) or (ARS 373 Minimum Grade of C or ARS 374 Minimum Grade of C)

**ARS 381 Intermediate Photography I 3 cr**

This course is designed to allow you to begin to communicate your own vision and artistic voice. This course is intended to take your technical skills to the next level, by reading, writing and thinking about photography.

**Prerequisite:** ARS 281 Minimum Grade of D

**ARS 382 Intermediate Photography II 3 cr**

The three main objectives of this course is to further your knowledge of the fine art photography, learn how to conceptualize ideas through the medium of photography, and to treat photography primarily as a creative medium for discussing personal, political, and social concerns. Since photography is tied to many technical processes, these concerns will also be acknowledged in this class.

**Prerequisite:** ARS 281 Minimum Grade of C and ARS 381 Minimum Grade of C

**ARS 387 Digital Silver Photography 3 cr**

This studio course examines the intersecting theories and practices of photography with digital cameras and computer imaging.

**Prerequisite:** ARS 382 Minimum Grade of D

**ARS 390 Special Topics 3 cr**

An upper level studio, lecture, or seminar course treating a special medium, subject, or theme, as announced.

**ARS 396 Professional Practices - W 3 cr**

This course prepares students for employment, graduate school, or a professional career in the visual arts. Restricted to majors.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**ARS 400 Topics in Animation 3 cr****ARS 404 Studies in Animation 3 cr**

Independent work in an approved Animation topic under the direction of a studio faculty member. This course may be repeated for a maximum of 6 credit hours.

**Prerequisite:** ARS 201 Minimum Grade of D and ARS 301 Minimum Grade of D

**ARS 408 Pre-Thesis in Animation - W 3 cr**

This course focuses on the creation of pre-production materials, concept art, storyboards, animatics, as well as research design documents and supplements, to be used in ARS 409 Senior Thesis in Animation course.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (ARS 301 Minimum Grade of C or ARS 302 Minimum Grade of C)

**ARS 409 Senior Thesis in Animation 3-6 cr**

An Independent project of creative work in the area of Animation with the guidance of one to three faculty advisors. The student is required to work at least 9 hours a week in the studio. The thesis must be publicly exhibited. This course should be taken twice in consecutive semesters for a total of 6 credit hours.

**Prerequisite:** ARS 404 Minimum Grade of C

**ARS 410 Topics in Glass 3 cr**

An upper level Glass course treating a special subject or theme as announced. This course may be repeated when the topic varies for a maximum of 6 credit hours.

**ARS 411 Advanced Kiln Formed Glass 3 cr**

Advanced kiln forming requires investigation into conceptual and technical problems in glass. The student becomes increasingly self-directed through further exploration of fusing, slumping, of casting. The development of firing schedules is emphasized.

**Prerequisite:** ARS 311 Minimum Grade of D and ARS 123 (may be taken concurrently) Minimum Grade of D

**ARS 412 Advanced Glassblowing 3 cr**

Advanced techniques in hot glass will be explored for the development of refined sculpture and/or craft in glass. Course assignments will emphasize personal creativity and exploration. Instruction includes advanced finishing techniques and cold working techniques. A minimum of 3 additional weekly lab hours outside of class time are required.

**Prerequisite:** ARS 312 Minimum Grade of D and ARS 121 (may be taken concurrently) Minimum Grade of D

**ARS 414 Studies in Glass 3 cr**

Independent work in an approved Glass topic under the direction of a studio faculty member. This course may be repeated for a maximum of 6 credit hours.

**ARS 418 Pre-Thesis in Glass 3 cr**

Independent work in an approved Glass topic under the direction of a studio faculty member. This course may be repeated for a maximum of 6 credit hours.

**Prerequisite:** (ARS 212 Minimum Grade of C and ARS 312 Minimum Grade of C and ARS 412 (may be taken concurrently) Minimum Grade of C) or (ARS 311 Minimum Grade of C and ARS 411 (may be taken concurrently) Minimum Grade of C) or ARS 490 (may be taken concurrently) Minimum Grade of C

**ARS 422 Figure Drawing III 3 cr**

Individual problems with the human figure as subject, emphasizing concept, composition, and media.

**Prerequisite:** ARS 322 (may be taken concurrently) Minimum Grade of D

**ARS 425 Conceptual Drawing III 3 cr**

A continuation of ARS 325 with emphasis on exploration of personal concepts.

**Prerequisite:** ARS 325 (may be taken concurrently) Minimum Grade of D

**ARS 426 Color Theory 3 cr**

A studio course on the nature, theory and application of color in an aesthetic context.

**Prerequisite:** (ARS 222 Minimum Grade of D or ARS 225 Minimum Grade of D)

**Cross-Listed:** ARS 326

**ARS 427 Advanced Color Theory 3 cr**

A studio course continuing the study of the nature, theory and application of color in an aesthetic context.

**Prerequisite:** ARS 426 Minimum Grade of C

**ARS 430 Topics in Painting 3 cr**

An upper level Painting course treating a special subject or theme as announced. This course may be repeated when the topic varies for a maximum of 12 credit hours.

**ARS 431 Painting IV 3-6 cr**

This class is a continuation of ARS 331 with emphasis on personal development of conceptual approaches in oil paint and/or water media paintings. Students with Primary Concentrations in Painting will use this course to prepare for thesis. This course may be repeated for a total of 6 semester hours credit.

**Prerequisite:** ARS 331 (may be taken concurrently) Minimum Grade of D or ARS 332 Minimum Grade of D

**ARS 434 Studies in Painting 3 cr**

Independent work in an approved Painting topic under the direction of a studio faculty member. This course may be repeated for a maximum of 6 credit hours.

**ARS 438 Pre-Thesis in Painting 3 cr**

Independent creative production and preliminary work in an approved Painting topic under the direction of a studio faculty member.

**Prerequisite:** ARS 431 Minimum Grade of C

**ARS 439 Senior Thesis in Painting 6 cr**

An Independent project of creative work in the area of Painting with the guidance of one to three faculty advisors. The student is required to work at least 18 hours a week in the studio. The thesis must be publicly exhibited. This course may be repeated once for credit.

**ARS 440 Topics in Ceramics 3 cr**

An upper level Ceramics course treating a special subject or theme as announced. This course may be repeated when the topic varies for a maximum of 6 credit hours.

**ARS 441 Advanced Ceramics 3-12 cr**

A continuation of ARS 341 with emphasis on hand building or wheel processes. May be repeated for a total of 12 semester hours credit.

**Prerequisite:** ARS 341 (may be taken concurrently) Minimum Grade of D or ARS 342 Minimum Grade of D

**ARS 444 Studies in Ceramics 3 cr**

Independent work in an approved Ceramics topic under the direction of a studio faculty member. This course may be repeated for a maximum of 6 credit hours.

**ARS 448 Pre-Thesis in Ceramics 3 cr**

This course will focus on developing conceptual, technical and professional presentation skills in preparation for the capstone course, ARS 498 Senior Thesis in Ceramics.

**Prerequisite:** ARS 441 Minimum Grade of C

**ARS 449 Senior Thesis in Ceramics 6 cr**

An independent project of creative work in the area of the Primary Concentration or one or more Secondary Concentrations, with the guidance of one to three faculty advisors. The student is required to work at least 18 hours a week in the studio. The thesis must be publicly exhibited.

**Prerequisite:** ARS 448 Minimum Grade of C

**ARS 450 Topics in Printmaking 3 cr****ARS 451 Advanced Printmaking 3-6 cr**

A continuation of ARS 351 with emphasis on each student's developing and refining an individual approach to creative work. For students with a Primary Concentration in Printmaking, this course is preparation for Thesis.

**Prerequisite:** ARS 351 (may be taken concurrently) Minimum Grade of D

**ARS 454 Studies in Printmaking 3 cr**

Independent work in an approved Printmaking topic under the direction of a studio faculty member. This course may be repeated for a maximum of 6 credit hours.

**ARS 458 Pre-Thesis in Printmaking 3 cr**

Independent creative production and preliminary work in an approved Printmaking topic in preparation for the capstone course.

**Prerequisite:** ARS 451 Minimum Grade of C

**ARS 459 Senior Thesis in Printmaking 6 cr**

An Independent project of creative work in the area of Printmaking with the guidance of one to three faculty advisors. The student is required to work at least 18 hours a week in the studio. The thesis must be publicly exhibited. This course may be repeated once for credit.

**ARS 460 Topics in Sculpture 3 cr**

An upper level Sculpture course treating a special subject or theme as announced. This course may be repeated when the topic varies for a maximum of 6 credit hours.

**ARS 461 Sculpture V 3-6 cr**

Experimental work with synthetic materials. This course may be repeated for a total of 6 semester hours credit. Requires permission of instructor.

**Prerequisite:** ARS 362 (may be taken concurrently) Minimum Grade of D

**ARS 464 Studies in Sculpture 3 cr**

Independent work in an approved Sculpture topic under the direction of a studio faculty member. This course may be repeated for a maximum of 6 credit hours.

**ARS 468 Pre-Thesis in Sculpture 3 cr**

This course focuses on the exploration and production of sculpture in materials such as metal, resin, clay, wood and concept to be taken prior to ARS 469 Senior Thesis in Sculpture. This course may be repeated for a maximum of 6 credit hours. \$200.00.

**Prerequisite:** ARS 362 Minimum Grade of C

**ARS 469 Senior Thesis in Sculpture 6 cr**

An independent project of creative work in the area of Sculpture with the guidance of one to three faculty advisors. The student is required to work at least 18 hours a week in the studio. The thesis must be publicly exhibited. This course may be repeated once for credit.

**ARS 470 Topics in Graphic Design 3 cr**

An upper level Graphic Design course treating a special subject or theme as announced. This course may be repeated when the topic varies for a maximum of 6 credit hours.

**ARS 472 Senior Graphic Design 3 cr**

An advanced workshop that addresses issues of visual communication using graphic design as a problem-solving tool.

**Prerequisite:** ARS 373 Minimum Grade of C and ARS 374 Minimum Grade of C

**ARS 473 Web Design 3 cr**

An introduction to interactive applications. This course provides instruction in innovative, artistic design and development of visual communication skills related to interactive applications.

**Prerequisite:** ARS 373 Minimum Grade of C

**ARS 474 Studies in Graphic Design 3 cr**

Independent work in an approved Graphic Design topic under the direction of a studio faculty member. This course may be repeated for a maximum of 6 credit hours.

**ARS 479 Design Business Practices-W 3 cr**

A study of the business principles of Graphic Design. Projects encourage both collaborative and independent study. Students explore design as a commercial art and develop the skills to coordinate projects through all phases of a professional, business relationship.

**Prerequisite:** ARS 373 Minimum Grade of C and ARS 374 Minimum Grade of C and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**ARS 480 Topics in Photography 3 cr**

An upper level Photography course treating a special subject or theme as announced. This course may be repeated when the topic varies for a maximum of 6 credit hours.

**ARS 481 Advanced Photography 3 cr**

This course will strive to help further develop each student's artistic strength in their use of the photographic medium. Each student will be required to write a statement explaining the body of work that they will create and what particular processes they might be interested in exploring.

**Prerequisite:** ARS 281 Minimum Grade of C and ARS 381 Minimum Grade of C and ARS 382 Minimum Grade of C

**ARS 483 Color Photography 3 cr**

This is an introduction to color photography. The goals are to become familiar with all aspects of color photography including film selection, processing, printing, theory, and criticism.

**Prerequisite:** ARS 281 Minimum Grade of D and ARS 381 Minimum Grade of D and ARS 382 Minimum Grade of D

**ARS 484 Studies in Photography 3 cr**

Independent work in an approved Photography topic under the direction of a studio faculty member. This course may be repeated for a maximum of 6 credit hours.

**ARS 485 Alternative Photo Processes 3 cr**

This is an advanced studio art course designed for students with a background in photography (primarily black and white) who want to expand their image making vocabulary through the use of early photographic techniques.

**Prerequisite:** ARS 481 Minimum Grade of D

**ARS 486 Pre-Thesis in Photography 3 cr**

This course is designed for students to communicate their own artistic vision by creating one large body of work. Students will be required to write a statement explaining the body of work that they wish to create and what particular processes they might be interested in exploring. This course is designed to prepare students for senior thesis and to help individuals think independently as artists, to formulate ideas based on aspects of their work, interests, and passions.

**Prerequisite:** ARS 481 Minimum Grade of C

**ARS 487 Photo Bookmaking 3 cr**

This class will focus on the design and construction of artist books. We will explore structure and form and how they support and influence the content of a book.

**Prerequisite:** ARS 481 Minimum Grade of D

**ARS 488 Graphic Design Thesis 3 cr**

A self-directed creative project in the area of graphic design with the guidance of a faculty member. Evaluation of the project is by faculty committee.

**Prerequisite:** ARS 472 Minimum Grade of C and ARS 479 Minimum Grade of C

**ARS 489 Senior Thesis in Photography 6 cr**

An independent project of creative work in the area of Photography with the guidance of one to three faculty advisors. The student is required to work at least 18 hours a week in the studio. The thesis must be publicly exhibited. This course may be repeated once for credit.

**ARS 490 Special Topics 1-12 cr**

An advanced studio, lecture, or seminar course treating a special medium, subject, or theme, as announced. This course may be repeated for a maximum of twelve (12) credit hours. Requires junior standing and permission of the instructor.

**ARS 494 Directed Studies 3-6 cr**

Independent work in an approved studio medium or topic under the direction of a studio faculty member.

**ARS 496 Professional Studies Internship 3 cr**

Students intern in a specialized area of interest. Written report required.

**ARS 497 Senior Thesis in Glass 6 cr**

An independent project of creative work in the area of the Glass Concentration, with the guidance of one to three faculty advisors. The student is required to work at least 18 hours a week in the studio. The thesis must be publicly exhibited.

**ARS 498 Senior Thesis 6 cr**

An independent project of creative work in the area of the Primary Concentration or one or more Secondary Concentrations, with the guidance of one to three faculty advisors. The student is required to work at least 18 hours a week in the studio. The thesis must be publicly exhibited. This course may be repeated once for credit.

**ARS 499 Honors Senior Thesis - H 3 cr**

Honors student, the first semester, will identify and carry out independent scholarly research on a topic with the guidance of a faculty mentor. The second semester, students will produce a body of work that incorporates and exemplifies the ideas explored in the research paper. The project will be concluded with a formal presentation to the Visual Arts faculty. The Honors Project will be graded by a three-member faculty committee, chaired by the mentor. This course is to be taken as two, sequential, three-credit course units.

**Prerequisite:** HON 301 Minimum Grade of D

**ARS 500 Graduate Animation 3 cr**

Intensive course structured as an exploration of the practice and production of animation. May be repeated for a total of 36 credit hours.

**ARS 504 Digital Modeling 3 cr**

This course introduces the concepts and techniques used in the creation of three dimensional form in a digital space. Emphasis will be on the practical use and creation of three dimensional models for animation and texturing. The course will also explore how formal choices impact meaning, and discuss contemporary artists who incorporate digital modeling into their work.

**ARS 510 Graduate Glass 3 cr**

Intensive investigation of visual, expressive or technical problems in glass. May be repeated for a total of 18 credit hours. Pre-requisite: bachelor's degree in art or art education.

**Prerequisite:** ARS 411 Minimum Grade of C and ARS 412 Minimum Grade of C

**ARS 520 Graduate Drawing 3-9 cr**

Intensive course in drawing as both a set of skills and as a creative medium of expression. May be repeated for a total of 36 credit hours. Pre-requisites: complete either appropriate pre-requisites or bachelor's degree in art or art education.

**Prerequisite:** ARS 422 (may be taken concurrently) Minimum Grade of C or ARS 425 (may be taken concurrently) Minimum Grade of C

**ARS 526 Graduate Color Theory 3 cr**

A studio course continuing a study of the nature, theory and application of color in an aesthetic context.

**Prerequisite:** ARS 326 Minimum Grade of C

**ARS 530 Graduate Painting 3-9 cr**

Intensive course in painting with traditional or contemporary media, subjects and concepts. May be repeated for a total of 36 credit hours. Pre-requisites: complete either appropriate pre-requisites or bachelor's degree in art or art education. Fee

**Prerequisite:** ARS 431 (may be taken concurrently) Minimum Grade of C

**ARS 540 Graduate Ceramics 3-9 cr**

A study of clay as a creative medium of expression. Problems of form, volume, space, texture, decoration, and function will be investigated in their relation to selected ceramics processes and building techniques. May be repeated for a total of 36 semester hours. Pre-requisites: complete either appropriate pre-requisites or bachelor's degree in art or art education.

**Prerequisite:** ARS 441 (may be taken concurrently) Minimum Grade of C

**ARS 550 Graduate Printmaking 3-9 cr**

Intensive investigation of visual, expressive or technical problems in one or more printmaking media. This course may be repeated for a total of 36 hours credit. Pre-requisites: complete either appropriate pre-requisites or bachelor's degree in art or art education.

**Prerequisite:** ARS 451 (may be taken concurrently) Minimum Grade of C

**ARS 551 Photomechanical Technologies 3 cr**

This course will provide students with an education in the materials, methods, history, contemporary technologies of photomechanical processes. Students will gain a knowledge of photographic print processes and issues through the development of a body of original work. Through critiques students will be expected to develop a familiarity with techniques and materials. Concurrent enrollment in ARS 591. Lab fee.

**Cross-Listed:** ARS 591

**ARS 552 Artist Book Seminar 3 cr**

This course will provide students with an education in the materials, methods, and contemporary strategies for artist books. Students will gain knowledge of several artist book strategies and forms through the development of a body of original work. Through critiques students will be expected to develop a familiarity with techniques and materials. Concurrent enrollment in ARS 591. Lab fee.

**Cross-Listed:** ARS 591

**ARS 560 Graduate Sculpture 3-9 cr**

Intensive investigation of problem of mass, volume, form, and space using one or more sculptural media. This course may be repeated for a total of 36 hours credit. Pre-requisites: complete either appropriate pre-requisites or bachelor's degree in art or art education.

**Prerequisite:** ARS 461 (may be taken concurrently) Minimum Grade of C

**ARS 570 Graduate Graphic Design 3 cr**

An intensive workshop that investigates advanced issues of visual communication using graphic design as both a problem-solving tool and as a medium for creative expression and communication. Emphasis on trending technology and/or professional practice. May be repeated for a total of 36 credit hours.

**Prerequisite:** ARS 488 Minimum Grade of B

**ARS 571 Advanced Typography and Layout 3-6 cr**

Intensive workshop that investigates and explores advanced typography and layout and/or format techniques both in digital and analog forms. Issues of visual communication using graphic design as both a problem-solving tool and a medium for creative expression and communication will also be investigated and explored. Emphasis on trending technology, research methods, and professional practice. May be repeated for a total of 6 credits hours.

**Prerequisite:** ARS 488 Minimum Grade of B

**ARS 572 Divergent Thinking Research 3-6 cr**

Introduction to the fundamental and varied methodologies of research, theories of design and human behavior, and discipline-related history in order to work with a variety of design products and users. Emphasis will be placed on application of research findings to the creative process, design, and visual solutions. May be repeated for a total of 6 credit hours.

**Prerequisite:** ARS 488 Minimum Grade of B

**ARS 576 Build Your online & Social Media Brand 3-6 cr**

An intensive workshop that investigates advanced uses and techniques for growing an audience through social media and online content marketing using visual communication, graphic design, and copy writing techniques. Emphasis on trending technology and/or professional practice as a medium for creative expression and communication.

This graduate course focuses on growing an audience online with an emphasis on personal branding, social media branding and marketing, and content marketing on your website and social media channels. May be repeated for a total of 6 credit hours.

**Prerequisite:** ARS 488 Minimum Grade of B

**ARS 580 Graduate Photography 3 cr**

Emphasizing theory, concept, and critical thinking, while expanding knowledge of the photographic medium. May be repeated for a total of 18 credit hours. Prerequisite: ARS 387 Minimum Grade of D or ARS 481 Minimum Grade of a D or bachelor's degree in art or education.

**Prerequisite:** ARS 387 Minimum Grade of C or ARS 481 Minimum Grade of C

**ARS 590 Special Topics - 3-9 cr**

A graduate course treating a special medium, subject, or theme, as announced. This course may be repeated twice when the content varies, for a maximum of 9 credit hours.

**ARS 591 Graduate Seminar 3 cr**

A detailed examination of selected topics in art. Topics announced prior to registration. This course includes scholarly research, writing, and creative work. May be repeated up to five times for a total of 18 credit hours when course content changes. Prerequisite: Graduate standing in the Visual Art Department.

**ARS 592 Graduate Thesis 1-3 cr**

An independent project of creative work, with the guidance of a faculty committee. The thesis must be an original project/production and have a visual component. May be repeated for a total of 6 credit hours. Prerequisite: Must have completed or be concurrently enrolled in 9 hours of graduate courses.

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
BURNS, KARA K. (kkburns@southalabama.edu)	Art and Art History	Associate Professor	BA, University of Arizona MA, University of Oregon PHD, University of Arizona
FITZSIMMONS, SUSAN G (sgfitzsimmons@southalabama.edu)	Art and Art History	Professor	AB, Webster University MFA, Southern Illinois U-Carbondale
GIBBS, CONSTANCE DIANE (dgibbs@southalabama.edu)	Art and Art History	Professor	BFA, Auburn University MFA, Virginia Commonwealth U
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## Art History Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

#### Minor in Art History

Code	Title	Hours
Twenty-one hours minimum of Art History:		
ARH Upper Division (300/400) Electives		6
ARH Electives, any level		15
<b>Total Hours</b>		<b>21</b>

#### Additional Information

Six hours must be in courses 300 or higher taken at this university.

ARH 100 - Survey of Art may not count toward the minor in Art History..

## Studio Art (BFA) - Animation Concentration

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 105)		52-55
<b>Major Requirements</b>		
<i>Art Core</i>		21
A. Complete the following:		
ARS 121	Perceptual Drawing I	3
ARS 122	Perceptual Drawing II	3
B. Complete the following:		
ARS 123	Two-Dimensional Design	3
ARS 124	Three-Dimensional Design	3
C. Select two of the following:		
ARS 222	Figure Drawing I	
ARS 225	Conceptual Drawing I	
ARS 322	Figure Drawing II	
ARS 325	Conceptual Drawing II	
ARS 422	Figure Drawing III	
ARS 425	Conceptual Drawing III	
ARS 426	Color Theory	
D. Select one of the following:		
ARS 322	Figure Drawing II	3
ARS 325	Conceptual Drawing II	

ARS 422	Figure Drawing III	
ARS 425	Conceptual Drawing III	
ARS 426	Color Theory	
<i>Animation Concentration</i>		<b>33</b>
A. Complete the following:		
ARS 200	Intro to Animation	3
ARS 201	Two Dimensional Animation I	3
ARS 202	Three Dimensional Animation I	3
ARS 204	Experimental Animation	3
ARS 301	2D Animation II	3
ARS 302	3D animation II	3
ARS 304	Digital Modeling	3
B. Complete the following:		
ARS 408	Pre-Thesis in Animation - W	3
C. Complete the following:		
ARS 409	Senior Thesis in Animation	6
D. Complete the following:		
ARS 396	Professional Practices - W	3
<b>Secondary Concentration Requirement</b>		<b>15</b>
A secondary concentration is required for this program.		
The secondary concentration is fifteen hours in a studio area different from the student's primary concentration for the BFA in Studio Art. Secondary concentrations are available in Ceramics, Glass, Painting, Photography, Printmaking, Sculpture and Interdisciplinary. Interdisciplinary Secondary concentration consists of 9 credits in one area and 6 credits in any combination of the other.		
<b>A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE</b>		<b>120</b>

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

#### Additional Information

##### Requirements for a Double Primary Concentration

In lieu of a secondary concentration, students may complete a second primary concentration. This will require course work in excess of the 121 hours minimum required for the B.F.A. and may delay time to graduation. To complete a Double Primary Concentration, students must complete Primary Concentration requirements in two separate areas including Senior Thesis or Senior Portfolio where applicable.

##### Requirements for an Optional Minor

In addition to the completion of the Studio Art B.F.A. primary and secondary concentration requirements, students have the option to complete a minor in a discipline outside the department. The addition of a minor will require course work in excess of the 120 hours minimum required for the B.F.A. and may delay time to graduation.

# Graduation Plan

(121 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
ARH 103	Art History I	3
ARS 121	Perceptual Drawing I	3
ARS 123	Two-Dimensional Design	3
EH 101	English Composition I	3
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
ARS 122	Perceptual Drawing II	3
ARS 124	Three-Dimensional Design	3
MA 110 or MA 112	Finite Mathematics or Precalculus Algebra	3
EH 102	English Composition II	3
ARS 200	Intro to Animation	3
Area III, B Lab Science I #1 (or take in the summer) <sup>1</sup>		4
<b>Hours</b>		<b>19</b>
<b>Second Year</b>		
<b>Fall</b>		
ARS 201	Two Dimensional Animation I	3
ARS 202	Three Dimensional Animation I	3
ARS	Secondary I-#1 of 5	3
ARH 344	Contemporary Art (Fall only)	3
Area III, B Lab Science #2		4
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ARS 304	Digital Modeling	3
ARS 204	Experimental Animation	3
ARH 123	Art History II	3
Select one of the following English courses:		3
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
ARS	Secondary II-#2 of 5	3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
ARS 301	2D Animation II	3
ARS 302	3D animation II	3
Advanced Level Drawing course #1 of 3		3
ARH	Art History elective #1 of 2	3
HY 101 or HY 121 or HY 135	HY of Western Civilization I (Area IV, A) <sup>1</sup> or World Civilization I or US History to 1877	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ARS 408	Pre-Thesis in Animation - W	3
ARS	Art History elective #2 of 2	3
Secondary #3 of 5		3
HY 102 or HY 122 or HY 136	HY of Western Civilization II (Area IV, A, depending on which sequence you take) <sup>1</sup> or World Civilization II or US History since 1877	3
Advanced Level Drawing course #2 of 3		3
<b>Hours</b>		<b>15</b>

## Fourth Year

<b>Fall</b>		
ARS 409	Senior Thesis in Animation	3
ARS	Secondary #4 of 5	3
ARS 396	Professional Practices - W (Fall only)	3
Area IV, B (Social and Behavioral Sciences #1) <sup>1</sup>		3
<b>Hours</b>		<b>12</b>
<b>Spring</b>		
ARS 409	Senior Thesis in Animation	3
ARS	Secondary #5 of 5	3
ARS	Advanced Level Drawing course #3 of 3	3
Area IV, B (Social and Behavioral Sciences #2) <sup>1</sup>		3
CA 110	Public Speaking	3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>121</b>

<sup>1</sup> See General Education Requirements

# Studio Art (BFA) - Art History Concentration

## Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 105)		50-53
<b>Major Requirements</b>		<b>54</b>
<i>Art Core</i>		<i>21</i>
A. Complete the following:		
ARS 121	Perceptual Drawing I	3
ARS 122	Perceptual Drawing II	3
B. Select two of the following:		<b>6</b>
ARS 222	Figure Drawing I	
ARS 225	Conceptual Drawing I	
ARS 322	Figure Drawing II	
ARS 325	Conceptual Drawing II	
ARS 422	Figure Drawing III	
ARS 425	Conceptual Drawing III	
ARS 426	Color Theory	
C. Select one of the following:		<b>3</b>
ARS 322	Figure Drawing II	
ARS 325	Conceptual Drawing II	
ARS 422	Figure Drawing III	
ARS 425	Conceptual Drawing III	
ARS 426	Color Theory	
D. Complete the following:		
ARS 123	Two-Dimensional Design	3
ARS 124	Three-Dimensional Design	3
<i>Art History Concentration</i>		<b>33</b>
A. Complete the following:		
ARH 304 or ARH 306	Ancient Grk Art and Architect Roman Art	3
B. Complete the following:		
ARH 312 or ARH 415	Medieval Art and Architecture Gothic Architecture	3

C. Select one of the following:	3
ARH 322 Northern Renaissance Art	
ARH 324 Italian Early Renaissance	
ARH 326 16th Century Italian Art	
ARH 330 Baroque Art of Southern Europe	
ARH 332 Baroque Art and Architecture	
ARH 335 18th Century Art and Arch	
ARH 434 Baroque Art Flanders-Holland	
D. Select one of the following:	3
ARH 340 Early Modern Art	
ARH 345 American Arts 1600 - 1940	
ARH 346 Amer Architecture 1600-1940 -W	
E. Complete the following:	
ARH 480 Women in Art-W	3
or ARH 492 Seminar - W -	
F. Complete the following:	
ARH 493 Methodology of Art History-W	3
G. Complete the following:	
ARH 498 Art History Senior Thesis (6 credits)	6
H. ARH Electives	9
<b>Secondary Concentration Requirement</b>	<b>15</b>

A secondary concentration is required for this program.

The secondary concentration is fifteen hours in a studio area different from the student's primary concentration for the BFA in Studio Art. Secondary concentrations are available in Ceramics, Glass, Painting, Photography, Printmaking, Sculpture and Interdisciplinary. Interdisciplinary Secondary concentration consists of 9 credits in one area and 6 credits in any combination of the other.

**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

## Notes:

Seminar and Special Topics courses may be used to satisfy Art History Concentration area requirements.

## Additional Information

### Requirements for a Double Primary Concentration

In lieu of a secondary concentration, students may complete a second primary concentration. This will require course work in excess of the 120 hours minimum required for the B.F.A. and may delay time to graduation. To complete a Double Primary Concentration, students must complete Primary Concentration requirements in two separate areas including Senior Thesis or Senior Portfolio where applicable.

### Requirements for an Optional Minor

In addition to the completion of the Studio Art B.F.A. primary and secondary concentration requirements, students have the option to complete a minor in a discipline outside the department. The addition of a minor will require course work in excess of the 120 hours minimum required for the B.F.A. and may delay time to graduation.

## Graduation Plan

(121 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
ARH 103	Art History I	3
ARS 121	Perceptual Drawing I	3
ARS 123	Two-Dimensional Design	3
EH 101	English Composition I	3
MA 110 or MA 112	Finite Mathematics or Precalculus Algebra	3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
ARS 122	Perceptual Drawing II	3
ARS 124	Three-Dimensional Design	3
ARH 123	Art History II	3
EH 102	English Composition II	3
HY 101 or HY 121 or HY 135	HY of Western Civilization I (Area IV, A) or World Civilization I or US History to 1877	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
ARH U/D	Elective (Ancient)	3
ARS	Advanced level Drawing course #1 of 3	3
ARH 344	Contemporary Art (Fall only)	3
	Social & Behavioral Science #1 of 2	3
ARS	Secondary #1 of 5	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ARH	Upper level Art History Elective (Medieval)	3
ARS	Secondary #2 of 5	3
ARH	Art History Elective	3
	Area III, B-Natural Science with Lab #1 of 2	4
ARS	Advanced Level Drawing course #2 of 3	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
ARH	Upper level Elective (Ren/Baroque)	3
ARH	Elective	3
	Social & Behavioral Science #1 of 2	3
ARH 493	Methodology of Art History-W	3
	Area III, B-Natural Science with Lab #2 of 2	4
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ARH	Art History U/D elective (Modern)	3
ARS	Secondary #3 of 5	3
ARH 492	Seminar - W -	3
	Select one of the following (Area II-B):	3
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
	Social & Behavioral Science #2 of 2	3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
ARH 498	Art History Senior Thesis (#1 of 2)	3
ARH	Art History elective	3
ARS	Upper level Secondary #4 of 5	3
CA 110	Public Speaking	3

ARH	Art History elective	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ARH 498	Art History Senior Thesis (#2 of 2)	3
ARS	Upper level Secondary #5 of 5	3
ARH	Art History elective	3
ARS	Advanced level Drawing course #3 of 3	3
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>121</b>

<sup>1</sup> See General Education Requirements

## Studio Art (BFA) - Ceramics Concentration

### Degree Requirements

Code	Title	Hours	
<b>General Education Requirements</b>			
General Education (p. 105)		50-53	
<b>Major Requirements</b>			
<i>Art Core</i>			
A. Complete the following:			
ARS 121	Perceptual Drawing I	3	
ARS 122	Perceptual Drawing II	3	
B. Complete the following:			
ARS 123	Two-Dimensional Design	3	
ARS 124	Three-Dimensional Design	3	
C. Select two the following:			
ARS 222	Figure Drawing I	6	
ARS 225	Conceptual Drawing I		
ARS 322	Figure Drawing II		
ARS 325	Conceptual Drawing II		
ARS 422	Figure Drawing III		
ARS 425	Conceptual Drawing III		
ARS 426	Color Theory	3	
D. Select one of the following:			
ARS 322	Figure Drawing II		
ARS 325	Conceptual Drawing II		
ARS 422	Figure Drawing III		
ARS 425	Conceptual Drawing III		
ARS 426	Color Theory	3	
<i>Ceramics Concentration</i>			
A. Complete the following:			
ARS 241	Intro to Ceramics		3
B. Complete the following:			
ARS 341	Intermediate Ceramics		9
C. ARS 400 level Ceramics			
		12	
D. Complete the following:			
ARS 498	Senior Thesis	6	
E. Complete the following:			
ARS 396	Professional Practices - W	3	
<b>Secondary Concentration Requirement</b>		<b>15</b>	
A secondary concentration is required for this program.			

The secondary concentration is fifteen hours in a studio area different from the student's primary concentration for the BFA in Studio Art. Secondary concentrations are available in Ceramics, Glass, Painting, Photography, Printmaking, Sculpture and Interdisciplinary. Interdisciplinary Secondary concentration consists of 9 credits in one area and 6 credits in any combination of the other.

**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses. At least one must be in the major.

### Additional Information

#### Requirements for a Double Primary Concentration

In lieu of a secondary concentration, students may complete a second primary concentration. This will require course work in excess of the 121 hours minimum required for the B.F.A. and may delay time to graduation. To complete a Double Primary Concentration, students must complete Primary Concentration requirements in two separate areas including Senior Thesis or Senior Portfolio where applicable.

#### Requirements for an Optional Minor

In addition to the completion of the Studio Art B.F.A. primary and secondary concentration requirements, students have the option to complete a minor in a discipline outside the department. The addition of a minor will require course work in excess of the 121 hours minimum required for the B.F.A. and may delay time to graduation.

### Graduation Plan

(124 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
ARH 103	Art History I	3
ARS 241	Intro to Ceramics	3
ARS 124	Three-Dimensional Design	3
EH 101	English Composition I	3
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
ARS 121	Perceptual Drawing I	3
ARS 123	Two-Dimensional Design	3
ARH 123	Art History II	3
ARS 341	Intermediate Ceramics (1 of 3)	3
MA 110 or MA 112	Finite Mathematics or Precalculus Algebra	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
ARS 341	Intermediate Ceramics (2 of 3)	3
EH 102	English Composition II	3
ARS 122	Perceptual Drawing II	3
ARH 344	Contemporary Art (Fall only)	3
HY 101 or HY 121 or HY 135	HY of Western Civilization I or World Civilization I or US History to 1877	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ARS 341	Intermediate Ceramics (3 of 3)	3
ARS	Advanced Level Drawing Course #1 of 3	3
ARS	Secondary (1 of 5)	3
Area III, B - Natural Science with Lab #1 of 2		4

ARH	Art History elective (#1 of 2)	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
ARS 441	Advanced Ceramics	3
Select one of the following (Area II, B):		3
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
ARS	Advanced Level Drawing course #2 of 3	3
ARS	Secondary #2 of 5	3
Area III, B - Natural Science with Lab #2 of 2		4
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ARS 441	Advanced Ceramics (2 of 3)	3
ARS	Secondary (3 of 5)	3
ARS	Secondary (4 of 5)	3
Writing Course (W) anywhere in University		3
ARH	Art History elective #2 of 2	3
HY 102 or HY 136	HY of Western Civilization II (Area IV, B- depending on which sequence you take) or US History since 1877	3
<b>Hours</b>		<b>18</b>
<b>Fourth Year</b>		
<b>Fall</b>		
ARS 448	Pre-Thesis in Ceramics	3
ARS 441	Advanced Ceramics (Advanced Ceramics #3 of 3)	3
CA 110	Public Speaking	3
Area IV, B- Social and Behavioral Sciences		3
ARS 396	Professional Practices - W	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ARS 449	Senior Thesis in Ceramics	6
ARS	Secondary (5 of 5)	3
ARS	Advanced Level Drawing course #3 of 3	3
Area IV, B- Social and Behavioral Sciences		3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>124</b>

# Studio Art (BFA) - Glass Concentration

## Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 105)		52-55
<b>Major Requirements</b>		<b>54</b>
<i>Art Core</i>		27

- A. Complete the following:
- |         |                       |   |
|---------|-----------------------|---|
| ARS 121 | Perceptual Drawing I  | 3 |
| ARS 122 | Perceptual Drawing II | 3 |
- B. Complete the following:
- |         |                          |   |
|---------|--------------------------|---|
| ARS 123 | Two-Dimensional Design   | 3 |
| ARS 124 | Three-Dimensional Design | 3 |
- C. Select two of the following: 6

ARS 222	Figure Drawing I	
ARS 225	Conceptual Drawing I	
ARS 322	Figure Drawing II	
ARS 325	Conceptual Drawing II	
ARS 422	Figure Drawing III	
ARS 425	Conceptual Drawing III	
ARS 426	Color Theory	
D. Select one of the following:		3
ARS 322	Figure Drawing II	
ARS 325	Conceptual Drawing II	
ARS 422	Figure Drawing III	
ARS 425	Conceptual Drawing III	
ARS 426	Color Theory	

**Glass Concentration 33**

**A. Select 21 hours from the following: 21**

ARS 211	Glass Art, Science, History	
ARS 212	Intro to Glass Blowing	
ARS 290	Special Topics -	
ARS 311	Kiln Formed Glass	
ARS 312	Intermediate Glass Blowing	
ARS 390	Special Topics	
ARS 410	Topics in Glass	
ARS 411	Advanced Kiln Formed Glass	
ARS 412	Advanced Glassblowing	
ARS 414	Studies in Glass	
ARS 490	Special Topics	
ARS 494	Directed Studies	
ARS 498	Senior Thesis	

**B. Complete the following:**

ARS 418	Pre-Thesis in Glass	3
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**C. Complete the following:**

ARS 497	Senior Thesis in Glass	6
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**D. Complete the following:**

ARS 396	Professional Practices - W	3
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**Secondary Concentration Requirement 15**

A secondary concentration is required for this program. The secondary concentration is fifteen hours in a studio area different from the student's primary concentration for the BFA in Studio Art. Secondary concentrations are available in Ceramics, Glass, Painting, Photography, Printmaking, Sculpture and Interdisciplinary. Interdisciplinary Secondary concentration consists of 9 credits in one area and 6 credits in any combination of the other.

**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

**Notes:**  
Students may prefer to take either glass blowing or kiln formed classes. It is recommended that students take at least one kiln formed class (ARS 311) and one glass blowing class (ARS 212), before committing to a specific direction.

## Additional Information

### Requirements for a Double Primary Concentration

In lieu of a secondary concentration, students may complete a second primary concentration. This will require course work in excess of the 121 hours minimum required for the B.F.A. and may delay time to graduation. To complete a Double Primary Concentration, students must complete Primary Concentration requirements in two separate areas including Senior Thesis or Senior Portfolio where applicable.

### Requirements for an Optional Minor

In addition to the completion of the Studio Art B.F.A. primary and secondary concentration requirements, students have the option to complete a minor in a discipline outside the department. The addition of a minor will require course work in excess of the 121 hours minimum required for the B.F.A. and may delay time to graduation.

## Graduation Plan

(124 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
ARH 103	Art History I	3
ARS 121	Perceptual Drawing I	3
Select one of the following:		3
ARS 211	Glass Art, Science, History	
ARS 212	Intro to Glass Blowing	
ARS 311	Kiln Formed Glass	
EH 101	English Composition I	3
HY 101 or HY 121 or HY 135	HY of Western Civilization I (Area IV, A) or World Civilization I or US History to 1877	3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
ARS 122	Perceptual Drawing II	3
ARH 123	Art History II	3
ARS 124	Three-Dimensional Design	3
EH 102	English Composition II	3
MA 110 or MA 112	Finite Mathematics or Precalculus Algebra	3
ARS	Glass Elective (kiln or glass blowing)	3
<b>Hours</b>		<b>18</b>
<b>Second Year</b>		
<b>Fall</b>		
ARS	Glass Elective (kiln or glass blowing)	3
ARH 344	Contemporary Art (Fall only)	3
ARS 123	Two-Dimensional Design	3
HY 102 or HY 122 or HY 136	HY of Western Civilization II (Area IV, A- depending on which sequence you take) or World Civilization II or US History since 1877	3
ARS	Advanced Level Drawing course #1 of 2	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ARS	Glass Elective (kiln or glass blowing)	3
ARS 426	Color Theory	3
Area III, B- Natural Science with Lab #1 of 2		4
ARH	Art History elective #1 of 2	3
ARS	Secondary #1 of 5	3
<b>Hours</b>		<b>16</b>

### Third Year

<b>Fall</b>		
ARS	Glass elective (kiln or glass blowing)	3
Glass elective (kiln or glass blowing)		3
ARS 396	Professional Practices - W (Fall)	3
ARS	Secondary #2 of 5	3
Area III, B - Natural Sciences with Lab #2 of 2		4
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ARS	Glass elective (kiln or glass blowing)	3
Select one of the following (Area II, B)		3
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
ARS	Secondary #3 of 5	3
ARS	Advanced Level Drawing course #2 of 2	3
ARH	Art History elective #2 of 2	3
<b>Hours</b>		<b>15</b>

### Fourth Year

<b>Fall</b>		
ARS 418	Pre-Thesis in Glass	3
ARS	Secondary Studio #4 of 5	3
CA 110	Public Speaking	3
Area IV, B- Social and Behavioral Sciences		3
Writing course anywhere in the University		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ARS 497	Senior Thesis in Glass	6
ARS	Secondary #5 of 5	3
Area IV, B- Social and Behavioral Sciences		3
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>124</b>

## Studio Art (BFA) - Graphic Design Concentration

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 105)		52-55
<b>Major Requirements</b>		<b>54</b>
<i>Art Core</i>		<i>21</i>
A. Complete the following:		
ARS 121	Perceptual Drawing I	3
ARS 122	Perceptual Drawing II	3
B. Complete the following:		
ARS 123	Two-Dimensional Design	3
ARS 124	Three-Dimensional Design	3
C. Select two of the following:		
ARS 222	Figure Drawing I	
ARS 225	Conceptual Drawing I	
ARS 322	Figure Drawing II	
ARS 325	Conceptual Drawing II	
ARS 422	Figure Drawing III	

ARS 425	Conceptual Drawing III	
ARS 426	Color Theory	
D. Select one of the following:		3
ARS 322	Figure Drawing II	
ARS 325	Conceptual Drawing II	
ARS 422	Figure Drawing III	
ARS 425	Conceptual Drawing III	
ARS 426	Color Theory	
<i>Graphic Design Concentration</i>		33

A. Complete the following:		
ARS 488	Graphic Design Thesis	3
B. Complete the following:		
ARS 271	Introduction to Graphic Design	3
ARS 273	Graphic Design Foundations	3
ARS 272	Typography	3
C. Complete the following:		
ARS 373	Graphic Desgn Identity Systems	3
ARS 374	Publication Design	3
ARS 472	Senior Graphic Design	3
ARS 473	Web Design	3
D. Select two of the following:		
ARS 375	Digital Graphic Design	
ARS 376	Illustration	
ARS 390	Special Topics	
ARS 490	Special Topics	
ARS 496	Professional Studies Internship	

E. Complete the following:		
ARS 479	Design Business Practices-W	3

### Secondary Concentration Requirement 15

A secondary concentration is required for this program.

The secondary concentration is fifteen hours in a studio area different from the student's primary concentration for the BFA in Studio Art. Secondary concentrations are available in Ceramics, Glass, Painting, Photography, Printmaking, Sculpture and Interdisciplinary. Interdisciplinary Secondary concentration consists of 9 credits in one area and 6 credits in any combination of the other.

### A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

#### Notes:

#### Graphic Design Sophomore Review:

Once a year, students who wish to pursue a degree in graphic design at the University of South Alabama apply for admission to the BFA program in graphic design after completing ARS 271, ARS 273, and have completed or be taking ARS 272. For more information on the Review please contact [art@southalabama.edu](mailto:art@southalabama.edu) for specific dates and requirements.

## Additional Information

### Requirements for a Double Primary Concentration

In lieu of a secondary concentration, students may complete a second primary concentration. This will require course work in excess of the 121 hours minimum required for the B.F.A. and may delay time to graduation.

To complete a Double Primary Concentration, students must complete Primary Concentration requirements in two separate areas including Senior Thesis or Senior Portfolio where applicable.

### Requirements for an Optional Minor

In addition to the completion of the Studio Art B.F.A. primary and secondary concentration requirements, students have the option to complete a minor in a discipline outside the department. The addition of a minor will require course work in excess of the 120 hours minimum required for the B.F.A. and may delay time to graduation.

## Graduation Plan

(124 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
ARH 103	Art History I	3
ARS 121	Perceptual Drawing I	3
ARS 123	Two-Dimensional Design	3
MA 110 or MA 112	Finite Mathematics <sup>1</sup> or Precalculus Algebra	3
EH 101	English Composition I	3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
ARS 122	Perceptual Drawing II	3
ARS 124	Three-Dimensional Design	3
HY 101 or HY 121 or HY 135	HY of Western Civilization I (Area IV, A) or World Civilization I or US History to 1877	3
EH 102	English Composition II	3
ARH 123	Art History II	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
ARS 271	Introduction to Graphic Design	3
ARS 273	Graphic Design Foundations	3
ARS	Secondary #1 of 5	3
ARH 344	Contemporary Art (Fall only)	3
HY 102 or HY 122 or HY 136	HY of Western Civilization II (Area IV, A- depending on sequence) or World Civilization II or US History since 1877	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ARS 272	Typography	3
Advanced Level Drawing course #1 of 3		3
ARH	Art History elective #1 of 2	3
Natural Science with Lab #1		4
ARS	Secondary #2 of 5	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
ARS 373	Graphic Desgn Identity Systems	3
Select one of the following:		
ARS 375	Digital Graphic Design	
ARS 376	Illustration	
ARS 496	Professional Studies Internshp	
Advanced Level Drawing course #2 of 3		3
ARH	Art History elective #2 of 2	3
Natural Science with Lab #2		4
<b>Hours</b>		<b>16</b>

<b>Spring</b>		
ARS 374	Publication Design	3
ARS 473	Web Design	3
Writing (W) course anywhere in University <sup>1</sup>		
ARS	Secondary #3 of 5	3
Select one of the following (Area II, B):		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
ARS 472	Senior Graphic Design	3
ARS 479	Design Business Practices-W	3
ARS	Secondary #4 of 5	3
Area IV, B Social and Behavioral Sciences #1		
CA 110	Public Speaking	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ARS 490	Special Topics (GD elective)	3
or ARS 496	or Professional Studies Internship	
ARS	Secondary #5 of 5	3
ARS	Advanced Level Drawing course #3 of 3	3
Area IV, B Social and Behavioral Sciences #2		
ARS 488	Graphic Design Thesis	3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>124</b>

<sup>1</sup> See General Education Requirements

## Studio Art (BFA) - Painting Concentration Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 105)		52-55
<b>Major Requirements</b>		<b>54</b>
<i>Art Core</i>		27
A. Complete the following:		
ARS 121	Perceptual Drawing I	3
ARS 122	Perceptual Drawing II	3
B. Complete the following:		
ARS 123	Two-Dimensional Design	3
ARS 124	Three-Dimensional Design	3
C. Select two of the following:		
ARS 222	Figure Drawing I	
ARS 225	Conceptual Drawing I	
ARS 322	Figure Drawing II	
ARS 325	Conceptual Drawing II	
ARS 422	Figure Drawing III	
ARS 425	Conceptual Drawing III	
ARS 426	Color Theory	

D. Select one of the following:		
ARS 322	Figure Drawing II	
ARS 325	Conceptual Drawing II	
ARS 422	Figure Drawing III	
ARS 425	Conceptual Drawing III	
ARS 426	Color Theory	
<i>Painting Concentration</i>		<b>33</b>
A. Complete the following:		
ARS 231	Painting I	3
B. Complete the following:		
ARS 232	Painting II	3
C. Complete the following:		
ARS 331	Painting III	3-12
D. Complete the following:		
ARS 431	Painting IV	3-6
E. Complete the following:		
ARS 438	Pre-Thesis in Painting	3
ARS 439	Senior Thesis in Painting	6
F. Select 0 to 9 hours from the following:		
ARS 390	Special Topics	
ARS 426	Color Theory	
ARS 427	Advanced Color Theory	
ARS 430	Topics in Painting	
ARS 434	Studies in Painting	
ARS 490	Special Topics	
ARS 494	Directed Studies	

G. Complete the following:		
ARS 396	Professional Practices - W	3
<b>Secondary Concentration Requirement</b>		<b>15</b>

A secondary concentration is required for this program.

The secondary concentration is fifteen hours in a studio area different from the student's primary concentration for the BFA in Studio Art. Secondary concentrations are available in Ceramics, Glass, Painting, Photography, Printmaking, Sculpture and Interdisciplinary. Interdisciplinary Secondary concentration consists of 9 credits in one area and 6 credits in any combination of the other.

**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

### Additional Information

#### Requirements for a Double Primary Concentration

In lieu of a secondary concentration, students may complete a second primary concentration. This will require course work in excess of the 121 hours minimum required for the B.F.A. and may delay time to graduation. To complete a Double Primary Concentration, students must complete Primary Concentration requirements in two separate areas including Senior Thesis or Senior Portfolio where applicable.

#### Requirements for an Optional Minor

In addition to the completion of the Studio Art B.F.A. primary and secondary concentration requirements, students have the option to complete a minor in a discipline outside the department. The addition of a minor will require course work in excess of the 120 hours minimum required for the B.F.A. and may delay time to graduation.

# Graduation Plan

(124 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
ARH 103	Art History I	3
ARS 121	Perceptual Drawing I	3
ARS 123	Two-Dimensional Design	3
EH 101	English Composition I	3
HY 101 or HY 121 or HY 135	HY of Western Civilization I (Area IV, A) or World Civilization I or US History to 1877	3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
ARS 122	Perceptual Drawing II	3
ARS 124	Three-Dimensional Design	3
ARH 123	Art History II	3
EH 102	English Composition II	3
MA 110 or MA 112	Finite Mathematics or Precalculus Algebra	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
ARS 231	Painting I	3
ARS	Advanced Level Drawing Course #1 of 3	3
Select one of the following (Area II, B):		3
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
ARH 344	Contemporary Art (Fall only)	3
ARS	Secondary #1 of 5	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ARS 232	Painting II	3
ARS	Secondary #2 of 5	3
ARH	Art History Elective #1 of 2	3
HY 102 or HY 122 or HY 136	HY of Western Civilization II (Area IV, A- depending on which sequence taken) or World Civilization II or US History since 1877	3
Area III, B- Natural Science with Lab #1 of 2		4
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
ARS 331	Painting III	3
ARS	Painting Elective #1 of 3	3
ARS	Advanced Level Drawing course #2 of 3	3
ARS	Secondary #3 of 5	3
ARS 396	Professional Practices - W (Fall only)	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ARS 431	Painting IV	3
ARH	Art History elective #2 of 2	3
(W)	course anywhere in University	3
ARS 426	Color Theory ((ARS Painting Elective#2 of 3))	3
Area III, B- Natural Science with Lab #2 of 2		4
<b>Hours</b>		<b>16</b>

## Fourth Year

<b>Fall</b>		
ARS 438	Pre-Thesis in Painting	3
ARS	Secondary #4 of 5	3
Painting Elective #3 of 3		3
ARS	Advanced Level Drawing #3 of 3	3
Social and Behavioral Science #1 of 2		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ARS 439	Senior Thesis in Painting	6
ARS	Secondary #5 of 5	3
Social/Behavioral Science #2 of 2		3
CA 110	Public Speaking	3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>124</b>

See General Education Requirements

# Studio Art (BFA) - Photography Concentration

## Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 105)		52-55
<b>Major Requirements</b>		<b>54</b>
<i>Art Core</i>		<i>27</i>
A. Complete the following:		
ARS 121	Perceptual Drawing I	3
ARS 122	Perceptual Drawing II	3
B. Complete the following:		
ARS 123	Two-Dimensional Design	3
ARS 124	Three-Dimensional Design	3
C. Select two of the following:		
ARS 222	Figure Drawing I	
ARS 225	Conceptual Drawing I	
ARS 322	Figure Drawing II	
ARS 325	Conceptual Drawing II	
ARS 422	Figure Drawing III	
ARS 425	Conceptual Drawing III	
ARS 426	Color Theory	
D. Select one of the following:		
ARS 322	Figure Drawing II	
ARS 325	Conceptual Drawing II	
ARS 422	Figure Drawing III	
ARS 425	Conceptual Drawing III	
ARS 426	Color Theory	
<i>Photography Concentration</i>		<i>33</i>
A. Complete the following:		
ARS 281	Intro to Photography	3
B. Complete the following:		
ARS 381	Intermediate Photography I	3
C. Complete the following:		
ARS 382	Intermediate Photography II	3

## D. Complete the following:

ARS 481	Advanced Photography	3
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## E. Select three of the following: 9

ARS 387	Digital Silver Photography	
ARS 480	Topics in Photography	
ARS 483	Color Photography	
ARS 484	Studies in Photography	
ARS 485	Alternative Photo Processes	
ARS 487	Photo Bookmaking	
ARS 490	Special Topics	
ARS 494	Directed Studies	

## F. Complete the following:

ARS 486	Pre-Thesis in Photography	3
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## G. Complete the following:

ARS 489	Senior Thesis in Photography	6
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## H. Complete the following:

ARS 396	Professional Practices - W	3
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**Secondary Concentration Requirement 15**

A secondary concentration is required for this program.

The secondary concentration is fifteen hours in a studio area different from the student's primary concentration for the BFA in Studio Art. Secondary concentrations are available in Ceramics, Glass, Painting, Photography, Printmaking, Sculpture and Interdisciplinary. Interdisciplinary Secondary concentration consists of 9 credits in one area and 6 credits in any combination of the other.

**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

**Additional Information****Requirements for a Double Primary Concentration**

In lieu of a secondary concentration, students may complete a second primary concentration. This will require course work in excess of the 121 hours minimum required for the B.F.A. and may delay time to graduation. To complete a Double Primary Concentration, students must complete Primary Concentration requirements in two separate areas including Senior Thesis or Senior Portfolio where applicable.

**Requirements for an Optional Minor**

In addition to the completion of the Studio Art B.F.A. primary and secondary concentration requirements, students have the option to complete a minor in a discipline outside the department. The addition of a minor will require course work in excess of the 120 hours minimum required for the B.F.A. and may delay time to graduation.

**Graduation Plan**

(124 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
ARH 103	Art History I	3
ARS 121	Perceptual Drawing I	3
EH 101	English Composition I	3
MA 110 or MA 112	Finite Mathematics or Precalculus Algebra	3

ARS 281	Intro to Photography	3
<b>Hours</b>		<b>17</b>

**Spring**

ARS 122	Perceptual Drawing II	3
ARS 123	Two-Dimensional Design	3
ARS 381	Intermediate Photography I	3
EH 102	English Composition II	3
Area III, B Natural Science #1		4
<b>Hours</b>		<b>16</b>

**Second Year****Fall**

ARS 124	Three-Dimensional Design	3
ARS 382	Intermediate Photography II	3
ARS	Secondary #1 of 5	3
ARH 123	Art History II	3
HY 101 or HY 121 or HY 135	HY of Western Civilization I (Area IV, A) or World Civilization I or US History to 1877	3
<b>Hours</b>		<b>15</b>

**Spring**

ARS 481	Advanced Photography	3
ARS	Secondary #2 of 5	3
ARS	Advanced level Drawing course #1 of 3	3
CA 110	Public Speaking	3
HY 102 or HY 122 or HY 136	HY of Western Civilization II (Area IV, B - depending on which sequence you take) or World Civilization II or US History since 1877	3
<b>Hours</b>		<b>15</b>

**Third Year****Fall**

ARS 483	Color Photography (Photo elective #1 of 3)	3
ARH 344	Contemporary Art (Fall only)	3
ARS	Secondary #3 of 5	3
Area III, B Natural Science with Lab 2		4
Select one of the following (Area II, B):		3
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
<b>Hours</b>		<b>16</b>

**Spring**

ARS 485	Alternative Photo Processes (Photo elective #2 of 3)	3
ARS	Secondary #4 of 5	3
ARH	Art History elective #1 of 2	3
ARS	Advanced level Drawing course #2 of 3	3
Social/Behavioral Science #1		3
<b>Hours</b>		<b>15</b>

**Fourth Year****Fall**

ARS 486	Pre-Thesis in Photography	3
ARS 487	Photo Bookmaking (Photo elective #3 of 3)	3
ARS	Advanced Level Drawing course #3 of 3	3
Area IV, B Social/Behavioral Science 2		3
ARS 396	Professional Practices - W (Fall only)	3
<b>Hours</b>		<b>15</b>

**Spring**

ARS 489	Senior Thesis in Photography	6
ARS	Secondary #5 of 5	3
(W) course		3

ARH	Art History elective #2 of 2	3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>124</b>

See General Education Requirements

## Studio Art (BFA) - Printmaking Concentration

### Degree Requirements

Code	Title	Hours	
<b>General Education Requirements</b>			
General Education (p. 105)		52-55	
<b>Major Requirements</b>		<b>54</b>	
<i>Art Core</i>		<i>21</i>	
A. Complete the following:			
ARS 121	Perceptual Drawing I	3	
ARS 122	Perceptual Drawing II	3	
B. Complete the following:			
ARS 123	Two-Dimensional Design	3	
ARS 124	Three-Dimensional Design	3	
C. Select two of the following:			
ARS 222	Figure Drawing I	6	
ARS 225	Conceptual Drawing I		
ARS 322	Figure Drawing II		
ARS 325	Conceptual Drawing II		
ARS 422	Figure Drawing III		
ARS 425	Conceptual Drawing III		
ARS 426	Color Theory	3	
D. Select one of the following:			
ARS 322	Figure Drawing II		
ARS 325	Conceptual Drawing II		
ARS 422	Figure Drawing III		
ARS 425	Conceptual Drawing III		
ARS 426	Color Theory	33	
<i>Printmaking Concentration</i>			
A. Complete the following:			
ARS 255	Beginning Printmaking		3
B. Select 9-12 hours from the following:			
ARS 352	Relief/Woodcut		9-12
ARS 353	Intaglio/Etching		
ARS 354	Screenprint/Serigraphy		
ARS 355	Lithography		
C. Select 6-9 hours from the following:			
ARS 426	Color Theory	6-9	
ARS 450	Topics in Printmaking		
ARS 451	Advanced Printmaking		
ARS 454	Studies in Printmaking		
ARS 494	Directed Studies		
D. Complete the following:			
ARS 458	Pre-Thesis in Printmaking	3	
E. Complete the following:			
ARS 459	Senior Thesis in Printmaking	6	

F. Complete the following:

ARS 396	Professional Practices - W	3
<b>Secondary Concentration Requirement</b>		<b>15</b>

A secondary concentration is required for this program.

The secondary concentration is fifteen hours in a studio area different from the student's primary concentration for the BFA in Studio Art. Secondary concentrations are available in Ceramics, Glass, Painting, Photography, Printmaking, Sculpture and Interdisciplinary. Interdisciplinary Secondary concentration consists of 9 credits in one area and 6 credits in any combination of the other.

**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

#### Additional Information Requirements for a Double Primary Concentration

In lieu of a secondary concentration, students may complete a second primary concentration. This will require course work in excess of the 121 hours minimum required for the B.F.A. and may delay time to graduation. To complete a Double Primary Concentration, students must complete Primary Concentration requirements in two separate areas including Senior Thesis or Senior Portfolio where applicable.

#### Requirements for an Optional Minor

In addition to the completion of the Studio Art B.F.A. primary and secondary concentration requirements, students have the option to complete a minor in a discipline outside the department. The addition of a minor will require course work in excess of the 120 hours minimum required for the B.F.A. and may delay time to graduation.

### Graduation Plan

(124 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
ARH 103	Art History I	3
ARS 121	Perceptual Drawing I	3
ARS 123	Two-Dimensional Design	3
EH 101	English Composition I	3
HY 101 or HY 121 or HY 135	HY of Western Civilization I or World Civilization I or US History to 1877	3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
ARS 122	Perceptual Drawing II	3
ARS 124	Three-Dimensional Design	3
ARH 123	Art History II	3
EH 102	English Composition II	3
MA 110 or MA 112	Finite Mathematics or Precalculus Algebra	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
ARS 255	Beginning Printmaking	3
ARS	Advanced Level Drawing Course #1 of 3	3
ARH 344	Contemporary Art (Fall only)	3
Area III, B Natural Science with Lab #1 of 2		4

HY 102 or HY 122 or HY 136	HY of Western Civilization II (depending on what sequence, or take sequence during summer) <sup>1</sup> or World Civilization II or US History since 1877	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ARS 353	Intaglio/Etching	3
ARS	Secondary #1 of 5	3
ARS 426	Color Theory	3
ARH	Art History elective #1 of 2	3
ARS 354	Screenprint/Serigraphy	3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
ARS 352	Relief/Woodcut	3
ARS 396	Professional Practices - W (Fall only)	3
ARS	Advanced Level Drawing course #2 of 3	3
ARS	Secondary #2 of 5	3
Natural Science + Lab (#2 of 2) Area III, B		4
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ARS 355	Lithography	3
ARS	Secondary #3 of 5	3
ARH	Art History elective #2 of 2	3
ARS 451	Advanced Printmaking	3
Select one of the following:		3
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
ARS 458	Pre-Thesis in Printmaking	3
CA 110	Public Speaking	3
ARS	Secondary #4 of 5	3
Social/Behavioral Science		3
(W) course anywhere in University <sup>1</sup>		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ARS 459	Senior Thesis in Printmaking	6
ARS	Secondary 5	3
ARS	Advanced Level Drawing course #3 of 3	3
Area IV, B-Social/Behavioral Science #2		3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>124</b>

<sup>1</sup> See General Education Requirements

## Studio Art (BFA) - Sculpture Concentration

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 105)		52-55
<b>Major Requirements</b>		<b>54</b>

### Art Core 21

#### A. Complete the following:

ARS 121	Perceptual Drawing I	3
ARS 122	Perceptual Drawing II	3

#### B. Complete the following:

ARS 123	Two-Dimensional Design	3
ARS 124	Three-Dimensional Design	3

#### C. Select two of the following:

ARS 222	Figure Drawing I	
ARS 225	Conceptual Drawing I	
ARS 322	Figure Drawing II	
ARS 325	Conceptual Drawing II	
ARS 422	Figure Drawing III	
ARS 425	Conceptual Drawing III	
ARS 426	Color Theory	

#### D. Select one of the following: 3

ARS 322	Figure Drawing II	
ARS 325	Conceptual Drawing II	
ARS 422	Figure Drawing III	
ARS 425	Conceptual Drawing III	
ARS 426	Color Theory	

### Sculpture Concentration 33

#### A. Complete the following:

ARS 261	Sculpture I	3
ARS 262	Sculpture II	3

#### B. Select 15 hours from the following: 15

ARS 361	Sculpture III	
ARS 362	Sculpture IV	
ARS 461	Sculpture V	
ARS 464	Studies in Sculpture	

#### C. Complete the following:

ARS 468	Pre-Thesis in Sculpture	3
ARS 469	Senior Thesis in Sculpture	6

#### D. Complete the following:

ARS 396	Professional Practices - W	3
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### Secondary Concentration Requirement 15

A secondary concentration is required for this program.

The secondary concentration is fifteen hours in a studio area different from the student's primary concentration for the BFA in Studio Art. Secondary concentrations are available in Ceramics, Glass, Painting, Photography, Printmaking, Sculpture and Interdisciplinary. Interdisciplinary Secondary concentration consists of 9 credits in one area and 6 credits in any combination of the other.

### A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

### Additional Information

#### Requirements for a Double Primary Concentration

In lieu of a secondary concentration, students may complete a second primary concentration. This will require course work in excess of the 121 hours minimum required for the B.F.A. and may delay time to graduation. To complete a Double Primary Concentration, students must complete

Primary Concentration requirements in two separate areas including Senior Thesis or Senior Portfolio where applicable.

**Requirements for an Optional Minor**

In addition to the completion of the Studio Art B.F.A. primary and secondary concentration requirements, students have the option to complete a minor in a discipline outside the department. The addition of a minor will require course work in excess of the 120 hours minimum required for the B.F.A. and may delay time to graduation.

**Graduation Plan**

(124 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
ARH 103	Art History I	3
ARS 121	Perceptual Drawing I	3
ARS 123	Two-Dimensional Design	3
MA 110 or MA 112	Finite Mathematics or Precalculus Algebra	3
EH 101	English Composition I	3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
ARS 122	Perceptual Drawing II	3
ARS 124	Three-Dimensional Design	3
ARH 123	Art History II	3
EH 102	English Composition II	3
HY 101 or HY 121 or HY 135	HY of Western Civilization I (Area IV) or World Civilization I or US History to 1877	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
ARS 261	Sculpture I	3
ARS	Secondary #1 of 5	3
ARS	Advanced Level Drawing Course#1 of 3	3
ARH 344	Contemporary Art	3
Select one of the following (Area II, B):		3
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ARS 262	Sculpture II	3
ARS	Secondary #2 of 5	3
ARH	Art History elective #1 of 2	3
Area III, B Lab science 1		4
HY 102 or HY 122 or HY 136	HY of Western Civilization II (depending on which sequence you take) or World Civilization II or US History since 1877	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
ARS	Advanced Level Drawing course #2 of 3	3
ARS	Sculpture Elective #1 of 5	3
ARS 396	Professional Practices - W (Fall only)	3
Area III, B Natural Science Lab 2		4

Secondary #3 of 5		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ARH	Art History elective #2 of 2	3
ARS	Sculpture Elective #2 of 5	3
ARS	Sculpture Elective #3 of 5	3
ARS	Sculpture Elective #4 of 5	3
(W) course anywhere in University		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
ARS 468	Pre-Thesis in Sculpture	3
ARS	Sculpture Elective #5 of 5 (Directed Studies recommended)	3
ARS	Secondary #4 of 5	3
CA 110	Public Speaking	3
Area IV, B Social/Behavioral Science		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ARS 469	Senior Thesis in Sculpture	6
ARS	Secondary #5 of 5	3
ARS	Advanced Level Drawing course #3 of 3	3
Area IV, B Social/Behavioral Science		3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>124</b>

See General Education Requirements

**Studio Art Minor Degree Requirements**

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

**Minor in Art (Studio)**

Code	Title	Hours
Twenty-one hours minimum of Studio Art:		
ARS Upper Division (300/400) Elective		3
ARS Electives, any level		18
<b>Total Hours</b>		<b>21</b>

**Additional Information**

Three hours must be in courses numbered 300 or higher taken at this university.

**Visual Art (BA) - Art History Concentration**

**Degree Requirements**

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		55-59
<b>Major Requirements</b>		<b>39</b>
<i>Visual Art (BA) Core</i>		<i>15</i>
A. Complete the following:		
ARH 103	Art History I	3

ARH 123	Art History II	3
ARH 344	Contemporary Art	3
ARS 123	Two-Dimensional Design	3
ARS 124	Three-Dimensional Design	3
<i>Art History Concentration</i>		24
A. Ancient Art - Complete the following:		
ARH 304	Ancient Grk Art and Architect	3
or ARH 306	Roman Art	
B. Medieval Art - Complete the following:		
ARH 312	Medieval Art and Architecture	3
or ARH 415	Gothic Architecture	
C. Renaissance Art and Baroque Art - Select one of the following:		
ARH 322	Northern Renaissance Art	
ARH 324	Italian Early Renaissance	
ARH 326	16th Century Italian Art	
ARH 330	Baroque Art of Southern Europe	
ARH 332	Baroque Art and Architecture	
ARH 335	18th Century Art and Arch	
ARH 434	Baroque Art Flanders-Holland	
D. Modern Art - Select one of the following:		
ARH 340	Early Modern Art	3
ARH 345	American Arts 1600 - 1940	
ARH 346	Amer Architecture 1600-1940 -W	
E. Seminar - Complete the following:		
ARH 480	Women in Art-W	3
or ARH 492	Seminar - W -	
F. Complete the following:		
ARH 493	Methodology of Art History-W	3
G. ARH Electives		
		6
<b>Minor Requirements</b>		
A minor is required for this degree program		18-24
<b>A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE</b>		<b>120</b>

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

#### Notes:

Seminar and Special Topics courses may be used to satisfy Art History Concentration area requirements.

## Language Requirements in Art History

While the department does not require language training beyond the General Education requirement (6 hours), we strongly encourage art history majors, particularly those planning graduate study, to pursue foreign languages beyond what is required by the College. French and German are the preferred languages because they are required by most M.A. and Ph.D. programs in art history.

The B.A. program requires completion of the general education requirements in the College of Arts and Sciences, requirements for a minor, and enough elective courses for credit hours to total 120. At least 30 hours of courses numbered 300 or higher must be taken at this University, including a minimum of 15 hours of upper-division art courses. A minimum of 39 hours in art history and studio courses is required. All

students must complete the core requirements and those listed under one of two concentrations, art history or art studio.

## Graduation Plan

(121 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
Foreign language #1 of 2		3
ARH 103	Art History I	3
or ARH 123	or Art History II	
EH 101	English Composition I	3
MA 110	Finite Mathematics	3
or MA 112	or Precalculus Algebra	
		<b>Hours</b>
		<b>14</b>
<b>Spring</b>		
ARH 123	Art History II	3
or ARH 103	or Art History I	
ARS 123	Two-Dimensional Design	3
Foreign Language #2 of 2		3
EH 102	English Composition II	3
Humanities and Fine Arts Component (Other than ARH)		3
		<b>Hours</b>
		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
ARH 344	Contemporary Art	3
ARS 124	Three-Dimensional Design	3
Foreign Language #3 (optional) or elective <sup>1</sup>		3
Natural Science #1 with Lab		4
Course in Minor #1		3
		<b>Hours</b>
		<b>16</b>
<b>Spring</b>		
ARH	Upper level Elective Medieval Art History	3
Foreign Language #4 (optional) or Elective <sup>1</sup>		3
Course in Minor #2		3
Area III, B- Natural Science #2 with Lab		4
Select one of the following: <sup>1</sup>		3
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
		<b>Hours</b>
		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
ARH 493	Methodology of Art History-W	3
HY 101	HY of Western Civilization I	3
or HY 121	or World Civilization I	
or HY 135	or US History to 1877	
Natural Science #3		3
Course in Minor #3		3
CA 110	Public Speaking <sup>1</sup>	3
		<b>Hours</b>
		<b>15</b>
<b>Spring</b>		
ARH	Upper-Division Elective Modern	3
ARH	Elective (Ren/Baroque0	3
HY 102	HY of Western Civilization II (depending on 1st HY)	3
or HY 122	or World Civilization II	
or HY 136	or US History since 1877	
Upper-Division Course in Minor #4		3

Upper-Division Course in Minor #5	3
<b>Hours</b>	<b>15</b>
<b>Fourth Year</b>	
<b>Fall</b>	
ARH Upper level Art History Elective (Ancient)	3
ARH 492 Seminar - W -	3
Social/Behavioral Sciences #1 of 2	3
Upper level Course in Minor #6	3
Upper level Course in Minor #7 or Elective	3
<b>Hours</b>	<b>15</b>
<b>Spring</b>	
ARH U/D Elective	3
ARH Electives	5-6
U/D Course in Minor #8 or Elective	3
Area IV, B- Social/Behavioral Sciences	3
<b>Hours</b>	<b>14-15</b>
<b>Total Hours</b>	<b>120-121</b>

<sup>1</sup> See Graduate Degree Requirements in Art History require a reading knowledge of one or more foreign languages (y=typically one for MA and two for a Ph.D.) French or German are preferred. It is recommended that students planning to pursue a graduate degree take four courses in one language to achieve reading proficiency.

Number of courses and number of upper division courses depends on Minor Department.

# Visual Art (BA) - Studio Art Concentration

## Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		55-59
<b>Major Requirements</b>		
<i>Visual Art (BA) Core</i>		<b>15</b>
A. Complete the following:		
ARH 103	Art History I	3
ARH 123	Art History II	3
ARH 344	Contemporary Art	3
ARS 123	Two-Dimensional Design	3
ARS 124	Three-Dimensional Design	3
<i>Studio Art Concentration</i>		<b>24</b>
A. Complete the following:		
ARS 396	Professional Practices - W	3
B. Select nine hours from following:		
ARS 301	2D Animation II	
ARS 302	3D animation II	
ARS 304	Digital Modeling	
ARS 311	Kiln Formed Glass	
ARS 312	Intermediate Glass Blowing	
ARS 322	Figure Drawing II	
ARS 325	Conceptual Drawing II	
ARS 331	Painting III	
ARS 341	Intermediate Ceramics	

ARS 351	Intermediate Printmaking
ARS 352	Relief/Woodcut
ARS 353	Intaglio/Etching
ARS 354	Screenprint/Serigraphy
ARS 355	Lithography
ARS 361	Sculpture III
ARS 362	Sculpture IV
ARS 373	Graphic Design Identity Systems
ARS 374	Publication Design
ARS 375	Digital Graphic Design
ARS 376	Illustration
ARS 381	Intermediate Photography I
ARS 382	Intermediate Photography II
ARS 387	Digital Silver Photography
ARS 400	Topics in Animation
ARS 404	Studies in Animation
ARS 410	Topics in Glass
ARS 411	Advanced Kiln Formed Glass
ARS 412	Advanced Glassblowing
ARS 414	Studies in Glass
ARS 422	Figure Drawing III
ARS 425	Conceptual Drawing III
ARS 426	Color Theory
ARS 427	Advanced Color Theory
ARS 430	Topics in Painting
ARS 431	Painting IV
ARS 434	Studies in Painting
ARS 440	Topics in Ceramics
ARS 441	Advanced Ceramics
ARS 450	Topics in Printmaking
ARS 451	Advanced Printmaking
ARS 454	Studies in Printmaking
ARS 460	Topics in Sculpture
ARS 461	Sculpture V
ARS 464	Studies in Sculpture
ARS 470	Topics in Graphic Design
ARS 472	Senior Graphic Design
ARS 473	Web Design
ARS 474	Studies in Graphic Design
ARS 479	Design Business Practices-W
ARS 480	Topics in Photography
ARS 481	Advanced Photography
ARS 483	Color Photography
ARS 484	Studies in Photography
ARS 485	Alternative Photo Processes
ARS 487	Photo Bookmaking
ARS 490	Special Topics
ARS 494	Directed Studies
ARS 496	Professional Studies Internship

C. ARS Electives 12

### Minor Requirements

A minor is required for this degree program 18-24

**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

**Notes:**

The B.A. program requires completion of the general education requirements in the College of Arts and Sciences, requirements for a minor, and enough elective courses for credit hours to total 120. At least 30 hours of courses numbered 300 or higher must be taken at this University, including a minimum of 15 hours of upper-division art courses. A minimum of 39 hours in art history and studio courses is required. All students must complete the core requirements and those listed under one of two concentrations, art history or art studio.

## Graduation Plan

(121 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
Foreign Language #1		3
ARH 103 or ARH 123	Art History I or Art History II	3
EH 101	English Composition I	3
MA 110 or MA 112	Finite Mathematics or Precalculus Algebra	3
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
ARH 123 or ARH 103	Art History II or Art History I	3
ARS 123	Two-Dimensional Design	3
Foreign Language #2		3
EH 102	English Composition II	3
Humanities and Fine Arts Component (Other than Art History)		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
ARH 344	Contemporary Art	3
ARS 124	Three-Dimensional Design	3
ARS	Art Elective #1 <sup>1</sup>	3
Area III, B-Natural Science #1 with Lab		4
Course in Minor #1		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ARS	Art Elective #2 of 4 <sup>2</sup>	3
ARS	Art Elective #3 of 4	3
Course in Minor #2		3
Area III, B-Natural Science #2 with Lab		4
Select 3 credits from the following (Area II B):		3
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
<b>Hours</b>		<b>16</b>

**Third Year**

<b>Fall</b>		
ARS 396	Professional Practices - W	3
HY 101 or HY 121 or HY 135	HY of Western Civilization I or World Civilization I or US History to 1877	3
Natural Science #3		3
Course in Minor #3		3
CA 110	Public Speaking	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
HY 102 or HY 122 or HY 136	HY of Western Civilization II (Depending on 1st HY) or World Civilization II or US History since 1877	3
ARS	Art Elective #4 of 4	3
ARS	Upper Level Art Elective #1 of 3	3
ARS	Upper Level Art Elective #2 of 3	3
ARS	Upper Level Art Elective #3 of 3	3
<b>Hours</b>		<b>15</b>

**Fourth Year**

<b>Fall</b>		
ARS	U/D Elective #2	3
U/D Writing course		3
Area IV, B- Social/Behavioral Science		3
U/D Course in Minor #6		3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ARS	Upper Level Art Elective #3 of 3	3
Area IV, B Social and Behavioral Sciences		3
U/D Course in Minor #7		3
U/D Minor <sup>3</sup> #8 or U/D Elective		3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>121</b>

- <sup>1</sup> ARS 121 Recommended
- <sup>2</sup> ARS 122 Recommended
- <sup>3</sup> Recommended Course

Number of courses and number of upper division courses depends on Minor Department.

## Visual Art (MFA) - Creative Technologies and Practice

### Degree Requirements

#### Master of Fine Arts in Creative Technologies and Practice (M.F.A.) Program

The Master of Fine Arts program in Creative Technologies and Practice at the University of South Alabama is a cross-disciplinary program appealing to creatives who are interested in a variety of media technologies. The program emphasizes interdisciplinary practice that spans multiple concentrations within the visual arts with technology serving to inform or facilitate the creative process.

The MFA in Creative Technologies and Practice will equip individuals to enter the workforce in a variety of creative technology areas, particularly to manage creative teams, to pursue careers as visual artists, to advance

knowledge in the field through research or creative output, and to teach at the university level.

The MFA in Creative Technologies and Practice will equip individuals to enter the workforce in various creative technology areas, particularly to manage creative teams, pursue careers as visual artists, advance knowledge in the field through research or creative output, and teach at the university level.

The requirements and procedures that follow are specifically for the Department of Visual Arts. However, the general rules and policies of the Graduate School also apply.

## Minimum Requirements for Regular Admission

Students may be admitted for Fall or Spring enrollment. Although applications for admission and assistantships are accepted throughout the year, applicants who want to be considered for the assistantships need to have their application submitted by February 15.

Fall admission applications are reviewed from February 15 through July 15. The graduate admissions committee will make initial recommendations about applicants for Fall enrollment, with formal letters sent to applicants by the end of April. Applicants seeking enrollment in the Spring must have their application submitted by November 20 of the preceding Fall semester. Depending on the availability of space and funding, applications may be approved and students admitted throughout the year. In addition to the general admissions requirements of the Graduate School, requirements for admission to the M.F.A. Creative Technologies program are:

1. Applicants to graduate programs in Arts and Sciences typically have a minimum GPA of at least a 3.0 on all undergraduate work. In exceptional cases, applicants may be considered with at least a 2.5 GPA on all undergraduate work, or at least a 2.75 GPA on the last 60 hours of undergraduate work.
2. Official Transcript(s) from other institutions and sessions/programs/workshops the student has attended.
3. Artist's statement of no more than 500 words.
4. Letter of intent of no more than 500 words.
5. Resumé or Curriculum Vitae
6. Three letters of recommendation.
7. A portfolio of 20 pieces that shows proficiency of media in which the student wishes to dedicate further study. If the student is focusing on video, film, or animation we require portfolio equivalents of five pieces that are three to five minutes in length.

To apply please go to this link and upload all materials through the online system. If you have any questions please email me at [gradart@southalabama.edu](mailto:gradart@southalabama.edu).

For applicants for whom English is a second language, the students must have a working proficiency of the English language and submit:

- Minimum TOEFL IBT score of at least 71 **or**
- Minimum IELTS score of at least 6 (Paper-based score of 525, computer-based score of 197) **or**
- Minimum iTEP score of 3.7 **or**
- Minimum PTE Academic score of 48

Note: ESL applicants must apply through the International Admissions Office at USA. Some programs may require higher scores to prove English

proficiency. Applicants who hold a bachelor's degree from an accredited U.S. institution are not required to submit TOEFL results.

Applicants to graduate programs in Arts and Sciences typically have a minimum GPA of at least a 3.0 on all undergraduate work. In exceptional cases, applicants may be considered with at least a 2.5 GPA on all undergraduate work, or at least a 2.75 GPA on the last 60 hours of undergraduate work.

## Graduate Assistantships

The Department of Visual Arts offers assistantships to M.F.A. students annually on a competitive basis. Assistantships include a stipend, a tuition fellowship, and waiver of out-of-state fees. The deadline for Graduate Assistantships is February 15. Applications for admissions are taken continuously. See Graduate Coordinator for information and application. (See also Bulletin section on Graduate School, "Assistantships and Fellowships.") Students awarded assistantships must complete all semesters of study in residence at the University of South Alabama. More information about assistantships is available from the:

Office of the Dean of the Graduate School  
Mobile Townhouse 222  
University of South Alabama  
Mobile, AL 36688-0002

## Degree Requirements

The Master of Fine Arts in Creative Technologies and Practice degree is awarded in recognition of the student's demonstrated ability to create original, creative research at the highest levels without extensive supervision. The degree is not granted solely upon completion of a stated amount of course work, but rather after the student demonstrates and defends a body of work or presentation of a major project in a public exhibition.

## General Required Credit

A minimum of 60 semester hours of approved graduate credit is required. Details about the curriculum are given below.

## Transfer Credit

Graduate courses taken at another accredited university, such as for students with MA degrees in the same (or a closely related) subject as that of the M.F.A. program, may be considered in the M.F.A. plan of study up to a maximum of 12 semester hours. Only grades of "A" or "B" may be accepted as transfer credit. The graduate coordinator, in consultation with the Chair, and if necessary, the advisory committee, will evaluate transfer credit; the transfer credit is approved by the Dean of the Graduate School only after completion of a minimum of nine semester hours of graduate course work in the masters program at USA.

## Residency Requirements

A minimum of four semesters of study in residence is required. The residency requirement must be met at USA.

The final two semesters of study may be completed as low residency. The low residency requirement obligates each student to visit the USA main campus two to three times during each semester of low residency.

If a student plans on completing his/her final two semesters in residency elsewhere the student must meet the following by February 1 of his/her second year.

No one with an assistantship will be able to apply for the final year to be held in low residency.

1. The student must have internet access and a computer or phone on which to video chat weekly with primary thesis advisor, having virtual studio tours.
2. The student must provide proof of access to a facility where they can create and obtain suitable studio space in which to work.
3. The student must have the ability to transport the work to the University of South Alabama main campus.
4. The student's thesis show must be on the University of South Alabama main campus.
5. The student must have the ability to travel during the weeks specified for both semesters.
6. The student must be on campus for a thesis review during the first full week of classes during the Fall Semester and once again during the last week of October or the first full week of November. In the Spring Semester the student must be on campus three times: once during the first full week of class, the second time will be the week before spring break, and the third time will be at the end of the semester to hang and present his/her thesis show.
7. The student must be available per the faculty's schedule.

## Time Limit

Failure to complete the work within the periods specified shall necessitate reevaluation of the student's program and may result in a recommendation for dismissal by the Director of Graduate Studies to the Graduate Dean.

All requirements for the M.F.A. degree must be completed within seven years from the date of matriculation. A student who has not satisfactorily completed a thesis in a seven-year period must apply for a defined extension to complete the degree based on a personal hardship. This request must be recommended by the major professor, the Chair of the Department, the Director of Graduate Studies, and approved by the Dean of the Graduate School. If the extension is not approved, the student will be dismissed.

If the student does not complete the degree requirements in any defined extension period, the Director of the Graduate Program may recommend and the Dean of the Graduate School may take whatever action is necessary up to and including dismissal.

## Course Requirements

All students must have fifteen credits of art history including Contemporary Art History at time of graduation, but students may exempt the requirement using undergraduate courses.

Each student must have at least 18 semester hours of Graduate Seminar (ARS 591), 36 hours in directed research, (ARS 500-ARS 590, ARH 590, or approved Graduate Coursework outside of the Department), and at least 6 hours in thesis development (ARS 592).

## Schematic of Typical Program

Code	Title	Hours
ARS 591	Graduate Seminar (six enrollments)	18
<b>Directed Research</b> ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/art-history/footnote1/">http://bulletin.southalabama.edu/programs-az/arts-sciences/art-history/footnote1/</a> ) <sup>1</sup>		
	Graduate level coursework in Art History or Studio Art, or approved Graduate Coursework outside of the Department of Visual Arts	36

## Thesis

ARS 592	Graduate Thesis (1 per semester)	6
<b>Total Hours</b>		<b>60</b>

## Footnote

<sup>1</sup> ARS 500-590 or ARH 590

## Defense of Thesis

The final oral defense of the thesis is scheduled after the public exhibition and submission of written component is completed except for such revisions as may be necessary as a result of the defense.

## Biology

### Department Information

Department of Biology website  
<https://www.southalabama.edu/biology> (<https://www.southalabama.edu/biology/>)

### Undergraduate Studies

The program of the Department of Biology is designed to contribute to a scientific background as part of a liberal education. The department offers a diversified, broadly based program, which can be designed to satisfy many areas of study. Our multitrack major can provide the traditional student with a well-rounded background in biology, or students may select courses to prepare them for a particular area of study. The multitrack curriculum can prepare students for graduate study, pre-health professional fields (such as medicine or dentistry), marine biology, or environmental science. The department has persons trained to advise in each of these areas. A list of advisors for a specific track or area of study can be obtained from the departmental office.

All first-time freshmen must successfully complete CAS 100 as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students, who must enroll in the fall semester following entry.

Effective for fall, 2016, Major Milestones are used in all concentrations of the Biology Bachelor of Science major to help students stay on track for timely graduation. Each regular semester in the Biology major is a tracking term. To remain on track, students must complete the milestone requirements for each tracking term. These requirements are viewable on the Major Milestone tab above.

Major milestone requirements apply only to full-time, degree-seeking students who first entered Fall 2016 or later. Milestone requirements do not apply to transfer students in the Biology program.

The sample academic plan viewable on the Major Milestone tab above is designed to ensure graduation in the Biology major in four years. Several academic plans are available – consult with your academic advisor for the plan that is the best fit for you. For specific course requirements, refer to the program requirements above and the General Education requirements of the College of Arts and Sciences.

## Degrees, Programs, or Concentrations

- Biology (BS) (p. 143)
- Biology (BS) - Environmental Science Concentration (p. 144)
- Biology (BS) - Marine Biology Concentration (p. 145)

- Biology (BS) - Senior Thesis Concentration (p. 146)
- Biology (MS) (p. 147)
- Biology (MS) - Thesis Concentration (<http://bulletin.southalabama.edu/programs-az/arts-sciences/biology/biology-ms-thesis-concentration/>)
- Biology (MS) Non-Thesis Concentration (<http://bulletin.southalabama.edu/programs-az/arts-sciences/biology/biology-ms-nonthesis-concentration/>)
- Biology Minor (p. 148)
- [biology-ms-thesis-concentration/](http://bulletin.southalabama.edu/programs-az/arts-sciences/biology/biology-ms-thesis-concentration/) (<http://bulletin.southalabama.edu/programs-az/arts-sciences/biology/biology-ms-thesis-concentration/>)
- [biology-ms-nonthesis-concentration/](http://bulletin.southalabama.edu/programs-az/arts-sciences/biology/biology-ms-nonthesis-concentration/) (<http://bulletin.southalabama.edu/programs-az/arts-sciences/biology/biology-ms-nonthesis-concentration/>)

## Courses

### **BLY 101 Life Science I 3 cr**

The first of a two-semester sequence designed for the non-major. The basic principles of biological phenomena are emphasized by examples relating to the human. Cell structure and function, energy and organ systems are studied. Credit will not be allowed for both the non-major sequence (BLY 101, BLY 101L and BLY 102 BLY 102L) and the major/minor sequence (BLY 121, BLY 121L and BLY 122, BLY 122L).

**Corequisite:** BLY 101L

### **BLY 101L Life Science I Laboratory 1 cr**

Laboratory exercises associated with BLY 101. Together, BLY 101 and BLY 101L count as one laboratory science course, partially fulfilling general education requirements. Credit will not be allowed for both the non-major sequence (BLY 101, BLY 101L and BLY 102 BLY 102L) and the major/minor sequence (BLY 121, BLY 121L and BLY 122, BLY 122L).

**Corequisite:** BLY 101

### **BLY 102 Life Science II 3 cr**

A continuation of BLY 101. Organ systems, cell reproduction, plant and animal development, heredity, evolution, and ecology area studied. Credit will not be allowed for both the non-major sequence (BLY 101, BLY 101L and BLY 102 BLY 102L) and the major/minor sequence (BLY 121, BLY 121L and BLY 122, BLY 122L).

**Prerequisite:** BLY 101 (may be taken concurrently) Minimum Grade of D

**Corequisite:** BLY 102L

### **BLY 102L Life Science II Lab 1 cr**

Laboratory exercises associated with BLY 102. Together, BLY 102 and 102L count as one laboratory science course, partially fulfilling general education requirements. Credit will not be allowed for both the non-major sequence (BLY 101, BLY 101L and BLY 102 BLY 102L) and the major/minor sequence (BLY 121, BLY 121L and BLY 122, BLY 122L).

**Prerequisite:** BLY 101 (may be taken concurrently) Minimum Grade of D and BLY 102 (may be taken concurrently) Minimum Grade of D

### **BLY 121 General Biology I 3 cr**

A study of general biological principles, including the chemical basis of life; cellular biology, including cell structure and metabolism, genetics, microevolution; and a survey of simple organisms, including bacteria, protists and fungi. Core Course. Credit will not be allowed for both the non-major sequence (BLY 101, BLY 101L and BLY 102 BLY 102L) and the major/minor sequence (BLY 121, BLY 121L and BLY 122, BLY 122L).

**Prerequisite:** A02 22 or S02 540 or S12 565 or CH 100 Minimum Grade of D or CH 131 (may be taken concurrently) Minimum Grade of D or BLY 101 Minimum Grade of C or MA 112 (may be taken concurrently) Minimum Grade of D

**Corequisite:** BLY 121L

### **BLY 121L General Biology I Lab 1 cr**

Laboratory exercises associated with BLY 121. Together, BLY 121 and BLY 121L count as one laboratory science course, partially fulfilling general education requirements. Credit will not be allowed for both the non-major sequence (BLY 101, BLY 101L and BLY 102 BLY 102L) and the major/minor sequence (BLY 121, BLY 121L and BLY 122, BLY 122L). Fee.

**Prerequisite:** (S02 540 or A02 22 or CH 100 Minimum Grade of D or CH 131 (may be taken concurrently) Minimum Grade of D or BLY 101 Minimum Grade of C or MA 112 (may be taken concurrently) Minimum Grade of D)

**Corequisite:** BLY 121

### **BLY 122 General Biology II 3 cr**

A study of plants, major invertebrate phyla, vertebrate morphology, plant and animal physiology, animal behavior, macroevolution and ecology. Core course. Credit will not be allowed for both the non-major sequence (BLY 101, BLY 101L and BLY 102 BLY 102L) and the major/minor sequence (BLY 121, BLY 121L and BLY 122, BLY 122L).

**Prerequisite:** BLY 121 Minimum Grade of D

**Corequisite:** BLY 122L

### **BLY 122L General Biology II Laboratory 1 cr**

Laboratory exercises associated with BLY 122. Together, BLY 122 and 122L count as one laboratory science course, partially fulfilling general education requirements. Credit will not be allowed for both the non-major sequence (BLY 101, BLY 101L and BLY 102 BLY 102L) and the major/minor sequence (BLY 121, BLY 121L and BLY 122, BLY 122L). Fee.

**Prerequisite:** BLY 121 Minimum Grade of D

**Corequisite:** BLY 122

### **BLY 134 Ocean Science 3 cr**

An introduction to physical, chemical, and biological oceanography.

### **BLY 134L Ocean Science Lab 1 cr**

Lab experiences associated with BLY 134.

**Prerequisite:** BLY 134 (may be taken concurrently) Minimum Grade of D

### **BLY 205 Intro Environmental Sci 4 cr**

Environmental science, including the fundamentals required to understand how ecosystems work, how environmental modifications affect ecosystems and living things, and how living things affect their environment. Topics to be emphasized include the effects of pollution, habitat modification and other environmental changes, on ecosystems, plants, wildlife, man, outdoor recreation and the future. Public health and medical effects will also be considered. Many topics covered are of special significance to this region: wetlands, the effects of dredging and filling, artificial lake construction, development, agricultural and forestry practices on ecosystems, plants and animals. Requires college biology, or permission of instructor. The course includes lecture and a lab component.

**BLY 207 Biology of Aging 3 cr**

A descriptive review of processes of aging. Emphasis is placed on studying structural and functional changes that could occur with increase in chronological age. Usually taught in the fall, spring and summer terms.

**Prerequisite:** BLY 101 Minimum Grade of D

**BLY 213 Microbiology 3 cr**

A survey of bacteria, fungi, protozoa and viruses with emphasis on host-microbe interactions, immune responses, and control mechanisms.

**Prerequisite:** BLY 101 Minimum Grade of D or BLY 121 Minimum Grade of D

**Cross-Listed:** BMD 210

**BLY 214 Lab Studies Microbiology 1 cr**

A series of laboratory experiments designed to provide practical experiments in basic microbial techniques.

**Prerequisite:** (BLY 213 (may be taken concurrently) Minimum Grade of D or BMD 210 Minimum Grade of D)

**BLY 300 Ecology 3 cr**

Introduction to general concepts of ecology. Major topics will include population growth dynamics, community structure and interactions, ecosystem structure and function, and principles of biodiversity and biogeography. Theoretical and practical issues will be addressed. Core course.

**Prerequisite:** (MA 112 Minimum Grade of D and CH 131 Minimum Grade of D and BLY 121 Minimum Grade of C and BLY 122 Minimum Grade of C)

**BLY 301 Cell Biology 3 cr**

A course designed to integrate cell structure and function: the study of the ultrastructure, organization, physiology, genetics, and other functions of the cell. Core course.

**Prerequisite:** (BLY 121 Minimum Grade of C and BLY 122 Minimum Grade of C and CH 131 Minimum Grade of D) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**BLY 302 Genetics 3 cr**

An introduction to both classical and modern genetic concepts and theory, with an emphasis on problem-solving. Topics covered include Mendelian genetics, molecular genetics, and evolutionary genetics. Core course.

**Prerequisite:** BLY 121 Minimum Grade of C and BLY 122 Minimum Grade of C and CH 131 Minimum Grade of D and BLY 121L Minimum Grade of C and BLY 122L Minimum Grade of C

**BLY 304 Exp. Designs in Biology 3 cr**

Experimental designs in Biology is intended to provide students with basic skills of experimental design and statistical methodology needed in modern biological research. Additionally, students will learn basic statistical software (e.g., Minitab, Ecosim, Resampling Procedures). The use of statistical software will be fully integrated with lecture material to provide a 'holistic' learning experience. Having completed this course, students will have gained a basic foundation in quantitative procedures for analyzing and interpreting biological data. This course requires each student to have a lap-top computer and a copy of Minitab Student v 14, which is provided with the required text.

**Prerequisite:** BLY 121 Minimum Grade of C and BLY 122 Minimum Grade of C and MA 112 Minimum Grade of C

**BLY 305 Introduction to Evolution 3 cr**

Introduction to general concepts of evolution. Major topics will include natural selection, genetic drift, quantitative genetics, phylogenetics, speciation, human evolution, and evolutionary medicine. Theoretical and practical issues will be addressed. Core course.

**Prerequisite:** (MA 112 Minimum Grade of D or CH 131 Minimum Grade of D) and (BLY 121 Minimum Grade of C and BLY 122 Minimum Grade of C)

**BLY 307 Research Methods for STEM Educators 3 cr**

Research Methods (BLY 307) is a three-hour course in the required UTeach South sequence. Content focuses on the teaching and application of the Scientific Method, experimental design, data collection, analysis, and interpretation, as well as scientific communication.

It is designed to meet the needs of pre-service STEM education students. Alignment to state content and pedagogical standards will be emphasized.

**Prerequisite:** (EDU 125 Minimum Grade of C) and (EDU 126 Minimum Grade of C)

**BLY 310 Economic Botany - W 3 cr**

This course includes the study of plants in their form and structure by connecting them to their use by humans. Topics include plant anatomy and nomenclature; history of plant use; origins of economically important plants; use of flowers, fruits, stems and leaves for food and other purposes.

**Prerequisite:** (BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 300 Minimum Grade of C and BLY 305 Minimum Grade of C and EH 102 Minimum Grade of C)

**BLY 312 Writing in Biology 3 cr**

An introduction to writing and communication in the life sciences. Topics will include searching the scientific literature, scientific writing style, data presentation, writing lab reports, and preparing scientific presentations.

**Prerequisites:** EH102 or EH105, BLY 300, 301, 302, 305.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (BLY 300 Minimum Grade of C and BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 305 Minimum Grade of C)

**BLY 314 Molecular Microbiology - W 4 cr**

Study of procaryotic and eucaryotic microorganisms and their relationship to their environment. Molecular, genetic and biochemical aspects of each will be emphasized.

**Prerequisite:** EH 102 Minimum Grade of C and CH 131 Minimum Grade of C and BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 321 Genetics of Development 3 cr**

An in-depth laboratory experience to determine the genetic regulation involved in organ development using the *C. elegans* model system.

The research experience gained in this laboratory class is designed to generate novel results to ultimately be shared with the larger scientific community. Emphasis will be place on mastering experimental design and data analysis. Students will work together in laboratory groups to carry out experiments, to discuss progress and conclusions, and review the primary literature relating to the project.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 327 Philosophy of Science 3 cr**

Studies such topics as method and explanation in the sciences; the demarcation between science and pseudoscience; realist and anti-realist views about scientific theories; the logic of scientific change; confirmation; reduction; laws of nature; underdetermination; and society, science, values and also explores the intellectual, social and cultural history of science, mathematics and philosophy. This course is designed to meet needs of students in Philosophy, Biology, and Mathematics and students in pre-service education programs..

**BLY 332 Biology of Algae 4 cr**

A survey of non-vascular plants: algae, fungi, liverworts, and mosses, with emphasis on morphology and taxonomy.

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 333 Biomedical Ethics - W 3 cr**

Ethical analyses of problems and issues in the biomedical and health-related fields. Topics may include genetic research and technology, abortion, health care, experimentation, and death and dying.

**Prerequisite:** EH 102 Minimum Grade of C or EH 105 Minimum Grade of C

**Cross-Listed:** PHL 333

**BLY 342 Experimental Cell Biology-W 2 cr**

Laboratory experience with instrumentation and techniques utilized in modern cell biology research including organellar isolation, enzyme assay, protein analysis, and microscope techniques. Students develop and conduct group projects.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 350 Human Physiology 3 cr**

The function and regulation of the organ systems of the body and physiological integration of the systems to maintain homeostasis. Course content will include neural and hormonal homeostatic control mechanisms, and study of the musculoskeletal, circulatory, respiratory, digestive, urinary, immune, reproductive, and endocrine systems.

**Prerequisite:** (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C) and CH 115 Minimum Grade of C or (CH 131 Minimum Grade of C and CH 131L Minimum Grade of C) and (BLY 121 Minimum Grade of C or BLY 141 Minimum Grade of C) and BLY 121L Minimum Grade of C and (BLY 122 Minimum Grade of C or BLY 142 Minimum Grade of C) and BLY 122L Minimum Grade of C

**BLY 354 General Entomology 4 cr**

Classification and habits of insects, including collection, preservation, and identification of those occurring in south Alabama.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 360 Invertebrate Zoology 4 cr**

Detailed study of the invertebrate phyla, taxonomy, ecology and phylogenetic relationship. Terrestrial, fresh-water, and marine forms are studied.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 365 Comp Vertebrate Anatomy 5 cr**

Anatomy and evolution of the organ systems of the major vertebrate groups. Laboratory includes dissections of dogfish, sharks, and cats. Category C (usually taught in the fall term).

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D)

**BLY 367 Marine Biology 4 cr**

A general survey of marine plants, invertebrates and vertebrates, the communities they form and the physical and chemical factors that influence them. Field trips include marsh, seagrass, and dune habitats. Sampling from research vessels and laboratory exercises will serve to introduce students to the diversity of marine habitats and organisms. Organisms will be identified using dichotomous keys. Participation in overnight field trips is a part of this course. Snorkeling gear is required.

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C) and (CH 115 Minimum Grade of D or CH 131 Minimum Grade of D) and (CH 116 Minimum Grade of D or CH 132 Minimum Grade of D)

**BLY 368 Dolphins and Whales 2 cr**

Classification, anatomy, and ecology of cetaceans and manatees. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 369 Blgy/Conserv Marine Turtles 2 cr**

Introductory course providing an overview of the biology and conservation of marine turtles. The course will culminate with a multi-day field trip to sea turtle nesting beaches and foraging grounds in the southeastern U.S. Class also will visit sea turtle research and rehabilitation facilities. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term. Special fees apply and will be posted on the website: [www.disl.org](http://www.disl.org)

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of C or BLY 142 Minimum Grade of C) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 370 Marine Aquaculture 2 cr**

Techniques and issues involved with the commercial culture of marine organisms including nutrition, reproductive biology, production, water quality, processing, marketing, and economics. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 371 Shark and Ray Biology 2 cr**

This course will provide an introduction to the biology of sharks and rays, with special emphasis on regional shark fauna and field techniques.

Lectures will be supplemented with discussions of papers from the primary literature to familiarize students with current research; in addition, longline and gillnet sampling will provide students with first hand knowledge of field techniques and local shark identification. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) or (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 372 Coastal Birds of Alabama 2 cr**

An introductory-level, field-based course covering identification, population dynamics and behavior of coastal avian fauna. Field trips will be taken to local coastal ecosystems and island rookeries. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 380 Study Abroad Biology 1-4 cr**

This course is for educational opportunities in foreign countries in any biological science discipline. Offered in May, or Summer Semester. May be repeated when content varies.

**Prerequisite:** (BLY 300 Minimum Grade of C and BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 305 Minimum Grade of C)

**BLY 411 Developmental Biology 3 cr**

A study of the principles that regulate the development of a complex, multicellular from a single cell with a focus on the underlying molecular mechanism and genetic regulation. Topics to be covered will include fertilization, differentiation, cell fate determination, pattern formation, organogenesis and regeneration. Particular emphasis will be placed on the experimental approaches, both historical and contemporary, that led to our current understanding of the development of multicellular organisms.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 414 Expt Bacterial Genomics - W 4 cr**

An integrated lab-lecture course utilizing real-world research experiences to explore the molecular genetics and genomics of bacteria. Students will be directly involved in the design, execution, analysis, and presentation of group research projects determining the function of genes from completed microbial genomes. A basic foundation in microbiology and genetics is required for this course.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C and BLY 314 Minimum Grade of C and EH 101 Minimum Grade of C and EH 102 Minimum Grade of C

**BLY 425 Chemical Ecology - W 3 cr**

This class focuses on chemically mediated interactions between, among, and within organisms in both the aquatic and terrestrial environments. The topics covered include: chemoreception, chemical defense, chemical attraction, and the impact of chemical ecology on humans. This course includes a writing component. Students will gain experience in critical analysis, research development, grant writing, and computer-based presentation.

**Prerequisite:** (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 426 Freshwater Ecology 3 cr**

This course examines four aspects of freshwater ecology; physical and chemical properties of water, biotic communities, links among freshwater systems, and human influence on freshwater ecosystems. Students will be required to submit a collection of local freshwater invertebrates.

**Prerequisite:** (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**Cross-Listed:** BLY 526

**BLY 430 Marine Botany 4 cr**

A general survey of marine algae and vascular and non-vascular plants associated with the marine environment. Distribution, identification, structure, ecology, and reproduction will be considered. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

**Prerequisite:** (BLY 121 Minimum Grade of C or BLY 141 Minimum Grade of C) and (BLY 122 Minimum Grade of C or BLY 142 Minimum Grade of C) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 431 Plant Physiology - W 4 cr**

An integrative study of higher plant functions. This course includes a study of water relations, plant biochemistry, plant development, and plant-environmental interactions.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C and CH 132 Minimum Grade of D

**BLY 433 Evolution of Vascular Plants 4 cr**

A survey of the systematics, taxonomy, and structure of the major groups of vascular plants. Fossil plants (paleobotany) will also be covered where relevant. Many labs are outdoors and focus on plant structure and identification utilizing the rich local flora.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 434 Plant Physiological Ecology 3 cr**

Plant Physiological Ecology is an investigation into the relatively "new" scientific field of physiological ecology (i.e., the study of how plants function in their environment) and is designed to meet the needs of students majoring in biology, ecology and/or various disciplines in plant biology. This course explores plant biology, plant-animal interactions, as well as, principles of ecology and evolution. Category B.

**Prerequisite:** BLY 121 Minimum Grade of C and BLY 122 Minimum Grade of C and BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C and BLY 431 Minimum Grade of C

**Cross-Listed:** BLY 534

**BLY 435 Biology of Fungi 4 cr**

Identification and morphology of fungi with some emphasis on their relation to human affairs. Collection required.

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 436 Animal Physiology - W 4 cr**

This class will take a comparative approach to animal physiology. Comparisons of structural and functional relationships in the body systems of invertebrates and vertebrates, including humans, will be made. A basic foundation in chemistry and cell biology is required for this course. This course incorporates writing and computer components. Students will gain experience in critical analysis, research development and analysis, word processing, computer based statistical and graphical analysis, and in computer based presentation programs.

**Prerequisite:** (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 440 Biochemistry I 3 cr**

Study of the fundamental biochemical concepts; emphasis is placed on protein, carbohydrate, and lipid structure as related to their functional behavior; enzymes kinetics and mechanisms of action; thermodynamic relationships in biochemical systems. Offered only in Fall term. Cross-listed with CH 440.

**Prerequisite:** CH 202 Minimum Grade of D and BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C  
**Cross-Listed:** CH 440

**BLY 441 Biochemistry II 3 cr**

Study of the reaction and regulations of intermediary metabolism; the biochemistry of genetics systems to include regulatory mechanisms and protein synthesis. Offered only in Spring term. Cross-listed with CH 441.

**Prerequisite:** BLY 440 Minimum Grade of D or CH 440 Minimum Grade of D

**Cross-Listed:** CH 441

**BLY 443 Lab Studies Biochemistry 2 cr**

Course familiarizes the student with basic laboratory techniques commonly employed in biochemical research. Offered only in Spring term. Cross-listed with CH 443.

**Prerequisite:** (BLY 440 Minimum Grade of D or CH 440 Minimum Grade of D) and (BLY 441 (may be taken concurrently) Minimum Grade of D or CH 441 (may be taken concurrently) Minimum Grade of D)

**Cross-Listed:** CH 443

**BLY 445 Computational Genetics-W 3 cr**

An ever growing body of online genetic datasets and publically available software makes basic informatic analysis of genetic systems no longer restricted to programmers. Utilizing the principle online resources employed by researchers today, this course will provide advanced undergraduates with a solid foundation in computational biology as well as the competency to independently evaluate emerging resources in the future. Students enrolled in this course will gain real world experience in the application of informatic techniques through participating in an actual collaborative research analysis and through directly contributing to a peer-reviewed manuscript reporting their results. Requires permission of instructor.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 450 Animal Behavior 4 cr**

Course examines animal behavior from a biological and empirical viewpoint, with an emphasis on behavioral adaptations of animals to their environment. Orientation, migration, rhythms, communication, territoriality, social and courtship behaviors will be considered within the context of ecology and evolution.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 451 Marine Vertebrate Zoology 4 cr**

A study of marine vertebrates, with emphasis on fishes; their systematics, zoogeography, and ecology. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

**Prerequisite:** (BLY 121 Minimum Grade of C or BLY 141 Minimum Grade of C) and (BLY 122 Minimum Grade of C or BLY 142 Minimum Grade of C) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 452 Marine Mammals 4 cr**

This is a marine field course designed to engage students in the collection, identification, and preservation of parasites of marine vertebrates and invertebrates. Each student will be required to submit a collection of parasites taken from beach, barrier island, estuarine, and pelagic (10-200km) offshore localities.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 455 Ornithology 4 cr**

Principles of classification, structure, distribution, migration, natural history and adaptations of birds within an ecological context. Field & laboratory identification of birds by habitat, size, form, color, and sound. Some field activities may occur at times other than regularly scheduled laboratory hours.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C and BLY 121 Minimum Grade of C and BLY 121L Minimum Grade of C and BLY 122 Minimum Grade of C and BLY 122L Minimum Grade of C

**BLY 459 General Parasitology 4 cr**

Ecology and evolution of parasites and a survey of all major parasitic groups.

**Prerequisite:** (BLY 121 Minimum Grade of C or BLY 141 Minimum Grade of C) and (BLY 122 Minimum Grade of C or BLY 142 Minimum Grade of C) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 463 Vertebrate Histology 4 cr**

Microscopic anatomy of organ systems, with emphasis on human tissues. Category C (usually taught in the Spring term)

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D)

**BLY 466 Introduction to Neurobiology 3 cr**

Neuroanatomy and neurophysiology of marine invertebrates and vertebrates. Topics include resting and action potentials, synaptic transmission, neurotransmitters, sensory transduction, muscle innervation, sensorimotor transformations, and the neurophysiological basis of behavior. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 468 Coral Reef Ecology 4 cr**

Ecology and evolution of coral reef, seagrass, and mangrove communities. An additional assessment will cover transportation, meals, and lodging for a one-week field trip to Andros Island, Bahamas. Updated information at [www.disl.org](http://www.disl.org). Prerequisites: BLY 121 and 122 and BLY 325 or BLY 325 or BLY 425 or BLY 475. Category D (usually taught in summer session).

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (BLY 325 Minimum Grade of C or BLY 425 Minimum Grade of C or BLY 475 Minimum Grade of C)

**BLY 470 Herpetology 4 cr**

A field course that emphasizes the ecology, evolution, natural history, characteristics, structure, function, geographic distribution, behavior, and systematics of amphibians and reptiles. Course includes structured writing assignments and focuses on good writing skills and forms. Laboratory and field work emphasize identification of specimens by name, habitat, and characteristics. Some field activities will occur at times other than the scheduled laboratory hours.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 471 Mar Invertebrate Zoology 4 cr**

A study of the natural history, systematics, and morphology of marine invertebrates. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

**Prerequisite:** (BLY 121 Minimum Grade of C or BLY 141 Minimum Grade of C) and (BLY 122 Minimum Grade of C or BLY 142 Minimum Grade of C) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 472 Marine Behavioral Ecology 4 cr**

The ecological and evolutionary significance of animal behaviors in the marine environment. Exercises will include analysis of data collected from laboratory and field experiments. Statistics recommended. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 474 Intro to Oceanography 4 cr**

A general introduction to the oceans, with emphasis on chemical, physical, and geological processes and their relation to biological systems. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

**Prerequisite:** (BLY 121 Minimum Grade of C or BLY 141 Minimum Grade of C) and (BLY 122 Minimum Grade of C or BLY 142 Minimum Grade of C) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 475 Marine Ecology 4 cr**

The relationship of marine organisms to their environment. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

**Prerequisite:** (BLY 121 Minimum Grade of C or BLY 141 Minimum Grade of C) and (BLY 122 Minimum Grade of C or BLY 142 Minimum Grade of C) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 478 Coastal Wetlands Ecology 4 cr**

This course will focus on near shore wetland areas and emphasize biogeochemical processes, productivity, biodiversity and ecosystem function, as well as address the issues that threaten and protect these valuable resources.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 483 Field Marine Science 1-4 cr**

Course consists of a 10-day field exercise in the tropical southeastern Gulf of Mexico (Florida Keys) and the temperate north Atlantic. Sites alternate annually. Faculty members with diverse interest accompany the students, participate in pre-trip readings and discussion sessions and evaluate the product developed by each student. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term. Requires Senior or Graduate standing in a major related to Marine Sciences and permission of instructor.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 484 Conservation Biology 3 cr**

The study of preserving biodiversity and sustaining ecosystems using a multidisciplinary approach. Primary emphasis will focus on the development of strategies for preservation and management using scientific principles and theory.

**Prerequisite:** (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 485 Evolutionary Biology 3 cr**

The study of mechanisms and historical patterns of evolutionary change in biological systems ranging from genes to phylogeny.

**Prerequisite:** (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 490 Special Topics 1-4 cr**

Small interested groups of students will study specialized topics not generally listed in the course offerings. Faculty and visiting professors will offer courses in their areas of specialization. This course may be taken more than once if the topic changes for a total of eight hours. Requires permission of the department.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 494 Directed Studies 1-4 cr**

Course is designed to enable the capable student to pursue independent research under the direction of a member of the faculty. Six hours of credit can be used to satisfy the 37 credit hours for the Biology major. Requires permission of the department chair.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 499 Honors Research in Biology-H-W 1-6 cr**

Experience in planning, conducting, and reporting a research project under the direction of the faculty. Requires overall GPA 3.0, Biology GPA 3.5, and permission of the faculty.

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (CH 115 Minimum Grade of D or CH 131 Minimum Grade of D) and (CH 116 Minimum Grade of D or CH 132 Minimum Grade of D)

**BLY 510 Prof in Science 3 cr**

The overall goal for this course to convey expectations and important "survival skills" required to succeed in the competitive world of science. Emphasis is placed on grant writing, publications, tenure and promotion, collegiality, productivity creativity, building a CV, alternative paths, and achieving balance between the professional and private life.

**BLY 511 Developmental Biology 3 cr**

A study of the principles that regulate the development of a complex, multicellular organism from a single cell with a focus on the underlying molecular mechanism and genetic regulation. Topics to be covered will include fertilization, differentiation, cell fate determination, pattern formation, organogenesis, and regeneration. Particular emphasis will be placed on the experimental approaches, both historical and contemporary, that led to our current understanding of the development of multicellular organisms.

**Prerequisite:** (BLY 302 Minimum Grade of D or BLY 311 Minimum Grade of D) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and BLY 363 Minimum Grade of D

**BLY 514 Expt Bact Genomics 4 cr**

An integrated lab-lecture course utilizing real-world research experience to explore the molecular genetics and genomics of bacteria. Students will be directly involved in the design, execution, analysis, and presentation of group research projects determining the function of genes from completed microbial genomes. A basic foundation in microbiology and genetics is required for this course.

**BLY 515 Ecotoxicology 4 cr**

The impact of chemicals as toxic agents on ecosystems. Students will understand types, sources, and effects of environmental toxicants, methods of testing and interpretation, and regulation of environmental toxicants. This material will be presented in the context of ecosystem health rather than human health. This is a core course for MS degree students in the Environmental Toxicology program.

**Prerequisite:** (BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C) and (CH 201 Minimum Grade of C and CH 202 Minimum Grade of C) and (CH 540 Minimum Grade of B and CH 541 Minimum Grade of B)

**BLY 520 Biometry 4 cr**

The application of statistical methodology, both univariate and multivariate techniques, to the solution of biological problems. This course is not designed as a substitute for instruction in statistics, but rather to complement previous course work. The laboratory will involve the use of PC computers to perform procedures on biological data and subsequent interpretation of the results. Prerequisites can be waived at the discretion of the instructor.

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (ST 175 Minimum Grade of D or ST 210 Minimum Grade of D or ST 540 Minimum Grade of C)

**BLY 525 Chemical Ecology 3 cr**

Chemical Ecology focuses on chemically mediated interactions within organisms in both aquatic and terrestrial environments. The topics covered include: chemoreception, chemical defense, chemical attraction, and the impact of chemical ecology on humans. Students will gain experience in critical analysis, research development, grant writing, and computer-based presentation. Requires permission of instructor.

**Prerequisite:** (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C) and (CH 201 Minimum Grade of C or CH 222 Minimum Grade of C)

**BLY 526 Freshwater Ecology 3 cr**

Course examines four aspects of freshwater ecology: physical and chemical properties of water, biotic communities, links among freshwater systems, and human influences on freshwater ecosystems. Students will be required to submit a collection of local freshwater invertebrates. Prerequisite: Ecology (equivalent to BLY 303). This prerequisite may be waived at the discretion of the instructor. Dual listed with BLY 426.

**Prerequisite:** BLY 303 Minimum Grade of C

**Cross-Listed:** BLY 426

**BLY 530 Marine Microbial Ecology 3 cr**

A general survey of the types of microorganisms found in the marine environment. Emphasis will be on the interaction of microorganisms with each other and with their environment. In particular, the role of microorganisms in the carbon cycling and biogeochemical processes will be stressed. Readings from current literature will expose students to the latest techniques and research.

**Cross-Listed:** MAS 530

**BLY 534 Plant Physiological Ecology 3 cr**

This course is an investigation into how plants function in their environment and is designed to meet the needs of students majoring in biology, ecology and/or various disciplines in plant biology. This course explores plant biology, plant-animal interactions, as well as, principles of ecology and evolution.

**Prerequisite:** BLY 121 Minimum Grade of C and BLY 122 Minimum Grade of C and BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C and BLY 431 Minimum Grade of C

**Cross-Listed:** BLY 434

**BLY 535 Biology of Fungi 4 cr**

Identification and morphology of fungi with some emphasis on their relation to human affairs. Collection required. Credit for both BLY 535 and 435 is not allowed.

**Cross-Listed:** BLY 435

**BLY 536 Advanced Animal Physiology 3 cr**

This class explores animal physiology, aiming to understand how animals work, from individual cells to whole organisms. We will take a comparative approach to understand the fundamental ways in which animals deal with the common challenges. A basic foundation in chemistry, molecular biology, cell biology, and evolutionary biology is required for this course. Students will complete a capstone independent literature review on a topic of their choice in the field of animal physiology.

**Cross-Listed:** BLY 436

**BLY 540 Biochemistry I 3 cr**

Study of the fundamental biochemical concepts; emphasis is placed on protein, carbohydrate, and lipid structure as related to their functional behavior; enzymes kinetics and mechanisms of action; thermodynamic relationships in biochemical systems. Offered only in Fall term. Cross-listed with CH 540.

**Prerequisite:** (CH 201 Minimum Grade of D or CH 222 Minimum Grade of D) and (CH 202 Minimum Grade of D or CH 223 Minimum Grade of D)

**Cross-Listed:** BLY 440

**BLY 541 Biochemistry II 3 cr**

Study of the reaction and regulations of intermediary metabolism; the biochemistry of genetics systems to include regulatory mechanisms and protein synthesis. Offered only in Spring term. Cross-listed with CH 541.

**Prerequisite:** BLY 540 (may be taken concurrently) Minimum Grade of B

**BLY 543 Lab Studies Biochemistry 2 cr**

Course familiarizes the student with basic laboratory techniques commonly employed in biochemical research. Offered only in Spring term. Cross-listed with CH 543.

**Prerequisite:** BLY 440 Minimum Grade of D or BLY 441 Minimum Grade of D or BLY 540 Minimum Grade of B or BLY 541 Minimum Grade of B

**Cross-Listed:** CH 543

**BLY 544 Molecular Biology 3 cr**

BLY 544 is a graduate course that covers the basic mechanisms by which organisms utilize, maintain and duplicate their genetic information. Topics to be covered include: organization of genes, the mechanisms and regulation of transcription, RNA processing and translation, the packaging of DNA as chromatin and its impact on gene expression, DNA replication, recombination and repair, and genomics and proteomics.

**BLY 549 Scientific Writing for Biologists 3 cr**

Writing and communication skills are amongst the most important assets for any biologist and is a broadly transferable skill regardless of career path. This course aims to demystify the writing process and teach the fundamentals of effective scientific writing. Instruction will focus primarily on the process of writing a research prospectus and publishing scientific manuscripts but grant writing will also be addressed.

**BLY 551 Marine Vertebrate Zoology 4 cr**

A study of marine vertebrates with emphasis on fishes; their systematics, zoogeography, and ecology. Students will have an opportunity to assemble a collection of vertebrate species. Course offered only through Marine Environmental Sciences Consortium. Credit for both BLY 551 and BLY 451 is not allowed.

**BLY 566 Introduction to Neurobiology 4 cr**

Neuroanatomy and neurophysiology of marine invertebrates and vertebrates. Topics include resting and action potentials, synaptic transmission, neurotransmitters, sensory transduction, muscle innervation, sensorimotor transformations, and the neurophysiological basis of behavior. Credit for BLY 566 and 466 is not allowed.

**Prerequisite:** ((BLY 121 Minimum Grade of C and BLY 121L Minimum Grade of C) or BLY 141 Minimum Grade of C) and ((BLY 122 Minimum Grade of C and (BLY 122L Minimum Grade of C) or BLY 142 Minimum Grade of C)

**BLY 568 Coral Reef Ecology 4 cr**

Ecology and evolution of coral reef, seagrass, and mangrove communities. An additional assessment will cover transportation, meals, and lodging for a one-week field trip Andros Island, Bahamas. Updated information at [www.disl.org](http://www.disl.org). Prerequisite: BLY 325, Ecology. Credit for BLY 568 and BLY 468 is not allowed.

**Prerequisite:** BLY 325 Minimum Grade of C

**BLY 570 Herpetology 4 cr**

A field course that emphasizes the ecology, evolution, natural history, characteristics, structure, function, geographic distribution, behavior, and systematics of amphibians and reptiles. Course includes structured writing assignments and focuses on good writing skills and forms.

Laboratory and field work emphasize identification of specimens by name, habitat, and characteristics. Some field activities will occur at times other than the scheduled laboratory hours. Oral classroom presentations required. Credit for BLY 470 and BLY 570 is not allowed.

**BLY 571 Marine Invertebrate Zoology 4 cr**

A study of the natural history, systematics and morphology of marine invertebrates. Credit for both BLY 571 and BLY 471 is not allowed.

**BLY 572 Marine Behavioral Ecology 4 cr**

The ecological and evolutionary significance of animal behaviors in the marine environment. Exercises will include analysis of data collected from laboratory and field experiments. Statistics recommended. Credit for BLY 572 and BLY 472 is not allowed.

**Prerequisite:** (BLY 122 Minimum Grade of C and BLY 122L Minimum Grade of C) or BLY 142 Minimum Grade of C

**BLY 573 Oceanol Gulf of Mexico 3 cr**

A descriptive study of the oceanology of the Gulf of Mexico, and adjacent waters, including coastal zone, continental shelf, and deep ocean.

**BLY 575 Marine Ecology 4 cr**

Their relationship of marine organisms to their environment. Credit for both BLY 575 and BLY 475 is not allowed.

**BLY 583 Field Marine Science I 1-4 cr**

The Field Marine Science course will consist of an 8 - 12 day field exercise in representative coastal sites. The field exercise is conducted in the term break prior to the term of registration for the course. Faculty members with diverse interests will accompany the students, participate in pre-trip discussions and evaluate the product developed by each student. The course is designed to familiarize students with habitats and research conditions different from those they experience on the Northern Gulf Coast. Field trip locations are selected on the basis of faculty and student interest, economics, and availability of logistical support. Students pay their room and board costs for the field exercise. The course is primarily for graduate students, but advanced undergraduates may enroll with consent of instructor. Both BLY 483/583 and 488/588 may be taken for credit when each is taught in a different environment.

**BLY 585 Evolutionary Biology 3 cr**

The study of mechanisms and historical patterns of evolutionary change in biological systems ranging from genes to phylogeny.

**BLY 589 Marine Plankton 3 cr**

The course familiarizes the student with the taxonomic breadth of phytoplankton, bacterioplankton and zooplankton in estuaries, coastal seas and open oceans. Though the focus is on taxonomic familiarization, basic biology of all major taxa, represented in the plankton will be covered. Students will learn fundamental, as well as "cutting-edge", field, lab, and statistical techniques.

**BLY 590 Special Topics - 1-4 cr**

Small, interested groups of students will study specialized topics not generally listed in the course offerings. Faculty and visiting professors will offer courses in their areas of specialization. This course may be taken more than once if the topic changes for a total of eight hours. Requires permission of the department.

**BLY 592 Seminar 1 cr**

Recent research in areas of special academic interest to students and faculty.

**BLY 594 Directed Studies - 1-4 cr**

Independent research under the direction of a member of the graduate faculty. A maximum of six credits may be used to meet degree requirements. Permission of instructor required.

**BLY 599 Thesis 1-4 cr**

Requires approval of research prospectus by student's graduate committee.

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
DELANEY TUCKER, CYNTHIA LEIGH (leighdelaney@southalabama.edu)	Biological Sciences	Senior Instructor	BS, University of West Florida MS, University of South Alabama
FROST, LAURA ANN (lafrost@southalabama.edu)	Biological Sciences	Assistant Professor	BS, University of Alabama PHD, University of Washington
HAMIL, TRAY WEATHINGTON (thamil@southalabama.edu)	Biological Sciences	Senior Instructor	BS, Univ of Alabama-Birmingham MS, University of South Alabama
HENNING, JEREMIAH A (henning@southalabama.edu)	Biological Sciences	Assistant Professor	BS, University of Wisconsin-Oshko MS, University of Wisconsin-Oshko PHD, University of Tennessee-Knox
HOWELL, JACQUELYN SUZANNE (jackiehowell@southalabama.edu)	Biological Sciences	Instructor	BS, University of South Alabama MS, University of South Alabama
ITZA, ERIN MARIE (eitza@southalabama.edu)	Biological Sciences	Instructor	BS, Southeast Missouri State U MS, Miami University
LITTLEFIELD, RYAN SCOTT (ryanlittlefield@southalabama.edu)	Biological Sciences	Assistant Professor	BA, Johns Hopkins University PHD, Scripps Research Institute
MAJOR, KELLY M. (kmajor@southalabama.edu)	Biological Sciences	Professor	BA, Elmira College PHD, University of Maine
MATA, JUAN LUIS (jmata@southalabama.edu)	Biological Sciences	Associate Professor	BS, Univ of Costa Rica MS, Univ of Costa Rica PHD, University of Tennessee-Knox
MCCREADIE, JOHN WILLIAM (jmccread@southalabama.edu)	Biological Sciences	Professor	BS, University of Guelph MS, Memorial Univ of Newfoundland PHD, Memorial Univ of Newfoundland
NI CHADHAIN, SINEAD M. (snichadhain@southalabama.edu)	Biological Sciences	Associate Professor	BS, University of Scranton PHD, University of Delaware
PEREZ, JONATHAN HEBBEL (jhperez@southalabama.edu)	Biological Sciences	Assistant Professor	BA, Amherst College PHD, University of California-Davis
STRICKLAND, JASON LAYNE (jasonstrickland@southalabama.edu)	Biological Sciences	Assistant Professor	BS, Angelo State University MS, Angelo State University PHD, University of Central Florida
TRAN, TUAN MINH (tmtran@southalabama.edu)	Biological Sciences	Assistant Professor	BS, Vietnam National University PHD, University of Wisconsin-Madison

# Biology (BS)

## Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		<b>40</b>
<i>Biology Core</i>		
C or better is required for these six courses		
A. Complete the following:		
BLY 121 & 121L	General Biology I and General Biology I Lab	4
BLY 122 & 122L	General Biology II and General Biology II Laboratory	4
B. Complete the following:		
BLY 300	Ecology	3
BLY 301	Cell Biology	3
BLY 302	Genetics	3
BLY 305	Introduction to Evolution	3
C. Students then must complete 20 hours of upper level Biology courses		20
<b>Other STEM Requirements</b>		
See list below.		
<b>Minor Requirements</b>		
A minor is required for this degree program		18-24
<b>A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE</b>		<b>120</b>

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

## Other STEM Requirements

Code	Title	Hours
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
CH 201 & 201L	Organic Chemistry I and Organic Chemistry I Lab	4
Select one of the following Options:		8-10
Option 1		
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab	
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab	
Option 2		
GY 111 & 111L	Physical Geology and Physical Geology Lab	
GY 112 & 112L	Earth History and Earth History Lab	
Select one of the following Options:		4-7
Option 1		
MA 113	Precalculus Trigonometry	
or MA 115	Precal Algebra-Trigonometry	
ST 210	Stat Reason and Application	

or BLY 304 Exp. Designs in Biology

Option 2

MA 125 Calculus I

**Total Hours**

**24-29**

## Major Milestones

Effective for fall, 2016, Major Milestones are used in all concentrations of the Biology Bachelor of Science major to help students stay on track for timely graduation. Each regular semester in the Biology major is a tracking term. In order to remain on track, students must complete the milestone requirements for each tracking term. These requirements are viewable on the Major Milestone table below.

Major milestone requirements apply only to full-time, degree-seeking students who first entered Fall 2016 or later. Milestone requirements do not apply to transfer students in the Biology program.

The sample academic plan viewable on the Major Milestone tab below is designed to ensure graduation in the Biology major in four years. Several academic plans are available – consult with your academic advisor for the plan that is the best fit for you. For specific course requirements, refer to the program requirements above and the General Education requirements of the College of Arts and Sciences.

## Biology Sample 4+Year Plan with Milestones

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
EH 101	English Composition I <sup>1</sup>	3
MA 115 or MA 113	Precal Algebra-Trigonometry <sup>1</sup> or Precalculus Trigonometry	4
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
BLY 121 & 121L	General Biology I and General Biology I Lab	4
<b>Milestone Notes</b>		
Must complete at least 12 hours with a 2.0 or higher GPA		
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
EH 102	English Composition II (or Honors)	3
ST 210	Stat Reason and Application	3
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
BLY 122 & 122L	General Biology II and General Biology II Laboratory	4
<b>Milestone Notes</b>		
EH 101 or EH 105	English Composition I <sup>1</sup> or Honors Composition - H	
CH 131	General Chemistry I (and lab with a grade of D or better) <sup>1</sup>	
<b>Hours</b>		<b>14</b>
<b>Second Year</b>		
<b>Fall</b>		
BLY 300	Ecology	3
BLY 302	Genetics	3
CH 201 & 201L	Organic Chemistry I and Organic Chemistry I Lab	4
Foreign Language I <sup>2</sup>		3
CA 110	Public Speaking <sup>2</sup>	3
<b>Milestone Notes</b>		

BLY 121	General Biology I (and lab with a grade of C or better) <sup>1</sup>	
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
BLY 301	Cell Biology	3
BLY 305	Introduction to Evolution	3
Foreign Language II <sup>2</sup>		3
English Literature <sup>2</sup>		3
History (US or West. Civ.) <sup>2</sup>		3
<b>Milestone Notes</b>		
CH 201 & 201L	Organic Chemistry I and Organic Chemistry I Lab (with a grade of D or better)	
Select one of the following with a grade of C or better:		
BLY 300	Ecology	
BLY 301	Cell Biology	
BLY 302	Genetics	
BLY 305	Introduction to Evolution	
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
Biology Elective 300 level or higher		4
Biology Elective 300 level or higher		3
Select one of the following:		4
GY 111 & 111L	Physical Geology and Physical Geology Lab	
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab	
Fine Arts Elective <sup>2</sup>		3
<b>Milestone Notes</b>		
Select one of the following with a grade of C or better:		
BLY 300	Ecology	
BLY 301	Cell Biology	
BLY 302	Genetics	
BLY 305	Introduction to Evolution	
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
Biology Elective 300 level or higher		3
Biology Elective 300 level or higher		3
Select one of the following:		4
GY 112 & 112L	Earth History and Earth History Lab	
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab	
Social/ Behavioral Elective <sup>2,3</sup>		3
Minor		3
<b>Milestone Notes</b>		
Apply for graduation		
<b>Hours</b>		<b>16</b>
<b>Fourth Year</b>		
<b>Fall</b>		
Biology Elective 300 level or higher		3
Humanities Elective <sup>2,3</sup>		3
Social/ Behavioral Elective <sup>2</sup>		3
Minor		3
Minor		3
<b>Milestone Notes</b>		
Complete a total of at least 12 upper division (300-400) Biology elective hours		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Biology Elective 300 level or higher		4
Humanities Elective <sup>2</sup>		3
Social/ Behavioral Elective <sup>2</sup>		3
Minor		3

**Milestone Notes**

Complete a total of at least 20 upper division (300-400) Biology elective hours	
<b>Hours</b>	<b>13</b>
<b>Total Hours</b>	<b>120</b>

<sup>1</sup> Students who earn an English ACT score of 27 or above, SAT score of 610 or above on the verbal portion, or a new SAT Reading Test can opt out of EH 101.

<sup>2</sup> Courses meet general education requirements.

<sup>3</sup> Must have one history elective and one literature elective. In addition, students must choose a second history or literature to complete a two-part sequence.

**Major Milestone Notes**

- Students with ACT Math scores 22-23 should take MTH 100 and MA 112 in the first semester, and they will graduate with 123 hours; MA 125 also satisfies the math requirement. Students with ACT Math scores 21 and below should begin math courses in the summer before Fall - Year 1.
- There may be additional prerequisites for upper level major electives. Refer to the bulletin for more information.
- All Arts and Sciences majors require a minor between 18 and 24 hours. Courses used in a minor can also be used for general education requirements or major requirements (up to two courses).
- Two designated writing (W) courses are required with at least one course chosen from offerings in the student's major or minor. Courses carrying this required credit are identified in the University Bulletin by a (W) after the course title.
- The Sample 4-year plan is designed as a guide for students preparing for their course selections. This information provides only a suggested schedule. Actual course selections should be made in consultation with an advisor.

**Biology (BS) - Environmental Science Concentration****Degree Requirements**

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		<b>40</b>
<i>Biology Core</i>		
C or better is required for these six courses:		
A. Complete the following:		
BLY 121 & 121L	General Biology I and General Biology I Lab	4
BLY 122 & 122L	General Biology II and General Biology II Laboratory	4
B. Complete the following:		
BLY 300	Ecology	3
BLY 301	Cell Biology	3
BLY 302	Genetics	3
BLY 305	Introduction to Evolution	3

C. Students then must complete 20 hours of upper level Biology courses (12 of which are taken from a selection of upper level Biology courses listed below) (<http://bulletin.southalabama.edu/programs-az/arts-sciences/biology/footnote1/>)<sup>1</sup>

BLY 314	Molecular Microbiology - W
BLY 360	Invertebrate Zoology
BLY 332	Biology of Algae
BLY 354	General Entomology
BLY 425	Chemical Ecology - W
BLY 426	Freshwater Ecology
BLY 433	Evolution of Vascular Plants
BLY 435	Biology of Fungi
BLY 455	Ornithology
BLY 459	General Parasitology
BLY 470	Herpetology
BLY 484	Conservation Biology

#### Other STEM Requirements

See list below

#### Minor Requirements

A minor is required for this degree program 18-24

**A MINIMUM OF 120 HOURS REQUIRED FOR DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

#### Footnote

<sup>1</sup> Other preapproved elective courses, such as BLY 490, may also be accepted on a course-by-course basis.

#### Other STEM Requirements

Code	Title	Hours
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
CH 201 & 201L	Organic Chemistry I and Organic Chemistry I Lab	4

Select one of the following Options: 8-10

##### Option 1

PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab	
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab	

##### Option 2

GY 111 & 111L	Physical Geology and Physical Geology Lab	
GY 112 & 112L	Earth History and Earth History Lab	

Select one of the following Options: 4-7

##### Option 1

MA 113 or MA 115	Precalculus Trigonometry or Precal Algebra-Trigonometry	
ST 210 or BLY 304	Stat Reason and Application or Exp. Designs in Biology	

##### Option 2

MA 125	Calculus I	
<b>Total Hours</b>		<b>24-29</b>

#### Notes:

Effective for Fall, 2016, Major Milestones are used in all concentrations of the Biology Bachelor of Science major to help students stay on track for timely graduation. Each regular semester in the Biology major is a tracking term. In order to remain on track, students must complete the milestone requirements for each tracking term. These requirements are viewable on the Major Milestone tab above.

Major milestone requirements apply only to full-time, degree-seeking students who first entered Fall 2016 or later. Milestone requirements do not apply to transfer students in the Biology program.

## Biology (BS) - Marine Biology Concentration

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		<b>40</b>

General Education (p. 96) 53-57

**Major Requirements 40**

#### Biology Core

C or better is required for these six courses:

##### A. Complete the following:

BLY 121 & 121L	General Biology I and General Biology I Lab	4
BLY 122 & 122L	General Biology II and General Biology II Laboratory	4

##### B. Complete the following:

BLY 300	Ecology	3
BLY 301	Cell Biology	3
BLY 302	Genetics	3
BLY 305	Introduction to Evolution	3

C. Students then must complete 20 hours of upper level Biology courses (8 of which are taken at the Dauphin Island Sea Lab)

#### Other STEM Requirements

See list below

#### Minor Requirements

A minor is required for this degree program 18-24

**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

#### Other STEM Requirements

Code	Title	Hours
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
CH 201 & 201L	Organic Chemistry I and Organic Chemistry I Lab	4

Select one of the following Options: 8-10

## Option 1

PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab

## Option 2

GY 111 & 111L	Physical Geology and Physical Geology Lab
GY 112 & 112L	Earth History and Earth History Lab

Select one of the following Options: 4-7

## Option 1

MA 113 or MA 115	Precalculus Trigonometry Precal Algebra-Trigonometry
ST 210 or BLY 304	Stat Reason and Application Exp. Designs in Biology

## Option 2

MA 125	Calculus I
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**Total Hours** 24-29**Notes:**

Effective for Fall, 2016, Major Milestones are used in all concentrations of the Biology Bachelor of Science major to help students stay on track for timely graduation. Each regular semester in the Biology major is a tracking term. In order to remain on track, students must complete the milestone requirements for each tracking term. These requirements are viewable on the Major Milestone tab above.

Major milestone requirements apply only to full-time, degree-seeking students who first entered Fall 2016 or later. Milestone requirements do not apply to transfer students in the Biology program.

## Biology (BS) - Senior Thesis Concentration

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		<b>40</b>
<i>Biology Core</i>		
C or better is required for these six courses:		
A. Complete the following:		
BLY 121 & 121L	General Biology I and General Biology I Lab	4
BLY 122 & 122L	General Biology II and General Biology II Laboratory	4
B. Complete the following:		
BLY 300	Ecology	3
BLY 301	Cell Biology	3
BLY 302	Genetics	3
BLY 305	Introduction to Evolution	3

C. Students then must complete 20 hours of upper level Biology courses 20

**Other STEM Requirements**

See list below

**Minor Requirements**

A minor is required for this degree program 18-24

**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE** 120

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

### Other STEM Requirements

Code	Title	Hours
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
CH 201 & 201L	Organic Chemistry I and Organic Chemistry I Lab	4

Select one of the following Options: 8-10

## Option 1

PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab

## Option 2

GY 111 & 111L	Physical Geology and Physical Geology Lab
GY 112 & 112L	Earth History and Earth History Lab

Select one of the following Options: 4-7

## Option 1

MA 113 or MA 115	Precalculus Trigonometry Precal Algebra-Trigonometry
ST 210 or BLY 304	Stat Reason and Application Exp. Designs in Biology

## Option 2

MA 125	Calculus I
--------	------------

**Total Hours** 24-29**Notes:**

Effective for Fall, 2016, Major Milestones are used in all concentrations of the Biology Bachelor of Science major to help students stay on track for timely graduation. Each regular semester in the Biology major is a tracking term. In order to remain on track, students must complete the milestone requirements for each tracking term. These requirements are viewable on the Major Milestone tab above.

Major milestone requirements apply only to full-time, degree-seeking students who first entered Fall 2016 or later. Milestone requirements do not apply to transfer students in the Biology program.

### Additional Information

The Biology Senior Thesis Program offers bright, academically motivated undergraduate students the opportunity to develop research and

communication skills in preparation for a graduate or professional career. To apply for admission into the program, a student must:

1. have completed BLY 121, BLY 121L, BLY 122, BLY 122L, CH 131, CH 132, plus one more upper division biology course.
2. have earned a 3.25 GPA or better in biology courses attempted.
3. have earned a 3.0 GPA or better overall.
4. obtain a recommendation from a faculty member.

In addition to fulfilling the requirements of the standard biology program, senior thesis students must:

1. participate in the Undergraduate Senior Thesis in Biology program for three terms; this may include summer terms.
2. complete a minimum of six credits of directed research, three credits of which must be Honors Research in Biology (BLY 499).
3. complete a research prospectus including an introduction, proposed methods, and relevant literature citations. The prospectus must be submitted and approved by their advisory committee during the first term of participation in the program.
4. complete a written thesis, which must be approved by the advisory committee.
5. present a public oral defense of the research project.
6. complete a poster presentation at the USA Annual Research Forum or the UCUR Annual Research Forum.

Students participating in the Biology Senior Thesis Program who have a 3.5 GPA will also be eligible for Departmental Honors status.

Biology students who are part of the University Honors College will meet requirements for the Undergraduate Biology Senior Thesis as well as those of the University's program.

## Biology (MS)

### Degree Requirements

#### Graduate Studies

The Master of Science degree in Biology is designed to provide qualified students the opportunity to further their knowledge in areas of biology, as indicated by course offerings and research interests of the faculty.

#### Requirements for Admission

Students are admitted each semester. Graduate classes are only offered in fall and spring semesters.

The following criteria supplement the Graduate School criteria (see Categories of Admission):

#### Regular Admission

1. A four-year undergraduate major in Biology, Botany, Zoology, or Environmental Biology with a minimum GPA of 2.5 (on a 4-point scale) in all biological courses taken.
2. One year of freshman chemistry and at least one semester of organic chemistry.
3. One year of physics or geology.
4. Mathematics through calculus or statistics.
5. International students who do not speak English as their native language must submit proof of proficiency. A minimum TOEFL test score of 560 on the paper-based test (PBT), 220 on the computer-

based test (CBT), 85 on the internet-based test (IBT), or a minimum score of 6.5 on the IELTS test.

6. Three letters of reference.
7. Students interested in entering the Thesis Program will submit a 750-word letter from the student indicating their research interests. Students interested in entering the non-thesis Program will submit a 500-word letter indicating their interest in the program and their future goals.
8. Students interested in entering the Thesis Program must have identified a mentor from Biology (the student should contact the Graduate Coordinator before applying to the program).
9. Submission of an updated resume or CV.

#### Non-Degree Admission

The Department of Biology accepts Non-Degree Graduate Students within the general admission and credit regulations of the University of South Alabama with certain reservations and limitations. Students should consult the Department concerning these limitations before applying for such status. Included, but not limited to, are the following:

1. Students are restricted to enrollment in courses prefixed BLY that the Chair determines will advance their career development in biological sciences. Only in exceptional cases, wherein it is determined to the satisfaction of the Chair that the aforementioned career goals are enhanced, will a non-degree student be permitted to enroll in courses offered by other departments.
2. Students must confer with the Chair or the Graduate Coordinator of the Department of Biology before attempting to enroll in any class.
3. Students seeking to change from non-degree status to a degree-granting program must reapply and be evaluated as any other student who has not previously applied to such a program.

#### Graduate Assistantships

The Department offers several types of assistantships to qualified students. Application forms for assistantships with primary responsibilities in teaching and preparing laboratories are available through the departmental office. Additionally, some assistantships with primary responsibility in research are usually available each year. These assistantships are associated with grants and contracts that support the research of individual faculty members. In all cases, assistantships are approved by the Dean of the Graduate School upon recommendation of the appropriate sponsor within the University.

#### Requirements for MS Degree for All Students

Students planning to pursue a Ph.D. are encouraged to follow the thesis option. However, a non-thesis curriculum is available for those students who so elect. The non-thesis degree allows students to further their academic credentials to prepare themselves for professional careers in healthcare, government, and private enterprise.

Together with the student's advisory committee, a curriculum will be developed that best aligns with the student's professional goals. If, in the opinion of a student's committee, the student lacks adequate undergraduate preparation or English skills, the student will be required to make up such deficiencies.

All requirements must be met in five years. In addition to satisfying the general requirements of the Graduate School, candidates for the Master of Science degree in Biology must satisfy the following requirements:

### Thesis Program

1. Complete, with a minimum grade of "B", 30 hours of coursework at the 500 level. Students must complete at least 18 hours of formal coursework in BLY (excluding directed studies and thesis) listed courses. No course at the 400 level or below may be taken for graduate credit. A maximum of six credit hours may be granted for Directed Studies (BLY 594). All courses must be approved by the student's graduate advisory committee. The student's graduate committee, after consultation with the student, may require demonstration of additional proficiency in mathematics, computer skills, statistics, and/or require the student to take additional coursework.
2. Included in the 18 hours of formal coursework, students will complete the following core sequence:

Code	Title	Hours
BLY 510	Prof in Science	3
BLY 520	Biometry	4
BLY 544	Molecular Biology	3
BLY 585	Evolutionary Biology	3
BLY 592	Seminar	1
Remaining 4 hours can be chosen from other 500-level BLY course		4
<b>Total Hours</b>		<b>18</b>

3. Complete a thesis representing original research. A maximum of 9 hours credit will be granted for the thesis. Enrollment in BLY 599 (Thesis) is not permitted until the student's research prospectus has been approved by the advisory committee and Director of Graduate Studies, College of Arts and Sciences.
4. Write a research prospectus during the first year of study and submit it to the advisory committee for approval. Once the prospectus is approved, the student will schedule an oral defense.
5. Defense of the prospectus serves as the comprehensive qualifying exam and begins with a presentation of the prospectus and, where applicable, a progress report. The examination will begin with the presentation and progress report, followed by questions from any area of study closely or broadly related to the area of specialization. The exam committee will consist of the student's advisory committee members.
6. Each committee member will issue a grade for the student, following a rubric that considers various aspects of the presentation and oral examination, and has three possible scores for each category: 1 (insufficient), 2 (meets expectations), and 3 (above expectations). To pass the exam, a student must have an average score of 2 or above. Students are encouraged to review the rubric before the presentation, so they are aware of the committee's expectations. Students who fail will be allowed a second opportunity to pass the exam.
7. Publicly present an oral defense of the thesis.

### Non-Thesis Program

1. Complete, with a minimum grade of "B", thirty hours of coursework at the 500 level. No course at the 400 level or below may be taken for graduate credit. A maximum of six credit hours may be granted for Directed Studies (BLY 594).
2. A thesis is not required. Consequently, BLY 599 (Thesis) may not be taken, and the six semester hours normally associated with thesis research must be earned through formal coursework.
3. Complete at least 18 hours of graduate coursework with the "BLY" designation, excluding BLY 594. Additional career-relevant graduate

courses may be selected from other departments, upon approval of the Graduate Coordinator or Departmental Chair. Included in the 18 hours of formal coursework, students will complete the following core sequence:

Code	Title	Hours
BLY 510	Prof in Science	3
BLY 520	Biometry	4
BLY 544	Molecular Biology	3
BLY 585	Evolutionary Biology	3
BLY 592	Seminar	1

4. Students will satisfy the comprehensive exam requirement by achieving a minimum of "B" in all core courses.
5. Transition between "thesis" and "non-thesis" options requires the majority consent of the student's advisory committee.

## Biology Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Minor in Biology

Twenty hours of biology are required, including:

Code	Title	Hours
BLY 121	General Biology I	3
BLY 121L	General Biology I Lab	1
BLY 122	General Biology II	3
BLY 122L	General Biology II Laboratory	1
BLY 300	Ecology	3
BLY 301	Cell Biology	3
BLY 302	Genetics	3
BLY 305	Introduction to Evolution	3
<b>Total Hours</b>		<b>20</b>

Credit will not be allowed for both the non-major sequence (BLY 101, BLY 101L and BLY 102, BLY 102L) and the major/minor sequence (BLY 121, BLY 121L, BLY 122, BLY 122L.)

## Chemistry

### Department Information

Department of Chemistry website

<https://www.southalabama.edu/colleges/artsandsci/chemistry/>

### Undergraduate Studies

The chemistry curriculum is designed for students seeking a liberal education as well as for those students requiring more specialized training and skills. The courses provide the foundation necessary for those planning careers as chemists and biochemists following graduation, for students planning to further their education through advanced degrees in chemistry, biochemistry, related sciences, and for those in other professional fields. Two basic curricula are offered for chemistry majors:

1. The American Chemical Society certified degree program in Chemistry is available for those students seeking technical positions in chemistry, as well as for those planning to attend graduate school, or
2. A Biochemistry Option track is available for students strongly interested in the interface of chemistry and biomedical or biological sciences, especially for students anticipating going to graduate school in medical sciences, biochemistry, biophysics, or other life sciences.

Students pursuing a degree in Chemistry also must have a minor in another discipline. All first-time freshmen must successfully complete CAS 100 as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry.

### Undergraduate Senior Thesis in Chemistry

The Chemistry Senior Thesis Program is designed to stimulate analytical and critical thinking and as such offers motivated and focused undergraduate students the opportunity to develop research and communication skills in preparation for a graduate or professional career. To apply for admission into the program, a student must:

1. Have Junior Chemistry Major status or above.
2. Have completed:
 

Code	Title	Hours
CH 131	General Chemistry I	3
CH 132	General Chemistry II	3
CH 201	Organic Chemistry I	3
CH 202	Organic Chemistry II	3
Plus one (1) more lower or upper division chemistry course		3
3. Have earned a 3.25 GPA or better in chemistry courses attempted.
4. Have earned a 3.0 GPA or better overall.
5. Obtain a recommendation from a faculty member who will serve as research mentor for senior thesis.

In addition to fulfilling the requirements of the standard chemistry program, senior thesis students must complete:

1. A minimum of six (6) semester hours of CH 499. Upon successful completion of six (6) hours of CH 499 the requirement for four (4) hours of CH 494 will be waived.
2. A formal research Project Prospectus needs to be submitted and approved by the student's research mentor during the first term of participation in program. The prospectus will be prepared under the supervision of the student's research mentor and should include an introduction to the proposed research project, proposed research methods, and relevant literature citations.
3. Complete a written research thesis.
4. The formation of a thesis committee will be at the discretion of the faculty mentor.
5. Present a formal oral defense of the research work to Chemistry Department faculty and students.
6. Complete a poster presentation at national, regional, or local research forum.

Examples of appropriate venues for the presentation include an ACS National meeting, the USA Annual Research Forum (Spring term) or the UCUR Annual Research Forum (Fall term). Students participating in the Chemistry Senior Thesis Program who have a 3.5 GPA will also

be eligible for Departmental Honors status. Chemistry majors who are part of the University Honors College will meet the requirements for the Undergraduate Chemistry Senior thesis as well as those of the University's program.

### Graduate Studies

Although the Department of Chemistry has no graduate degree programs, courses are offered at the graduate level for those students who need such work.

### Degrees, Programs, or Concentrations

- Chemistry ACS Certified Chemistry Track, Major (p. 153)
- Chemistry Biochemistry Track, Major (p. 155)
- Chemistry Minor (p. 156)

### Courses

#### CH 101 Survey of Inorg and Org Chem 3 cr

An intensive presentation of inorganic and organic chemistry principles selected to convey a basic understanding of their relationship to and function in the life process. Laboratory exercises will introduce students to basic laboratory procedures, often using exercises related to life process. This course is generally taken by students in the College of Nursing. CH 101L must be taken concurrently. Together, CH 101 and CH 101L count as one laboratory science course, partially fulfilling general education requirements. (Offered Fall and Spring Semesters.) Core Course.

**Corequisite:** CH 101L

#### CH 101L Survey Inorg-Org Chem Lab 1 cr

Laboratory exercises associated with CH 101. CH 101 must be taken concurrently or as a prerequisite. Together, CH 101 and CH 101L count as one laboratory science course, partially fulfilling general education requirements. Core Course.

**Corequisite:** CH 101

#### CH 131 General Chemistry I 3 cr

Three lecture hours and one recitation hour per week for one semester. First of a two-semester sequence for majors, minors, and others seeking quantitative treatment. Topics include the nuclear model, stoichiometry, chemical reactions, gas laws, thermochemistry, atomic structure, and molecular bonding. It is strongly suggested that students take CH 131 and CH 131L concurrently. Together, CH 131 and CH 131L count as one laboratory science course partially fulfilling general education requirements. (Offered Fall and Spring Semesters.) Core Course.

**Prerequisite:** CH 100 Minimum Grade of D or CH 110 Minimum Grade of D or A02 24 or S02 560 or S12 580 or MA 112 Minimum Grade of C or MA 113 Minimum Grade of C or MA 172 Minimum Grade of C or MA 115 Minimum Grade of C or MA 121 Minimum Grade of C or MA 120 Minimum Grade of C or MA 287 Minimum Grade of C or MA 125 Minimum Grade of C or MA 132 Minimum Grade of C or MA 126 Minimum Grade of C or MA 233 Minimum Grade of C or MMT 080 or UTM 85

**CH 131L General Chemistry I Lab 1 cr**

Laboratory exercises associated with CH 131. It is strongly suggested that students take CH 131 and CH 13 1L concurrently. Together, CH 131 and CH 13 1L count as one laboratory science course, partially fulfilling general education requirements. Core course.

**Prerequisite:** CH 100 Minimum Grade of D or CH 110 Minimum Grade of D or A02 24 or S02 560 or S12 580 or MA 112 Minimum Grade of C or MA 113 Minimum Grade of C or MA 172 Minimum Grade of C or MA 115 Minimum Grade of C or MA 121 Minimum Grade of C or MA 120 Minimum Grade of C or MA 287 Minimum Grade of C or MA 125 Minimum Grade of C or MA 132 Minimum Grade of C or MA 126 Minimum Grade of C or MA 233 Minimum Grade of C or MMT 080 or UTM 85

**CH 132 General Chemistry II 3 cr**

Continuation of CH 131. Topics include solutions, colligative properties, chemical kinetics, equilibrium, acids and bases, pH, buffers, titrations, thermodynamics, and electrochemistry. Additional topics may include nuclear chemistry, organic and biochemistry, chemistry of inorganic compounds, transition metal complexes, and industrial chemistry. It is strongly suggested that students take CH 132 and 1 32L concurrently. Together, CH 132 and CH 1 32L count as one laboratory science course, partially fulfilling general education requirements. (Offered Fall and Spring Semesters.) Core Course.

**Prerequisite:** CH 115 Minimum Grade of D or (CH 131 Minimum Grade of D and CH 131L Minimum Grade of D)

**CH 132L General Chemistry II Lab 1 cr**

Laboratory exercises associated with CH 132. It is strongly suggested that students take CH 132 and 132L concurrently. Together, CH 132 and CH 132L count as one laboratory science course, partially fulfilling general education requirements. Core course.

**Prerequisite:** CH 131 Minimum Grade of D and CH 131L Minimum Grade of D

**CH 141 Chemical Principles 4 cr**

A one-semester accelerated introductory course in chemistry for majors, minors, and others seeking a more physical and quantitative treatment. Covers stoichiometry, states of matter, chemical bonding and structure, solutions, kinetics, gaseous and aqueous equilibria, thermodynamics, electrochemistry, and nuclear chemistry. (Offered Fall and Spring Semesters). Core Course.

**Prerequisite:** TOL 45

**Corequisite:** CH 141L

**CH 141L Chemical Principles Lab 1 cr**

Laboratory exercises associated with CH 141. CH 141 must be taken concurrently or as a prerequisite. Together, CH 141 and CH 141L count as one laboratory science course, partially fulfilling general education requirements.

**Prerequisite:** CH 141 (may be taken concurrently) Minimum Grade of D

**Corequisite:** CH 141

**CH 150 Intro to Computer Chemistry 2 cr**

This course will introduce the student to direct application and use of computer activity for applications in chemistry; acquisition of data from instrumentation, data analysis, presentation of experimental data, and chemical structure and modeling programs.

**Prerequisite:** (CH 115 Minimum Grade of D or (CH 131 Minimum Grade of D and CH 131L Minimum Grade of D) or (CH 141 (may be taken concurrently) Minimum Grade of D and CH 141L (may be taken concurrently) Minimum Grade of D)) and ((MA 113 Minimum Grade of D or MA 172 Minimum Grade of D) or (MA 115 Minimum Grade of D or MA 121 Minimum Grade of D) or (MA 125 Minimum Grade of D or MA 132 Minimum Grade of D) or (MA 126 Minimum Grade of D or MA 233 Minimum Grade of D))

**CH 201 Organic Chemistry I 3 cr**

Fundamentals of structure and chemical behavior of organic molecules including nomenclature, properties, structure, stereochemistry, spectroscopy (both infrared and nuclear magnetic resonance), reactions, synthesis, and mechanisms of alkanes, alkenes, alkyl halides, and alcohols. (Offered Fall and Spring Semesters). CH 201L must be taken concurrently.

**Prerequisite:** CH 116 Minimum Grade of D or (CH 132 Minimum Grade of D and CH 132L Minimum Grade of D) or (CH 141 Minimum Grade of D and CH 141L Minimum Grade of D)

**Corequisite:** CH 201L

**CH 201L Organic Chemistry I Lab 1 cr**

Laboratory exercises associated with CH 201. (Offered Fall and Spring Semesters.) The laboratory introduces basic organic laboratory practices such as the collection of physical properties data, separation and purification techniques, synthesis, and spectroscopic methods. CH 201 must be taken concurrently or as a prerequisite.

**Prerequisite:** ((CH 116 Minimum Grade of D) or (CH 132 Minimum Grade of D and CH 132L Minimum Grade of D))

**Corequisite:** CH 201

**CH 202 Organic Chemistry II 3 cr**

Continuation of study of structure and chemical behavior of organic molecules including aromatic compounds, ketones and aldehydes amines, carboxylic acids and their derivatives, carbohydrates, amino acids, peptides and proteins, nucleic acids, alkynes, ethers and epoxides, and conjugated dienes. (Offered Fall and Spring Semesters.) CH 202L must be taken concurrently.

**Prerequisite:** (CH 201 Minimum Grade of D and CH 201L Minimum Grade of D) or CH 222 Minimum Grade of D

**Corequisite:** CH 202L

**CH 202L Organic Chemistry II Lab 1 cr**

Laboratory exercises associated with CH 202. The laboratory continues with the basic organic laboratory practices with additional synthetic methods. (Offered Fall and Spring Semesters.) CH 202 must be taken concurrently or as a prerequisite.

**Prerequisite:** (CH 222 Minimum Grade of D) or (CH 201 Minimum Grade of D and CH 201L Minimum Grade of D)

**Corequisite:** CH 202

**CH 265 Introductory Analysis 3 cr**

A detailed study of the fundamental theories and principles of chemistry with emphasis on their application to quantitative analysis. Because proficiency of the material covered in CH 132 is vital for success in this course, students are strongly advised to take the two courses as close together as schedules permit. (Offered Fall and Spring Semesters.)

**Prerequisite:** (CH 132 Minimum Grade of C and CH 132L Minimum Grade of C) or (CH 116 Minimum Grade of C)

**Corequisite:** CH 265L

**CH 265L Introductory Analysis Lab 1 cr**

Laboratory exercises associated with CH 265. (Offered Fall and Spring Semesters.) CH 265 must be taken concurrently or as a prerequisite.

**Prerequisite:** (CH 132 Minimum Grade of C and CH 132L Minimum Grade of C) or (CH 116 Minimum Grade of C)

**Corequisite:** CH 265

**CH 301 Physical Chemistry I 3 cr**

Gas Laws, First and Second Law of Thermodynamics, Phase Equilibrium, Chemical Equilibrium, Physical Chemistry of Solutions, Electrochemistry, Transport Properties, and Chemical Kinetics. (Offered Fall Semester).

**Prerequisite:** (CH 132 Minimum Grade of C and CH 132L Minimum Grade of C and MA 126 Minimum Grade of D) and (PH 115 Minimum Grade of D or PH 202 Minimum Grade of D)

**Corequisite:** CH 301L

**CH 301L Physical Chemistry I Lab-W 1 cr**

Laboratory exercises associated with CH 301. (Offered Fall Semester.) Lab is required for chemistry majors.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (CH 132 Minimum Grade of C and CH 132L Minimum Grade of C) and (MA 126 Minimum Grade of D) and (PH 202 Minimum Grade of D or PH 115 Minimum Grade of D)

**Corequisite:** CH 301

**CH 302 Physical Chemistry II 3 cr**

Quantum Theory and Applications to Atoms and Molecules, Spectroscopy, and Statistical Thermodynamics. (Offered Spring Semester.) Required for chemistry majors.

**Prerequisite:** ((CH 265 Minimum Grade of D and CH 265L Minimum Grade of D) or CH 266 Minimum Grade of D) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (MA 126 Minimum Grade of D or MA 223 Minimum Grade of D) and (PH 202 (may be taken concurrently) Minimum Grade of D or PH 217 Minimum Grade of D) or (MA 227 (may be taken concurrently) Minimum Grade of D or MA 234 (may be taken concurrently) Minimum Grade of D) and (PH 115 Minimum Grade of D or PH 113 Minimum Grade of D)

**Corequisite:** CH 302L

**CH 302L Physical Chemistry II Lab - W 1 cr**

Laboratory exercises associated with CH 302. (Offered Spring Semester.) Lab is required for chemistry majors.

**Prerequisite:** ((EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and CH 265 Minimum Grade of D) and (CH 265L Minimum Grade of D or CH 266 Minimum Grade of D) and (MA 126 Minimum Grade of D or MA 233 Minimum Grade of D) and (PH 202 (may be taken concurrently) Minimum Grade of D or PH 217 Minimum Grade of D) or (MA 227 (may be taken concurrently) Minimum Grade of D or MA 234 (may be taken concurrently) Minimum Grade of D) and (PH 115 Minimum Grade of D or PH 113 Minimum Grade of D)

**Corequisite:** CH 302

**CH 394 Directed Studies - 1-4 cr**

Student works in a research laboratory under faculty guidance. May be repeated; sum of all directed studies cannot exceed eight (8) credits. Requires Junior standing or permission of Department Chair.

**CH 401 Intern Inorganic Chemistry 3 cr**

Atomic and molecular structure and bonding emphasizing the use of symmetry, group theory, and molecular orbitals; NMR spectrometry; coordination chemistry; organometallic chemistry and homogeneous catalysis. (Offered Spring Semester).

**Prerequisite:** (CH 301 Minimum Grade of D and CH 301L Minimum Grade of D and CH 302 Minimum Grade of D and CH 302L Minimum Grade of D) or CH 333 Minimum Grade of D

**CH 413 Org Reaction Mech and Synth 3 cr**

Study of organic reaction kinetics and mechanisms. Study of the synthesis of natural products and their mechanism of formation with concurrent discussion of nuclear magnetic resonance spectroscopy. (Offered as required).

**Prerequisite:** (CH 202 Minimum Grade of D or CH 223 Minimum Grade of D) and (CH 301 Minimum Grade of D or CH 332 Minimum Grade of D)

**CH 440 Biochemistry I 3 cr**

Study of fundamental biochemical concepts; emphasis is placed on protein, carbohydrate, and lipid structures as related to their functional behavior; enzyme kinetics and mechanisms of action; thermodynamic relationships in biochemical systems. (Offered Fall Semester). Cross-listed with BLY 440.

**Prerequisite:** (CH 202 Minimum Grade of D or CH 223 Minimum Grade of D)

**Cross-Listed:** BLY 440

**CH 441 Biochemistry II 3 cr**

Study of the reaction and regulations of intermediary metabolism; the biochemistry of genetic systems to include regulatory mechanisms and protein synthesis. (Offered Spring Semester). Cross-listed with BLY 441.

**Prerequisite:** CH 440 Minimum Grade of D or BLY 440 Minimum Grade of D

**Cross-Listed:** BLY 441

**CH 443 Lab Studies in Biochemistry 2 cr**

Course familiarizes the student with the basic laboratory techniques commonly employed in biochemical research. (Offered Spring Semester). Cross-listed with BLY 443.

**Prerequisite:** CH 440 Minimum Grade of D or BLY 440 Minimum Grade of D

**Cross-Listed:** BLY 443

**CH 451 Biophysical Chemistry 3 cr**

The study of the hydrodynamic and optical properties and methods used to elucidate the structure, conformation and function of biological macromolecules. (Offered as required). Prerequisite: Permission of instructor

**Prerequisite:** (CH 300 Minimum Grade of D or CH 301 Minimum Grade of D or CH 332 Minimum Grade of D) and (CH 440 Minimum Grade of D or BLY 440 Minimum Grade of D)

**CH 465 Instrumental Analysis 3 cr**

Modern analytical instruments, their operating principles, and their applications. (Offered Fall Semester).

**Prerequisite:** ((CH 265 Minimum Grade of D and CH 265L Minimum Grade of D) or CH 266 Minimum Grade of D) and (CH 300 Minimum Grade of D and CH 300L Minimum Grade of D) or ((CH 302 Minimum Grade of D and CH 302L Minimum Grade of D) or CH 333 Minimum Grade of D) or ((CH 301 Minimum Grade of D and CH 301L Minimum Grade of D) or CH 332 Minimum Grade of D)

**Corequisite:** CH 465L

**CH 465L Instrumental Analysis Lab 2 cr**

Laboratory exercises associated with CH 465. (Offered Fall Semester.)

**Prerequisite:** ((CH 265 Minimum Grade of D and CH 265L Minimum Grade of D) or CH 266 Minimum Grade of D) and (CH 300 Minimum Grade of D and CH 300L Minimum Grade of D) or ((CH 302 Minimum Grade of D and CH 302L Minimum Grade of D) or CH 333 Minimum Grade of D) or ((CH 301 Minimum Grade of D and CH 301L Minimum Grade of D) or CH 332 Minimum Grade of D)

**Corequisite:** CH 465

**CH 490 Sp Top - 1-4 cr**

Study of a significant topic in Chemistry. May be repeated for a maximum of four credits when the content varies.

**CH 492 Seminar I 1 cr**

Information retrieval from scientific references, journals, and on-line databases directed toward computer-based preparation of a student seminar having as the capstone experience a formal seminar for Department Faculty and students. (Offered Spring Semester). Requires Senior standing.

**CH 494 Directed Studies 1-4 cr**

Student works in a research laboratory under faculty guidance. May be repeated; sum of all directed studies cannot exceed eight (8) credits. Requires Senior standing or permission of Department Chair.

**CH 499 Sr Honors Chemistry Project-H 3 cr**

Student research under faculty direction; written report and oral presentation of research work to faculty and students. This course may be repeated once for a maximum of six credits. Requires permission of department chair.

**CH 514 Environmental Chemistry 3 cr**

Introduces the cycling of elements in the earth as groundwork for understanding the chemical reactions and fate of chemical species introduced as contaminants to the environment. The chemistry of natural and anthropogenic contaminants in the atmosphere, the hydrosphere, the lithosphere and the transport and transformation of chemical species in the environment are discussed. CH 514L must be taken concurrently. (Offered in Fall Semester.)

**Prerequisite:** (CH 202 Minimum Grade of D or CH 223 Minimum Grade of D)

**Corequisite:** CH 514L

**CH 514L Environmental Chemistry Lab 1 cr**

Laboratory exercises associated with CH 514. Real-world samples will be used to learn appropriate isolation techniques followed by chemical and instrumental analysis. CH 514 must be taken concurrently. (Offered in Fall Semester.)

**Prerequisite:** (CH 202 Minimum Grade of D or CH 223 Minimum Grade of D)

**Corequisite:** CH 514

**CH 515 Environmental Toxicology 4 cr**

Introduction to the scientific and technical principles of toxicological processes in the context of the ecosystem. Students will understand both the types of major environmental toxicants and how to properly evaluate their toxicity and factors that influence toxicity. Students will recognize and coherently formulate risk assessment and by using the tools and techniques acquired, develop and communicate proposals for remedy.

**Prerequisite:** (BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C) and (CH 201 Minimum Grade of C and CH 202 Minimum Grade of C) and (CH 540 Minimum Grade of B and CH 541 Minimum Grade of B)

**Cross-Listed:** EXT 515, MAS 515

**CH 540 Biochemistry I 3 cr**

Study of fundamental biochemical concepts; emphasis is placed on protein, carbohydrate, and lipid structures as related to their functional behavior, enzyme kinetics and mechanisms of action; thermodynamic relationships in biochemical systems. (Offered Fall Semester.) Requires Graduate status. Cross-listed with BLY 540.

**Prerequisite:** (CH 202 Minimum Grade of D or CH 223 Minimum Grade of D)

**CH 541 Biochemistry II 3 cr**

Study of the reactions and regulations of intermediary metabolism; the biochemistry of genetic systems to include regulatory mechanisms and protein synthesis. (Offered Spring Semester.) Requires Graduate status. Cross-listed with BLY 541.

**Prerequisite:** CH 540 Minimum Grade of B or BLY 540 Minimum Grade of B

**CH 543 Lab Studies in Biochemistry 2 cr**

Course familiarizes the student with the basic laboratory techniques commonly employed in biochemical research. (Offered Spring Semester.) Requires Graduate status. Cross-listed with BLY 543.

**Prerequisite:** CH 441 (may be taken concurrently) Minimum Grade of D or CH 540 Minimum Grade of B or CH 541 (may be taken concurrently) Minimum Grade of B

**CH 551 Biophysical Chemistry 3 cr**

The study of the hydrodynamic and optical properties and methods used to elucidate the structure, conformation and function of biological macromolecules. (Offered as required.)

**Prerequisite:** (CH 300 Minimum Grade of D or CH 301 Minimum Grade of D or CH 332 Minimum Grade of D) and (CH 440 Minimum Grade of D or BLY 440 Minimum Grade of D)

**CH 565 Instrumental Analysis 3 cr**

Modern analytical instruments, their operating principles, and their applications. (Offered Fall Semester). Requires Graduate status.

**Prerequisite:** ((CH 265 Minimum Grade of D and CH 265L Minimum Grade of D) or CH 266 Minimum Grade of D) and (CH 300 Minimum Grade of D and CH 300L Minimum Grade of D) or ((CH 302 Minimum Grade of D and CH 302L Minimum Grade of D) or CH 333 Minimum Grade of D) or ((CH 301 Minimum Grade of D and CH 301L Minimum Grade of D) or CH 332 Minimum Grade of D)

**CH 565L Instrumental Analysis Lab 2 cr**

Laboratory exercises associated with CH 565. (Offered Fall Semester.) Requires Graduate status.

**Prerequisite:** ((CH 265 Minimum Grade of D and CH 265L Minimum Grade of D) or CH 266 Minimum Grade of D) and (CH 300 Minimum Grade of D and CH 300L Minimum Grade of D) or ((CH 302 Minimum Grade of D and CH 302L Minimum Grade of D) or CH 333 Minimum Grade of D) or ((CH 301 Minimum Grade of D and CH 301L Minimum Grade of D) or CH 332 Minimum Grade of D)

**CH 571 Oxy Trans Proteins Marine Org 3 cr**

Study of the structure-function relationship of oxygen transport proteins utilized by marine vertebrates and invertebrates. (Offered as required.)

**Prerequisite:** Graduate status or permission of instructor.

**CH 590 Special Topics - 1-4 cr**

Study of a significant topic in chemistry. May be repeated for a maximum of four credits when the content varies. Requires Graduate status.

**CH 592 Seminar 1 cr**

The use of scientific references and journals retrieval. Library assignment may be directed toward preparation of student seminars which are scheduled concurrently. (Offered as required). Requires Graduate status.

**CH 594 Directed Studies- 1-4 cr**

Literature survey and research under senior staff guidance. May be repeated but not to exceed four credits.

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
CLEMENTS, JOSIE WILLOW (jclements@southalabama.edu)	Chemistry	Instructor	BS, University of South Alabama MSET, University of South Alabama
COYM, JASON W. (jwcoym@southalabama.edu)	Chemistry	Associate Professor	BS, University of Texas- Austin PHD, Florida State University
DAVIS, JAMES H. (jdavis@southalabama.edu)	Chemistry	Professor	AB, University of North Alabama MS, Vanderbilt University PHD, Vanderbilt University
FORBES, DAVID C. (dforbes@southalabama.edu)	Chemistry	Professor	BS, University of Florida PHD, University of Illinois-Urbana
O'BRIEN, RICHARD A. (robrien@southalabama.edu)	Chemistry	Assoc Professor of Instruction	BS, South Dakota State University MS, University of North Dakota PHD, University of Nebraska -Lincoln
OERTLI, CHRISTIAN U (cuoertli@southalabama.edu)	Chemistry	Assistant Professor	MS, Swiss Federal Inst of Tech PHD, Swiss Federal Inst of Tech
PERINE, DONALD RAY (dperine@southalabama.edu)	Chemistry	Asst Prof of Instruction	BA, Dillard University MS, Ohio State U-Main Campus MBA, University of South Alabama DA, Middle Tennessee State U
REICHERT, WILLIAM MATTHEW (reichert@southalabama.edu)	Chemistry	Professor	BS, Berry College PHD, University of Alabama
SCHANZ, HANS (schanz@southalabama.edu)	Chemistry	Assistant Professor	BS, Univ of Bayreuth DNS, Univ of Bayreuth
STENSON, ALEXANDRA CLAUDIA (astenson@southalabama.edu)	Chemistry	Professor	BS, Florida State University PHD, Florida State University
STOJANOVIC, MILORAD (stojanovic@southalabama.edu)	Chemistry	Assistant Professor	BS, University of South Alabama PHD, Florida State University
SYKORA, RICHARD E. (rsykora@southalabama.edu)	Chemistry	Professor	BS, Troy University-Main PHD, Auburn University
WIERZBICKI, ANDRZEJ (awierzbicki@southalabama.edu)	Chemistry	Professor	MS, A. Mickiewicz University PHD, A. Mickiewicz University
YET, LARRY (lyet@southalabama.edu)	Chemistry	Associate Professor	BS, Univ of British Columbia MS, Ohio State U-Main Campus PHD, Ohio State U-Main Campus

## Chemistry ACS Certified Chemistry Track, Major

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		50-54
<b>Major Requirements</b>		<b>46</b>
A. Complete the following:		
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
CH 150	Intro to Computer Chemistry	2
CH 201 & 201L	Organic Chemistry I and Organic Chemistry I Lab	4
CH 202 & 202L	Organic Chemistry II and Organic Chemistry II Lab	4

CH 265 & 265L	Introductory Analysis and Introductory Analysis Lab	4
CH 301 & 301L	Physical Chemistry I and Physical Chemistry I Lab-W	4
CH 302 & 302L	Physical Chemistry II and Physical Chemistry II Lab - W	4
CH 401	Intern Inorganic Chemistry	3
CH 440	Biochemistry I	3
CH 465 & 465L	Instrumental Analysis and Instrumental Analysis Lab	5
CH 492	Seminar I	1
B. Select four hours from one or both of the following:		4
CH 394	Directed Studies -	
CH 494	Directed Studies	

#### Other STEM Requirements

See below for details on required coursework in Mathematics and Physics.

#### Minor Requirements

A minor is required for this degree program 18-24

**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

## Other STEM Requirements

Code	Title	Hours
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### Mathematics

Two semesters of calculus are required, as follows:

MA 125	Calculus I	4
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MA 126	Calculus II	4
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### Physics

A Physics or Physics/Mathematics sequence is required. Select one 8-14 of the following options:

Option 1:

PH 201	Calculus-Based Physics I	
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PH 202	Calculus-Based Physics II	
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Option 2:

PH 114	Physics with Algebra-Trig I	
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PH 115	Physics with Algebra -Trig II	
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MA 227	Calculus III	
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Option 3: (<http://bulletin.southalabama.edu/programs-az/arts-sciences/chemistry/footnote2/>)<sup>1</sup>

PH 114	Physics with Algebra-Trig I	
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PH 115	Physics with Algebra -Trig II	
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PH 201	Calculus-Based Physics I	
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Option 4: (<http://bulletin.southalabama.edu/programs-az/arts-sciences/chemistry/footnote2/>)<sup>1</sup>

PH 114	Physics with Algebra-Trig I	
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PH 115	Physics with Algebra -Trig II	
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PH 202	Calculus-Based Physics II	
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## Footnote

<sup>1</sup> Options 3 and 4 require the approval of the Chair of the Department of Physics.

## Graduation Plan

(121 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CH 131 & 131L	General Chemistry I and General Chemistry I Lab <sup>1</sup>	4
MA 125	Calculus I	4
CAS 100	First Yr Exp -	2
EH 101	English Composition I	3
Fine Arts	Area II, C <sup>2</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
CH 132 & 132L	General Chemistry II and General Chemistry II Lab <sup>1</sup>	4
CH 150	Intro to Computer Chemistry	2
MA 126	Calculus II	4
EH 102	English Composition II	3

History	Area IV, A <sup>2</sup>	3
<b>Hours</b>		<b>16</b>

### Second Year

#### Fall

CH 201 & 201L	Organic Chemistry I and Organic Chemistry I Lab	4
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PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	4
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Foreign Language	Area V, A <sup>2</sup>	3
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CA 110	Public Speaking	3
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<b>Hours</b>		<b>14</b>
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#### Spring

CH 202 & 202L	Organic Chemistry II and Organic Chemistry II Lab	4
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PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	4
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Foreign Language	Area V, A <sup>2</sup>	3
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Literature	Area II, B <sup>2</sup>	3
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Minor course		3
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<b>Hours</b>		<b>17</b>
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### Third Year

#### Fall

CH 265 & 265L	Introductory Analysis and Introductory Analysis Lab	4
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CH 301 & 301L	Physical Chemistry I and Physical Chemistry I Lab-W	4
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History, Social, or Behavioral Science	Area IV, B <sup>2</sup>	3
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Humanities	Area II, D	3
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Minor course		3
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<b>Hours</b>		<b>17</b>
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#### Spring

CH 302 & 302L	Physical Chemistry II and Physical Chemistry II Lab - W	4
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CH 394 or CH 494	Directed Studies - or Directed Studies	2
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Humanities	Area II, D <sup>2</sup>	3
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History, Social, or Behavioral Science	Area IV, B <sup>2</sup>	3
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Minor course		3
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<b>Hours</b>		<b>15</b>
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### Fourth Year

#### Fall

CH 440	Biochemistry I	3
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CH 465 & 465L	Instrumental Analysis and Instrumental Analysis Lab	5
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CH 394 or CH 494	Directed Studies - or Directed Studies	2
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Minor course		3
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<b>Hours</b>		<b>13</b>
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#### Spring

CH 401	Interm Inorganic Chemistry	3
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CH 492	Seminar I	1
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History, Social, or Behavioral Science	Area IV, B <sup>2</sup>	3
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Minor courses		6
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<b>Hours</b>		<b>13</b>
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<b>Total Hours</b>		<b>121</b>
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<sup>1</sup> While the General Chemistry I and II Lecture and Lab are not strict co-requisites, completion of both is required to enroll in any course for which they are a pre-requisite. It is very strongly suggested that CH 131 and CH 131L be taken the same semester, and CH 132 and CH 132L be taken the following semester.

<sup>2</sup> See General Education Requirements

## Chemistry Biochemistry Track, Major Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		50-54
<b>Major Requirements</b>		<b>44</b>
A. Complete the following:		
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
CH 150	Intro to Computer Chemistry	2
CH 201 & 201L	Organic Chemistry I and Organic Chemistry I Lab	4
CH 202 & 202L	Organic Chemistry II and Organic Chemistry II Lab	4
CH 265 & 265L	Introductory Analysis and Introductory Analysis Lab	4
Select one of the following:		4
CH 301 & 301L	Physical Chemistry I and Physical Chemistry I Lab-W	
CH 302 & 302L	Physical Chemistry II and Physical Chemistry II Lab - W	
CH 440	Biochemistry I	3
CH 441	Biochemistry II	3
CH 443	Lab Studies in Biochemistry	2
CH 465 & 465L	Instrumental Analysis and Instrumental Analysis Lab	5
CH 492	Seminar I	1
B. Select four hours from one or both of the following:		4
CH 394	Directed Studies -	
CH 494	Directed Studies	

### Other STEM Requirements

See below for details on required coursework in Mathematics and Physics.

### Minor Requirements

A minor is required for this degree program 18-24

**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

### Notes

**Electives:** Students in the Biochemistry track who desire ACS Certification of their degree must take CH 401 as an elective course.

### Other STEM Requirements

Code	Title	Hours
<b>Mathematics</b>		
Two semesters of calculus are required, as follows:		
MA 125	Calculus I	4
MA 126	Calculus II	4

### Physics

A Physics or Physics/Mathematics sequence is required. Select one 8-14 of the following options:

Option 1:

PH 201	Calculus-Based Physics I
PH 202	Calculus-Based Physics II

Option 2:

PH 114	Physics with Algebra-Trig I
PH 115	Physics with Algebra -Trig II
MA 227	Calculus III

Option 3: (<http://bulletin.southalabama.edu/programs-az/arts-sciences/chemistry/footnote2/>)<sup>1</sup>

PH 114	Physics with Algebra-Trig I
PH 115	Physics with Algebra -Trig II
PH 201	Calculus-Based Physics I

Option 4: (<http://bulletin.southalabama.edu/programs-az/arts-sciences/chemistry/footnote2/>)<sup>1</sup>

PH 114	Physics with Algebra-Trig I
PH 115	Physics with Algebra -Trig II
PH 202	Calculus-Based Physics II

### Footnote

<sup>1</sup> Options 3 and 4 require the approval of the Chair of the Department of Physics.

## Graduation Plan

(122 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CH 131 & 131L	General Chemistry I and General Chemistry I Lab <sup>1</sup>	4
CAS 100	First Yr Exp -	2
EH 101	English Composition I	3
MA 125	Calculus I	4
Fine Arts	Area II, C <sup>2</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
CH 132 & 132L	General Chemistry II and General Chemistry II Lab <sup>1</sup>	4
CH 150	Intro to Computer Chemistry	2
EH 102	English Composition II	3
MA 126	Calculus II	4
History	Area IV, A <sup>2</sup>	3
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
CH 201 & 201L	Organic Chemistry I and Organic Chemistry I Lab	4
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	4
CA 110	Public Speaking	3
Foreign Language	Area V, A <sup>2</sup>	3
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
CH 202 & 202L	Organic Chemistry II and Organic Chemistry II Lab	4

PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	4
Foreign Language	Area V, A <sup>2</sup>	3
Literature	Area II, B <sup>2</sup>	3
Minor course		3
<b>Hours</b>		<b>17</b>

**Third Year****Fall**

CH 301 & 301L	Physical Chemistry I and Physical Chemistry I Lab-W <sup>3</sup>	4
CH 440	Biochemistry I	3
History, Social, or Behavioral Science	Area IV, B <sup>2</sup>	3
Humanities	Area II, D	3
Minor course		3
<b>Hours</b>		<b>16</b>

**Spring**

CH 265 & 265L	Introductory Analysis and Introductory Analysis Lab	4
CH 441	Biochemistry II	3
CH 394 or CH 494	Directed Studies - or Directed Studies	2
History, Social, or Behavioral Science	Area IV, B <sup>2</sup>	3
Minor course		3
<b>Hours</b>		<b>15</b>

**Fourth Year****Fall**

CH 465 & 465L	Instrumental Analysis and Instrumental Analysis Lab	5
CH 394 or CH 494	Directed Studies - or Directed Studies	2
Humanities	Area II, D <sup>2</sup>	3
Minor course		3
<b>Hours</b>		<b>13</b>

**Spring**

CH 443	Lab Studies in Biochemistry	2
CH 492	Seminar I	1
Elective or Minor Course		3
History, Social, or Behavioral Science	Area IV, B <sup>2</sup>	3
Minor courses		6
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>122</b>

<sup>1</sup> While the General Chemistry I and II Lecture and Lab are not strict co-requisites, completion of both is required to enroll in any course for which they are a pre-requisite. It is very strongly suggested that CH 131 and CH 131L be taken the same semester, and CH 132 and CH 132L be taken the following semester.

<sup>2</sup> See General Education Requirements

<sup>3</sup> Biochemistry students must take one Physical Chemistry Lecture/Lab pair. CH 301/CH 301L is recommended for Biochemistry students and generally offered in the Fall; CH 302/CH 302L is allowed and generally offered in the Spring.

## Chemistry Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Minor in Chemistry

A minimum of 12 hours of Chemistry beyond the CH 132/CH 132L course level is required.

This minor will consist of:

Code	Title	Hours
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
CH 201 & 201L	Organic Chemistry I and Organic Chemistry I Lab	4
CH 202 & 202L	Organic Chemistry II and Organic Chemistry II Lab	4
CH 265 & 265L	Introductory Analysis and Introductory Analysis Lab	4
<b>Total Hours</b>		<b>20</b>

Students are advised to consult with the Chair of the Department of Chemistry.

## Communication

### Department Information

Department of Communication website  
<https://www.southalabama.edu/colleges/artsandsci/communication/index.html> (<https://www.southalabama.edu/colleges/artsandsci/communication/>)

The purpose of the Department of Communication is to provide students with core competencies, within the context of a broad liberal arts and sciences curriculum, which will prepare them to be independent, critical thinkers who uphold the highest ethical standards as communication leaders in a global society.

Given this purpose, the Department attempts to meet individual performance and career needs with a flexible curriculum. Students select one of the majors offered and confer with their advisors to plan their courses of study. These focused areas of study help prepare students for a variety of careers in the communication field.

The majors offered in the Department of Communication are: Communication Studies, Digital Film and Television Production, Journalism (Multimedia Journalism and Broadcast Journalism), and Advertising and Public Relations. Students pursuing one of these 4 degrees must also have a minor area.

The department also offers a Master of Arts in Communication, integrating theoretical and research components of mass, interpersonal, and organizational communication, preparing students for work and further academic studies in a lively intellectual environment. The small program size permits students and faculty to work closely together as a

community of learners. The program accepts students with a variety of undergraduate degrees and professional experiences.

All first-time freshmen must successfully complete CAS 100 as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry.

## Honors in Communication

The Communication Departmental Honors program offers undergraduate students an opportunity to prepare for a graduate program or professional career. Students in this program will use their communication skills to develop a formal research project.

To be awarded Departmental honors in communication, students must:

1. Complete the standard requirements for the major in communication.
2. Have an overall institutional GPA of 3.5 or higher (University requirement).
3. Have a minimum 3.5 GPA in all communication courses (Department requirement).
4. Complete a communication research methods course (CA 300) with an earned grade of "B" or higher. This course may be counted toward the communication degree and toward 3 hours of upper division credit.
5. Complete a minimum of 3 credit hours, and no more than 6 credit hours in the Senior Honors Project, CA 499. Students receiving honors in communication will be required to take a minimum of 48 hours in communication (including CA 110).
6. Successfully defend the final research project during an oral presentation to a faculty committee. It is recommended that the student present a summary of the project during the Department's colloquium series and/or another appropriate public forum.

Application procedure - Students must:

1. Have earned an overall institutional GPA of 3.5 or higher and a minimum 3.5 GPA in all communication courses.
2. Apply by April 1 of their junior year.
3. Receive agreement of a tenure-track faculty member of the Department of Communication to serve as mentor, and obtain a letter of recommendation from that faculty member.
4. Receive permission of the Department Chair.

## Degrees, Programs, or Concentrations

- Advertising & Public Relations (BA) (p. 165)
- Advertising & Public Relations Minor (<http://bulletin.southalabama.edu/programs-az/arts-sciences/communication/advertising-public-relations-minor/>)
- Communication (MA) (p. 167)
- Communication (MA) - Non-Thesis Concentration (<http://bulletin.southalabama.edu/programs-az/arts-sciences/communication/communication-ma-nonthesis-concentration/>)
- Communication (MA) - Thesis Concentration (<http://bulletin.southalabama.edu/programs-az/arts-sciences/communication/communication-ma-thesis-concentration/>)
- Communication Minor (p. 169)
- Communication Studies (BA) (p. 162)
- Digital Film & Television (BA) (p. 163)

- Digital Film & Television Minor (<http://bulletin.southalabama.edu/programs-az/arts-sciences/communication/digital-cinema-television-minor/>)
- Journalism (BA) (p. 164)
- Journalism Minor (<http://bulletin.southalabama.edu/programs-az/arts-sciences/communication/journalism-minor/>)

## Courses

### CA 100 Intro to Communication 3 cr

Course examines various approaches people take to communicating. Focuses on developing an awareness of how and why we communicate and why we do not always communicate effectively. Includes consideration of variables related to interpersonal, group, public, and mass-communication contexts.

### CA 101 Intro to Media 3 cr

Course examines the functioning of communication media in contemporary society including the political, economic and social environment. The structure and functions of newspapers, magazines, film, recording, radio, television, advertising and public relations industries are examined. The impact of the media on individuals and institutions is explored.

### CA 110 Public Speaking 3 cr

A beginning study of the principles of speech communication as they relate to speaker-audience communication. The student is provided an opportunity to develop the art of audience and subject analysis, research, critical thinking, organization, language, and delivery of speeches. This course includes a video component. Fee

### CA 200 Survey of Comm Theory 3 cr

Introductory survey of theoretical orientations in the field of human communication. Focuses on alternative explanations regarding elements of the communication process, models of communication, the communication act, and the communication relationship.

### CA 210 Argumentation 3 cr

Examines the role of argumentation in a democratic society and aims to develop critical thinking and reasoned advocacy. Course makes functional a knowledge of tests of evidence and the modes of logical reasoning. Students participate in various forms of argumentation and debating.

**Prerequisite:** EH 101 Minimum Grade of C and EH 102 Minimum Grade of C

**Cross-Listed:** ARG 210

### CA 211 Interpersonal Comm 3 cr

A study of communication behavior in the interpersonal setting. Focuses on development of knowledge, trust, understanding, supportiveness, etc., in a relationship, and their collective impact on the communication exchange.

**CA 220 Writing Comm Media - W 3 cr**

Intensive study of writing for various media and audiences. Specific attention is given to improvement of writing skills, including grammar, punctuation, spelling, word use, sentence composition, Associated Press style, and organization of material, as well as the different formats for the different media. Media styles studied include print, broadcast, on-line journalism, and public relations, which also includes a study of evaluating, documenting, and prioritizing facts in the writing of news stories and media releases for public relations. Computer fee.

**Prerequisite:** (A01 27 or S01 610 or USEH P or EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**CA 222 Rhetoric, Culture, and Society 3 cr**

Course examines rhetoric or the art of persuasion, as it relates to popular culture. Students will apply rhetorical theory to such topics as music, film, and advertising.

**Cross-Listed:** ARG 222

**CA 230 Comm in Organization 3 cr**

Application of communication principles and techniques to those aspects of one's life in an organization that have been shown to be the most difficult and troublesome parts of the communication milieu in the world of work. Includes interviewing, conference participation, leadership decisions, conflict management, and organizational change as communication phenomena.

**CA 260 Digital Writing and Production 3 cr**

This course considers the nature of the digital environment as it relates to communication. Topics include writing in the online environment, effective use of images and multimedia, and basic web design. Computer fee.

**CA 275 Decision Making - Small Groups 3 cr**

Theory and practice in leading and participating in small group decision making. Special focus on group problem solving and the management of conflict in small group decision-making meetings.

**CA 286 Principles of Public Relations 3 cr**

An overview of the principles and techniques of public relations. Concentrates on the role of public relations in our society, the audience for public relations, and the mass media as public relations vehicles.

**Prerequisite:** (A01 27 or S01 550 or USEH P or EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and CA 101 (may be taken concurrently) Minimum Grade of D

**CA 290 Special Topics - 1-3 cr**

A variable-topics course treating communication concepts and topics relevant to the disciplines. May be repeated once when course content changes for a total of six credit hours.

**CA 300 Fnds of Comm Research 3 cr**

Introduction to research foundations in the field of communication. Includes historical, critical, descriptive, and experimental methods. Computer fee.

**CA 310 Persuasion 3 cr**

Basic theories and techniques of persuasion and their application to typical communication situations and problems in today's society.

**CA 315 Gender and Communication 3 cr**

Examines communication between genders by exploring theoretical perspectives used of gender development, gender socialization, interactions and stereotypes. Includes discussions involving the lesbian, gay, bisexual, transgender and LGBTQ community.

**CA 330 Intercultural Communication-W 3 cr**

CA 330 is the study of the theory and practice of intercultural communication. This course's goal is to focus on global dialogues within critical organizational incidents. This course has three objectives: to explain the culture-based situational conflict model; to integrate theory and practice in the discussion of organizational conflict; and to provide an excellent opportunity for writing within the organizational communication content areas.

**CA 351 Social Effects Mass Comm 3 cr**

Examination of the interaction between mass communication and the social institutions of American society. Current research literature in the field will be analyzed and methods of improving the system will be discussed.

**Prerequisite:** CA 200 Minimum Grade of D

**CA 360 Comm and the Internet 3 cr**

Intensive study and application of rhetorical and communication theories to understanding problems that arise as the Internet and the World Wide Web begin to render fixed media-based communication obsolete. Implications for advertising, journalism, organizational record keeping and management, interpersonal communication, training, entertainment, etc. Computer fee

**CA 366 Visual Info Electron Com Media 3 cr**

Rhetorical issues in the design of Internet and World Wide Web materials. Focus on how motion, color, and other visual elements compete for audience attention; how rhetorical theory, learning theory, and communication theory inform the myriad decisions involved in visual presentation. This course will address these rhetorical issues from the creator's and user's view point. Computer fee

**CA 385 Magazine Writing and Editing 3 cr**

CA 385 is designed to give students a broad overview of the magazine industry and its current trends, while also teaching them the skills needed to become successful magazine writers.

**Prerequisite:** (CA 220 Minimum Grade of D or CA 280 Minimum Grade of D)

**CA 386 Public Relations Comm Meth - W 3 cr**

The course provides a framework for the development of solidly written pieces for the public relations professional. It examines the techniques and approaches to communication tools across various media channels including traditional, nontraditional and digital media as well as strategies and tactics of public relations campaigns for internal and external audiences. Prerequisites: CA 220 and CA 286. Computer fee.

**Prerequisite:** (CA 220 Minimum Grade of D or CA 280 Minimum Grade of D) and CA 286 Minimum Grade of D

**CA 388 History of the Mass Media 3 cr**

The role of journalism in American society from the Revolution to the present. This course is also listed as History 388.

**Cross-Listed:** HY 388

**CA 390 Special Topics - 1-3 cr**

An advanced variable-topic course treating communication concepts and topics relevant to the discipline. May be repeated twice for up to six hours credit.

**CA 394 Dir St - 1-3 cr**

Directed individual study of literature in an area of need and interest to the student. May be repeated for a maximum of six hours credit.

**CA 410 Advanced Persuasion 3 cr**

An advanced examination of an application of persuasive techniques in communication situations and contexts (e.g. field, laboratory, interpersonal, small group, nonverbal, mass communication).

**CA 411 Relational Communication 3 cr**

An examination of issues, theories, research and skills that apply to managing and nurturing close relationships. Emphasis is given to applying course concepts to promote relational growth and manage interpersonal conflict through interaction in relationships.

**CA 422 Rhetorical Theory 3 cr**

A broad survey of the Western rhetorical tradition designed to give students a working knowledge of rhetoric and its historical and contemporary influence on communicative events and perspectives.

**CA 424 Rhetorical Criticism - W 3 cr**

This course is designed to introduce students to the process of rhetorical analysis. Through criticism of communication artifacts, students learn to identify key elements of the rhetorical process and to develop critical thinking, writing, and viewing skills. The course prepares students to interpret, understand, analyze, and critique communication in diverse contexts including speeches, advertisements, interpersonal conversations, films, and works of art to name a few. Culminating experience for communication studies students.

**Prerequisite:** (A01 27 or S01 610 or USEH P or (EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S)) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**CA 425 Issues in Rhetoric 3 cr**

Close examination of a single contemporary rhetorical phenomenon. Topics will rotate based upon disciplinary relevance and student needs. May be repeated once for credit when content varies for a maximum of six credits.

**CA 430 Adv Organizational Communicatn 3 cr**

Study and application of organizational and communication theory of assessment of organizational and communication needs. Critical analysis of intervention programs and strategies.

**Prerequisite:** CA 230 Minimum Grade of D

**CA 435 Comm Training-Dev Programs - W 3 cr**

Review and analysis of communication training and development programs designed to solve communication problems in groups and organizations. Students will develop and present a training or development program. Computer fee

**CA 443 Film History 3 cr**

An examination of the development of motion pictures from 1893 to the present. Films representing major periods, movements, and styles will be examined.

**CA 444 Film & TV Aesthetics 3 cr**

A study of the formation and evolution of film and television genres. Selected genres will be studied in terms of their structure and cultural history.

**CA 445 Ethics-Social Respons Comm 3 cr**

Study of social responsibility and ethics in communication. Acquaints student with ethical standards and expectations society has for communicators. Capstone Course. Requires Junior or Senior standing.

**CA 449 Mass Media Social Effects 3 cr**

Examination of the interaction between mass communication and American society. Current research literature in the field will be analyzed and methods of improving the system will be discussed.

**Prerequisite:** CA 101 Minimum Grade of D

**CA 453 Campaign and Election Comm 3 cr**

Provides students with a broad overview of political communication from both historical and contemporary perspectives so students may understand how the subject has evolved over time to become a unique field of theoretical and research interest. Special attention is paid to campaigns and elections, agenda-setting research, and media power. The major focus is on the United States.

**Prerequisite:** CA 100 Minimum Grade of C or CA 101 Minimum Grade of C or PSC 130 Minimum Grade of C

**Cross-Listed:** PSC 453

**CA 455 Law of Communication 3 cr**

Study of the broad application of principles of law to American Communication, including study of free speech, freedom of information, mass media law and regulation including libel, copyright, and right of privacy.

**CA 456 Social Media and Politics 3 cr**

An examination of how and why digital information technologies are used by citizens, activists, journalists, and politicians to shape and influence individual's political participation and engagement and public policy and society.

**Prerequisite:** (PSC 130 or CA 100 or CA 101)

**Cross-Listed:** PSC 456

**CA 460 Comm. Technology Systems 3 cr**

An examination of the new communication technology systems with an emphasis on how they reconfigure patterns of communication organizations, production, storage, and dissemination. The role of communication technology systems today and tomorrow, and implications for organizational, local, national, and international contexts will be studied. Computer fee.

**CA 475 Comm-Group Processes 3 cr**

The nature of small group processes. Leadership, communication, and decision making in small groups.

**CA 476 Advertising Campaigns I 3 cr**

The course is one of a two course sequence and is the first half of the advertising concentration capstone. It synthesizes previous courses within the communication curriculum. Students will research and develop a strategic advertising plan for a national client.

**Prerequisite:** (CA 321 Minimum Grade of D or CA 365 Minimum Grade of D) and CA 322 Minimum Grade of D

**CA 478 Advertising Campaigns II 3 cr**

Students develop a strategic integrated advertising campaign for a selected client. Campaign development includes the integration of research, planning and objective setting, branding, message, media and creative strategies, promotions, budgeting and evaluations. Culminating experience for advertising and brand communication students. Prerequisite: CA 476.

**Prerequisite:** CA 476 Minimum Grade of D

**CA 484 Managing Public Relations 3 cr**

Study of the operation and objectives of corporate and agency public relations using the case study approach. Emphasis is given to relating the management function of decision-making and policy formation to the communication process.

**Prerequisite:** CA 300 Minimum Grade of D and CA 386 Minimum Grade of D

**CA 490 Special Topics 1-3 cr**

An advanced variable-topic course treating communication concepts and topics relevant to the discipline. May be repeated twice for up to six hours credit.

**CA 492 Seminar - 1-3 cr**

An investigation of advanced topics and concepts of communication. Topics will rotate based upon disciplinary relevance and student need. May be repeated once for credit when content varies for a maximum of six credit hours.

**CA 494 Directed Studies 1-3 cr**

Investigation of questions of special interest in communication. May be repeated to a maximum of six semester hours, provided no repetition of subject matter occurs. Students are required to file a description of their goals and objectives for their study. This description is to be specific so that it can serve in place of a syllabus for this course.

**CA 496 Prof Studies - Internship 1-3 cr**

On-the-job experience in a selected communication area related to potential career selection. Supervision by communication advisor and off-campus agency required. The Internship Program may be repeated for up to six credits. Requires prior approval of internship coordinator and student's advisor. Internship candidates must have at least a 2.5 overall GPA and at least a 2.75 major GPA.

**CA 499 Senior Honors Project - H 3-6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project, relevant to the field of Communication study, that will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty chaired by the honors mentor. This course is required for Honors recognition and may be repeated for up to six credit hours.

**CA 500 Found Graduate Study Comm 3 cr**

This three-hour course provides an introduction to graduate study in the University of South Alabama Communication Department and an introduction to academic writing. This is a web-enhanced course. We will meet throughout the semester face-to-face in seminar format and in an informal "Meet and Greet" for graduate students and faculty.

**CA 501 Qualitative Research Methods 3 cr**

An in-depth study of a variety of qualitative research methodologies and their use in communication research, along with study of the use and practical applications of mixed-method and triangulation research methods.

**CA 502 Communication Theory 3 cr**

A survey of the theoretical perspectives that guide the study of communication. Competing and complementary epistemological frameworks will be compared.

**CA 503 Quantitative Research Methods 3 cr**

An investigation of research used in the study of communication; in-depth study of a variety of quantitative methodologies used in basic and applied communication research settings; study of statistical applications and practical interpretations.

**CA 510 Persuasion in Professional Com 3 cr**

Advanced analysis and development of persuasive messages and argumentative strategies. Ethical responsibilities of the message sender will also be addressed.

**CA 511 Theor Found in Interper Comm 3 cr**

Review of the interpersonal communication research literature with respect to the process of mutual adaptation and negotiation. The social and psychological processes constraining and organizing interpersonal communication will be studied. Topics include verbal and nonverbal codes, message production and interpretation, conversation management, relationship definition, and interpersonal communication competence.

**CA 522 Rhetorical Strategy Prof Comm 3 cr**

A broad survey of the Western rhetorical tradition designed to give students a working knowledge of rhetoric and its historical and contemporary influence on communicative events and perspectives.

**CA 524 Rhetorical Criticism 3 cr**

This course is designed to introduce students to the process of rhetorical analysis. Through criticism of communication artifacts, students learn to identify key elements of the rhetorical process and to develop critical thinking, writing, and viewing skills. This course prepares students to interpret, understand, analyze, and critique communication in diverse contexts including speeches, advertisements, interpersonal conversations, films, and works of art to name a few.

**CA 525 Issues in Rhetoric 3 cr**

Close examination of a single contemporary rhetorical phenomenon. Topics will rotate based upon disciplinary relevance and student needs. May be repeated once for credit when content varies for a maximum of six credits.

**CA 530 Analysis of Comm in Orgs. 3 cr**

Analysis of interpersonal, dyadic, group, and organization-wide communication events that occur in organizational settings. Attention will be directed to the network of messages that occur in organizations and the organizational change that occurs when a message system is disrupted or changed. Organizational communication research methodologies will be introduced.

**CA 535 Comm. Training & Develop Prog. 3 cr**

Review and analysis of communication training and development programs designed to solve communication problems in groups and organizations. Students will develop and present a training or development program.

**CA 542 Moving Image Structure 3 cr**

An analysis of moving-image form and process makers who supervise, produce, and/or evaluate electronic and/or film media for organizations. Theories of narrative and of moving-image syntax provide principles for structuring media content and managing the production process.

**CA 545 Communication Ethics 3 cr**

Advanced analysis and interaction between organizations and the social institutions of American society. Study of the literature and communication ethics and social responsibility.

**CA 549 Media Effects 3 cr**

A study of the role of corporate and public communication in the American social structure, including mass media extensions and impact upon institutions. Consideration of historical, legal, social, and economic issues.

**CA 555 Corp. and Public Comm. Law 3 cr**

A survey of the law as it deals with public communication. The course provides a working knowledge of First Amendment theory, copyright, trademark, advertising, contracts, access and administrative laws as they relate to the public relations environment.

**CA 560 Social Media Management 3 cr**

This course explores the roles, scopes, functions and impact of social media in communication, society, and business. Social media have caused a paradigm shift in the communication landscape. This course will teach students how to critically examine the dynamics of social media in different areas of global communication. We will investigate theoretical and research phenomena of social media management.

**CA 561 Teaching & Professionalism 3 cr**

This course will explore the practice of teaching and learning. In this course, the primary goal is to help students to make the transition from student to future colleague, thus there will also be a heavy emphasis on professionalization in the communication studies discipline.

**CA 570 Audience Dynamics 3 cr**

CA 570 explores how audience dynamics (attitudes, feelings, beliefs, experiences, values, needs, and behavior) influence message development in public relations and advertising campaigns.

**CA 575 Investigation of Group Comm. 3 cr**

An in-depth analysis of group communication theories. Topics to be covered include decision making, conflict, conformity, leadership, and observation methods.

**CA 576 Historical Perspectives of SC 3 cr**

An in-depth study of the field of strategic communication focusing specifically on the cultural history of advertising and public relations, as well as the contemporary issues, problems, and challenges facing these industries.

**CA 585 Reputation Management 3 cr**

CA 585 is designed to provide graduate students with a working knowledge of public relations crisis management. Course material focuses on actions to take and actions to avoid in handling a crisis situation from a public relations perspective, and how to work with management, employees, affected publics and the media.

**CA 587 Tideline Student Agency 3 cr**

This course allows graduate students to create and execute advertising and public relations strategies in an agency setting for select clients. Graduate students will have a supervisory role on assigned projects.

**CA 590 Sp Top in Comm - 1-3 cr**

A detailed examination of selected topics in communication theory. Topic announced prior to registration. Course may be repeated once when subject matter varies.

**CA 592 Seminar in Comm Theory 1-3 cr**

Departmental seminar investigating a selected field of communication theory through in-depth evaluation of its accompanying body of literature. Topic announced prior to registration. Course may be repeated once when subject matter varies.

**Prerequisite:** CA 500 (may be taken concurrently)

**CA 594 Dir St in Communication - 1-3 cr**

Independent research in field, laboratory, or library under the direction of a member of the graduate faculty.

**CA 596 Professional Studies - Intern 1-3 cr**

This course offers on-the-job experience related to student's course work in the Master of Arts in Communication program. Before enrolling in CA 596 students will consult with the Communication Department Graduate Coordinator regarding internship opportunities and eligibility.

**CA 599 Thesis 1-3 cr**

Students work independently to plan, research, and write results of an original research project. Students must have completed 24 hours of course work before enrolling in this course. Six credit hours of this course is required to complete the MA Thesis Option Degree in Communication. However, no more than 3 credit hours may be taken in any one semester without the expressed permission of the graduate faculty.

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
BOVENIZER, GEORGE H (gbovenizer@southalabama.edu)	Communication Arts	Assistant Professor	BA, Stetson University MS, Columbia U in the City of NY PHD, Regent University
BUSH, NADIA K. (nbush@southalabama.edu)	Communication Arts	Senior Instructor	BA, University of South Alabama MA, University of South Alabama
CHOI, JUNG HWA (jchoi@southalabama.edu)	Communication Arts	Assistant Professor	BA, Michigan State University MA, Michigan State University PHD, University of Texas- Austin
KOURY, KATHERINE BELL (kkoury@southalabama.edu)	Communication Arts	Senior Instructor	BA, University of South Alabama MA, University of South Alabama
SPARKS, MEGAN SEBASTIAN (mspark@southalabama.edu)	Communication Arts	Senior Instructor	BA, University of South Alabama MA, University of South Alabama
STEVENS, JOHNNY LEWIS (jlstevens@southalabama.edu)	Communication Arts	Part-Time Instructor	BS, Syracuse University MA, American University
TAYLOR, APRIL DUPREE (adupreetaylor@southalabama.edu)	Communication Arts	Assistant Professor	BS, University of Southern Miss MS, University of Southern Miss PHD, University of South Alabama

WALTER, MELISSA RAE  
(mwalter@southalabama.edu)

Communication Arts

Instructor

BA, University of South Alabama  
MA, University of South Alabama  
MS, University of South Alabama

# Communication Studies (BA)

## Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		<b>42</b>
<i>Communication Studies</i>		
A. Complete the following:		
CA 100	Intro to Communication	3
CA 200	Survey of Comm Theory	3
CA 210	Argumentation	3
CA 222	Rhetoric, Culture, and Society	3
CA 260	Digital Writing and Production	3
CA 275	Decision Making - Small Groups	3
CA 300	Fnds of Comm Research	3
CA 310	Persuasion	3
CA 445	Ethics-Social Respons Comm	3
B. Select 5 from the following:		15
CA 211	Interpersonal Comm	
CA 230	Comm in Organization	
CA 315	Gender and Communication	
CA 330	Intercultural Communication-W	
CA 360	Comm and the Internet	
CA 410	Advanced Persuasion	
CA 411	Relational Communication	
CA 422	Rhetorical Theory	
CA 424	Rhetorical Criticism - W	
CA 430	Adv Organizational Communicatn	
CA 453	Campaign and Election Comm	
CA 456	Social Media and Politics	
CA 496	Prof Studies - Internship	
<b>Minor Requirements</b>		<b>18-24</b>
A minor is required for this degree program		
<b>A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE</b>		<b>120</b>

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

## Graduation Plan

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
EH 101	English Composition I	3
CA 110	Public Speaking	3
Math	Area III, A <sup>1</sup>	3
CA 100	Intro to Communication	3
<b>Hours</b>		<b>14</b>

<b>Spring</b>		
EH 102	English Composition II	3
Fine Arts	Area III, C <sup>1</sup>	3
Humanities/Fine Arts	Area II, E <sup>1</sup>	3
Lab Science	Area III, B <sup>1</sup>	4
History	Area IV, A <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
Language	Area II, B <sup>1</sup>	3
Lab Science	Area III, B <sup>1</sup>	4
CA 200	Survey of Comm Theory	3
CA 210	Argumentation	3
CA 222	Rhetoric, Culture, and Society	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Language	Area II, B <sup>1</sup>	3
Literature	Area II, D <sup>1</sup>	3
Lab Science	Area III, B <sup>1</sup>	4
History/SBS	Area IV, B <sup>1</sup>	3
CA 260	Digital Writing and Production	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
History/SBS	Area IV, B <sup>1</sup>	3
CA 275	Decision Making - Small Groups	3
CA 300	Fnds of Comm Research	3
Minor	Minor course <sup>2</sup>	3
Minor	Minor course <sup>2</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
CA choose	Communication elective <sup>3</sup>	3
CA choose	Fundamentals of Communication Research	3
CA 310	Persuasion	3
Humanities/Fine Arts	Area II, E <sup>1</sup>	3
Minor	Minor course <sup>2</sup>	3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
History/SBS	Area IV, B <sup>1</sup>	3
CA 445	Ethics-Social Respons Comm	3
CA choose	Communication elective <sup>3</sup>	3
Minor	Minor course <sup>2</sup>	3
Minor	Minor course <sup>2</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Elective	Elective hours <sup>4</sup>	3
CA choose	Communication elective <sup>3</sup>	3
CA choose	Communication elective <sup>3</sup>	3
Minor	Minor course <sup>2</sup>	3
Minor	Minor course <sup>2</sup>	3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>122</b>

<sup>1</sup> See General Education Requirements

<sup>2</sup> All Arts and Sciences majors require a minor between 18 and 24 hours. This plan incorporates a 21-hour minor.

<sup>3</sup> Courses may be selected from CA 211, CA 230, CA 315, CA 330 (W), CA 360, CA 410, CA 411, CA 424 (W), CA 430, CA 453, CA 456, CA 475, CA 496

<sup>4</sup> The number of elective hours required will depend on the number of hours required by your minor. Work with your advisor to determine the number of elective hours you must take.

## Digital Film & Television (BA)

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		<b>42</b>
<i>Communication Core</i>		
A. Complete the following:		
CA 101	Intro to Media	3
CA 220	Writing Comm Media - W	3
<i>Digital Cinema and Television</i>		
A. Complete the following:		
DFT 241	Intro TV Studio Production	3
CA 260	Digital Writing and Production	3
DFT 320	Film and TV Scriptwriting-W	3
DFT 340	Video Field Production	3
DFT 341	Intermediate TV Studio Prod	3
DFT 356	Digital Cinema Management	3
DFT 440	Adv Video Field Production	3
B. Select one of the following:		
DFT 343	Film History	3
DFT 344	Film and TV Genres	3
C. Select four of the following:		
DFT 240	Digital Cinema Prod Basics	12
DFT 244	Radio Broadcasting	
CA 275	Decision Making - Small Groups	
DFT 283	Chinese Film	
DFT 343	Film History (if not chosen above)	
DFT 344	Film and TV Genres (if not chosen above)	
DFT 357	Basic Film Production	
DFT 358	Digit Comp, Animation & Graph	
JOU 382	Photojournalism	
CA 424	Rhetorical Criticism - W	
DFT 441	Adv TV Studio Production	
JOU 452	The News Documentary	
CA 496	Prof Studies - Internship	
<b>Minor Requirements</b>		<b>18-24</b>
A minor is required for this degree program		
<b>A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE</b>		<b>120</b>

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

### Graduation Plan

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
EH 101	English Composition I	3
CA 110	Public Speaking	3
Math	Area III, A <sup>1</sup>	3
CA 101	Intro to Media	3
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
EH 102	English Composition II	3
Fine Arts	Area II, C <sup>1</sup>	3
Humanities/Fine Arts	Area II, E <sup>1</sup>	3
Lab Science	Area III, B <sup>1</sup>	4
History	Area IV, A <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
Language	Area II, B <sup>1</sup>	3
Lab Science	Area III, B <sup>1</sup>	4
CA 220	Writing Comm Media - W	3
Hum/Fine Arts	Area II, E <sup>1</sup>	3
History/SBS	Area IV, B <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Language	Area II, B <sup>1</sup>	3
Literature	Area II, D <sup>1</sup>	3
Lab Science	Area III, B <sup>1</sup>	4
History/SBS	Area IV, B <sup>1</sup>	3
CA 260	Digital Writing and Production	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
DFT 241	Intro TV Studio Production	3
DFT 320	Film and TV Scriptwriting-W	3
DFT 240	Digital Cinema Prod Basics	3
Minor	Minor course <sup>2</sup>	3
Minor	Minor course <sup>2</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
History/SBS	Area IV, B <sup>1</sup>	3
DFT 343	Film History	3
or DFT 344	or Film and TV Genres	
DFT 341	Intermediate TV Studio Prod	3
Minor	Minor course <sup>2</sup>	3
Minor	Minor course <sup>2</sup>	3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
DFT 340	Video Field Production	3
DFT 356	Digital Cinema Management	3
DFT choose	DFT elective <sup>3</sup>	3
Minor	Minor course <sup>2</sup>	3
Minor	Minor course <sup>2</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
DFT 440	Adv Video Field Production	3
Minor	Minor course <sup>2</sup>	3
Elective	Elective hours <sup>4</sup>	3
DFT choose	DFT elective <sup>3</sup>	3

DFT choose	DFT elective <sup>3</sup>	3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>122</b>

<sup>1</sup> See General Education Requirements.

<sup>2</sup> All Arts and Sciences majors require a minor between 18 and 24 hours.

<sup>3</sup> Courses may be selected from DFT 244, CA 275, DFT 283, DFT 343 (if not selected above), DFT 344 (if not selected above), DFT 357, DFT 358, JOU 382, CA 424 (W), DFT 441, JOU 452, APR 487, CA 496.

<sup>4</sup> The number of elective hours required will depend on the number of hours required by your minor. Work with your advisor to determine the number of elective hours you must take.

## Journalism (BA)

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		<b>42</b>
<i>Journalism Core</i>		24
A. Complete the following:		
CA 101	Intro to Media	3
CA 220	Writing Comm Media - W	3
CA 260	Digital Writing and Production	3
CA 300	Fnds of Comm Research	3
JOU 350	Broadcast News	3
JOU 370	Interm Reporting-Writing-W	3
CA 445	Ethics-Social Respons Comm	3
CA 455	Law of Communication	3
Select one of the Concentrations A or B below:		18
<b>Minor Requirements</b>		<b>18-24</b>
A minor is required for this degree program		
<b>A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE</b>		<b>120</b>

Code	Title	Hours
<i>A. Multimedia Journalism Concentration</i>		<i>18</i>
I. Complete the following:		
JOU 281	Editing and Layout	3
JOU 382	Photojournalism	3
JOU 387	Magazine & Feature Writing-W	3
JOU 482	Multi-Media Story Telling	3
II. Select two of the following:		
JOU 252	Media Literacy Digital Age	
JOU 288	History of the Mass Media	
JOU 327	International Media	
JOU 353	Broadcast News Editing	
JOU 354	Media and Politics	
CA 449	Mass Media Social Effects	
JOU 472	Enterprise Reporting	
JOU 481	Opinion Writing - W	
CA 496	Prof Studies - Internship	

Code	Title	Hours
<i>B. Broadcast Journalism Concentration</i>		<i>18</i>
I. Complete the following:		
JOU 250	Radio and TV Performance	3
JOU 353	Broadcast News Editing	3
JOU 450	Adv Broadcast News	3
JOU 454	Newscast Practicum	3
II Select two of the following:		
JOU 270	Sports Journalism	
JOU 252	Media Literacy Digital Age	
JOU 288	History of the Mass Media	
JOU 327	International Media	
JOU 354	Media and Politics	
JOU 382	Photojournalism	
CA 449	Mass Media Social Effects	
JOU 482	Multi-Media Story Telling	
CA 496	Prof Studies - Internship	

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

## Graduation Plan

Multiple Degree Plans Available. Select to View Option

### Journalism (BA): Broadcast Journalism Concentration (120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
EH 101	English Composition I	3
Fine Arts	Area II, C <sup>1</sup>	3
Math	Area III, A <sup>1</sup>	3
CA 101	Intro to Media	3
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
EH 102	English Composition II	3
CA 110	Public Speaking	3
HUM/FA	Area II, E <sup>1</sup>	3
Lab Science	Area III, B <sup>1</sup>	4
History	Area IV, A <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
Language	Area II, B <sup>1</sup>	3
Lab Science	Area III, B <sup>1</sup>	4
CA 220	Writing Comm Media - W	3
CA 260	Digital Writing and Production	3
HY/SBS	Area IV, B <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Language	Area II, B <sup>1</sup>	3
Literature	Area II, D <sup>1</sup>	3
HY/SBS	Area IV, B <sup>1</sup>	3
JOU choose	Journalism elective <sup>3</sup>	3

JOU 250	Radio and TV Performance	3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
JOU 370	Intern Reporting-Writing-W	3
JOU 350	Broadcast News	3
JOU 353	Broadcast News Editing	3
Lab Science	Area III, B <sup>1</sup>	4
Minor	Minor course <sup>2</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
CA 300	Fnds of Comm Research	3
JOU 450	Adv Broadcast News	3
HUM/FA	Area II, E <sup>1</sup>	3
Minor	Minor course <sup>2</sup>	3
Minor	Minor course <sup>2</sup>	3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
HY/SBS	Area IV, B <sup>1</sup>	3
CA 455	Law of Communication	3
JOU choose	Journalism elective <sup>3</sup>	3
Minor	Minor course <sup>2</sup>	3
Minor	Minor course <sup>2</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Elective	Elective hours <sup>4</sup>	3
CA 445	Ethics-Social Respons Comm	3
JOU 454	Newscast Practicum	3
Minor	Minor course <sup>2</sup>	3
Minor	Minor course <sup>2</sup>	3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>122</b>

<sup>1</sup> See General Education Requirements.

<sup>2</sup> All Arts and Sciences majors require a minor between 18 and 24 hours. This plan incorporates a 21-hour minor.

<sup>3</sup> Courses may be selected from JOU 270, JOU 252, JOU 327, JOU 354, JOU 382, JOU 482, CA 496.

<sup>4</sup> The number of elective hours required will depend on the number of hours required by your minor. Work with your advisor to determine the number of elective hours you must take.

## Journalism (BA): Multimedia Journalism Concentration

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
EH 101	English Composition I	3
CA 110	Public Speaking	3
Math	Area III, A <sup>1</sup>	3
CA 101	Intro to Media	3
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
EH 102	English Composition II	3
Humanities/Fine Arts	Area II, C <sup>1</sup>	3
Lab Science	Area III, B <sup>1</sup>	4
History	Area IV, A <sup>1</sup>	3

CA 260	Digital Writing and Production	3
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
Language	Area II, B <sup>1</sup>	3
Lab Science	Area III, B <sup>1</sup>	4
CA 220	Writing Comm Media - W	3
JOU 281	Editing and Layout	3
Literature	Area II, D <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Language	Area II, B <sup>1</sup>	3
Humanities/Fine Arts	Area II, D <sup>1</sup>	3
Lab Science	Area III, B <sup>1</sup>	4
Minor	Minor course <sup>2</sup>	3
HY/SBS	Area IV, B <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
Humanities/Fine Arts	Area II, D <sup>1</sup>	3
HY/SBS	Area IV, B <sup>1</sup>	3
JOU 370	Intern Reporting-Writing-W	3
JOU 382	Photojournalism	3
Minor	Minor course <sup>2</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
CA 300	Fnds of Comm Research	3
JOU 350	Broadcast News	3
JOU 387	Magazine & Feature Writing-W	3
Minor	Minor course <sup>2</sup>	3
Minor	Minor course <sup>2</sup>	3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
HY/SBS	Area IV, B <sup>1</sup>	3
CA 455	Law of Communication	3
JOU choose	Journalism elective <sup>3</sup>	3
Minor	Minor course <sup>2</sup>	3
Minor	Minor course <sup>2</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
CA 445	Ethics-Social Respons Comm	3
JOU choose	Journalism elective <sup>3</sup>	3
JOU 482	Multi-Media Story Telling	3
Elective	Elective hours <sup>4</sup>	3
Minor	Minor course <sup>2</sup>	3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>122</b>

<sup>1</sup> Recommended Course

<sup>2</sup> See General Education Requirements.

<sup>3</sup> Courses may be selected from JOU 252, JOU 288, JOU 327, JOU 354, JOU 472, JOU 481, CA 496.

<sup>4</sup> The number of elective hours required will depend on the number of hours required by your minor. Work with your advisor to determine the number of elective hours you must take.

## Advertising & Public Relations (BA)

Degree Requirements

Code	Title	Hours
<b>Select General Education Requirements</b>		
General Education (p. 96)		
<b>Advertising and Public Relations Core</b>		
Complete the Following:		
CA 101	Intro to Media	3
CA 260	Digital Writing and Production (Advertising and Public Relations Core)	3
CA 300	Fnds of Comm Research	3
APR 221	Advertising Principles	3
APR 224	Public Relations Principles	3
APR 271	Strategic Publication Design	3
APR 324	Strategic Writing - W	3
APR 485	Cases in Strategic Comm	3
Choose Emphasis: A or B below.		18
<b>Minor Requirements</b>		<b>18-24</b>
A minor is required for this degree program.		
<b>A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE</b>		<b>120</b>

Code	Title	Hours
<b>A. Advertising Emphasis</b>		
18		
Complete the following:		
APR 321	Media Planning	3
APR 322	Creative Strategy - W	3
APR 486	Strategic Campaigns	3
Select 9 hours from the following list of courses:		9
APR 371	Branding & Visual Messages	
APR 384	Account Management	
APR 470	Digital Media & Analytics	
APR 471	Prof & Creative Portfolio	
APR 474	Consumer Sales Promotion	
APR 487	Tideline Agency	
CA 445	Ethics-Social Respons Comm	
CA 455	Law of Communication	
CA 496	Prof Studies - Internship	

Code	Title	Hours
<b>B. Public Relations Emphasis</b>		
Complete the following:		
APR "W" Public Relations		3
APR Special Topics in Public Relations		3
APR 486	Strategic Campaigns	3
Select 9 hours from the following list of courses:		9
APR 323	Sports PR	
APR 325	Applied Comm Workshop	
APR 326	P.R. & Non-Profit Fundraising	
APR 371	Branding & Visual Messages	
APR 470	Digital Media & Analytics	
APR 471	Prof & Creative Portfolio	
CA 445	Ethics-Social Respons Comm	
CA 455	Law of Communication	
CA 496	Prof Studies - Internship	

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

## Graduation Plan

Multiple Degree Plans Available. Select to View Option

### Advertising

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
EH 101	English Composition I	3
CA 110	Public Speaking	3
Math	Area III, A <sup>1</sup>	3
CA 101	Intro to Media	3
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
EH 102	English Composition II	3
Literature	Area II, D <sup>1</sup>	3
CA 220	Writing Comm Media - W	3
Lab Science	Area III, B <sup>1</sup>	4
History	Area IV, A <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
Language	Area II, B <sup>1</sup>	3
Lab Science	Area III, B <sup>1</sup>	4
APR 224	Public Relations Principles	3
CA 260	Digital Writing and Production	3
Fine Arts	Area II, C <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Language	Area II, B <sup>1</sup>	3
Humanities/Fine Arts	Area II, E <sup>1</sup>	3
History/SBS	Area IV, B <sup>1</sup>	3
Lab Science	Area III, B <sup>1</sup>	4
APR 271	Strategic Publication Design	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
CA 300	Fnds of Comm Research	3
APR 321	Media Planning	3
APR 324	Strategic Writing - W	3
History/SBS	Area IV, B <sup>1</sup>	3
Humanities/Fine Arts	Area II, E <sup>1</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Humanities/Fine Arts	Area II, E <sup>1</sup>	3
CA choose	Communication elective <sup>3</sup>	3
Minor	Minor course <sup>2</sup>	3
Minor	Minor course <sup>2</sup>	3
Minor	Minor course <sup>2</sup>	3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
APR 485	Cases in Strategic Comm	3
APR 384	Account Management	3
History/SBS	Area IV, B <sup>1</sup>	3
Minor	Minor course <sup>2</sup>	3

Minor	Minor course <sup>2</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Elective	Elective hours <sup>4</sup>	3
CA 445	Ethics-Social Respons Comm	3
APR 486 or APR 487	Strategic Campaigns or Tideline Agency	3
CA choose	Communication elective <sup>3</sup>	3
Minor	Minor course <sup>2</sup>	3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>122</b>

<sup>1</sup> See General Education Requirements.

<sup>2</sup> All Arts and Sciences majors require a minor between 18 and 24 hours. This plan incorporates a 18 hour minor.

<sup>3</sup> Courses may be selected from APR 322, APR 323, APR 325, APR 354, APR 371, APR 384, APR 470, APR 471, APR 474, CA 453, CA 455, CA 456, CA 496, DFT 340, DFT440, JOU 383, JOU 387.

<sup>4</sup> The number of elective hours required will depend on the number of hours required by your minor. Work with your advisor to determine the number of elective hours you must take.

## Public Relations

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
EH 101	English Composition I	3
CA 110	Public Speaking	3
Math	Area III, A <sup>1</sup>	3
CA 101	Intro to Media	3
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
EH 102	English Composition II	3
Literature	Area II, D <sup>1</sup>	3
CA 220	Writing Comm Media - W	3
Lab Science	Area III, B <sup>1</sup>	4
History	Area IV, A <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
Language	Area II, B <sup>1</sup>	3
Lab Science	Area III, B <sup>1</sup>	4
APR 224	Public Relations Principles	3
CA 260	Digital Writing and Production	3
Fine Arts	Area II, C <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Language	Area II, B <sup>1</sup>	3
Humanities/Fine Arts	Area II, E <sup>1</sup>	3
History/SBS	Area IV, B <sup>1</sup>	3
Lab Science	Area III, B <sup>1</sup>	4
APR 271	Strategic Publication Design	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
CA 300	Fnds of Comm Research	3
APR 321	Media Planning	3
APR 324	Strategic Writing - W	3

History/SBS	Area IV, B <sup>1</sup>	3
Humanities/Fine Arts	Area II, E <sup>1</sup>	3
<b>Hours</b>		<b>15</b>

<b>Spring</b>		
Humanities/Fine Arts	Area II, E <sup>1</sup>	3
CA choose	Communication elective <sup>3</sup>	3
Minor	Minor course <sup>2</sup>	3
Minor	Minor course <sup>2</sup>	3
Minor	Minor course <sup>2</sup>	3
<b>Hours</b>		<b>15</b>

<b>Fourth Year</b>		
<b>Fall</b>		
APR 485	Cases in Strategic Comm	3
APR 384	Account Management	3
History/SBS	Area IV, B <sup>1</sup>	3
Minor	Minor course <sup>2</sup>	3
Minor	Minor course <sup>2</sup>	3
<b>Hours</b>		<b>15</b>

<b>Spring</b>		
CA 445	Ethics-Social Respons Comm	3
APR 486 or APR 487	Strategic Campaigns or Tideline Agency	3
Elective	Elective hours <sup>4</sup>	3
CA choose	Communication elective <sup>3</sup>	3
Minor	Minor course <sup>2</sup>	3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>122</b>

<sup>1</sup> See General Education Requirements.

<sup>2</sup> All Arts and Sciences majors require a minor between 18 and 24 hours. This plan incorporates a 18 hour minor.

<sup>3</sup> Courses may be selected from APR 322, APR 323, APR 325, APR 354, APR 371, APR 384, APR 470, APR 471, APR 474, CA 453, CA 455, CA 456, CA 496, DFT 340, DFT440, JOU 383, JOU 387.

<sup>4</sup> The number of elective hours required will depend on the number of hours required by your minor. Work with your advisor to determine the number of elective hours you must take.

## Communication (MA)

### Degree Requirements

#### Graduate Studies

The Master of Arts in Communication integrates theoretical and research components of mass, interpersonal and organizational communication, preparing students for work and further academic studies. The graduate faculty combines applied knowledge with communication theory as they engage students to think critically about current communication issues and practices. Courses examine how communication creates, sustains, and changes organizations, political institutions, and society as a whole.

The graduate faculty combines applied knowledge with communication theory as they engage students to think critically about current communication issues and practices. Courses examine how communication creates, sustains, and changes organizations, political institutions, and society as a whole.

The program curriculum consists of 33 credit hours, including a 6-hour core, and 27 hours from elective courses from the Communication and other university departments.

## Thesis/Non-Thesis Option

The program provides a thesis or non-thesis option. The non-thesis curriculum consists of 33 credit hours, including a 6-hour core, 27 hours of elective courses. The thesis curriculum consists of 33 credit hours, including a 6-hour core, 21 hours of elective courses, and 6 credit hours toward completion of a thesis.

Thesis hours count toward degree completion only when a thesis is completed. In the event of non-completion, students will substitute 6 additional credit hours to complete the non-thesis degree option.

## Requirements for Admission

All applications must receive approval from the Graduate Program Coordinator, the Director for Graduate Studies for the College of Arts and Sciences, and the Graduate Dean. Students are admitted each semester and must meet the following requirements:

### Regular Admission

A bachelor's degree from an institution accredited by the appropriate United States accrediting agency or equivalent for international institutions.

Official copies of undergraduate transcripts.

Applicants to graduate programs in Arts and Sciences typically have a minimum GPA of at least a 3.0 on all undergraduate work. In exceptional cases, applicants may be considered with at least a 2.5 GPA on all undergraduate work, or at least a 2.75 GPA on the last 60 hours of undergraduate work.

### International Students

- International students must submit documentation of TOEFL test scores of 250 on computer-based test or 100 on internet-based test, or a minimum score of 7 on the IELTS.
- A documented evaluation by the USA host department to be conducted by video teleconference.
- Students who are required to take the English Language Proficiency Examination and whose scores suggest an English language deficiency must take the appropriate English as a Second Language courses. These courses are not counted as part of the 33-hour degree program.

## Non-Degree Admission

Students may register for and complete up to 15 hours without formal entrance into the program.

## Degree Requirements and Courses

Students must complete a minimum of 33 semester hours of credit in approved 500-level courses. A minimum of 27 semester hours must be completed at the University of South Alabama. At least 27 semester hours must be taken in communication.

### Core Courses

The following 6 hours are required and must be completed at the University of South Alabama.

- CA 502 (generally offered in the fall semester)
- CA 503 (generally offered in the spring semester).

Although students are advised to take CA 502 and CA 503 sequentially, they are not required to do so.

## Remaining Courses

- With advisor approval, students may take up to 6 of the 33 required graduate hours outside of the Communication Department. Students should work closely with their advisors to develop a plan of study. After completing the two required courses, the remaining hours (excluding any directed studies, courses outside the department, or thesis hours for those on the thesis-track) may be selected from any CA 500-level courses.

## Directed Studies

CA 594

Directed study courses involve independent study of a communication topic. The purpose is to provide study in an area of specialization not covered by an existing course.

- The student must submit a topic proposal to a graduate faculty member. Once the topic is approved, both the faculty member and the student must sign a contract describing student expectations and outcomes and grading criteria.
- The student can register for between 1 and 3 credit hours in CA 594 courses with course requirements determined accordingly.
- The student may take a maximum of 3 hours in directed study coursework.

## Grade Requirements

- A minimum of a 3.0 GPA on all work attempted is required for graduation.
- Courses in which a student receives a "D" or below will not be counted toward the degree program.
- A maximum of 2 courses with a grade of "C" will be counted toward the degree program.
- Students receiving 3 grades of "C" or below, regardless of the overall GPA, will be dismissed from the program.
- A student who receives a failing grade in a course for graduate credit may be dismissed from the program.

## Time Limitations

- All degree requirements must be completed within 7 calendar years.
- Most students who take 9 hours per semester complete the degree within a 2-year period.
- The time required for degree completion depends on how many courses a student can take each semester.

## Course Load

- Two or three courses (6-9 credit hours) per semester constitute a full-time course load.

## Accelerated Bachelor's to Master's Program in Communication Option

### Program Description

The USA accelerated bachelor's to master's (ABM) in Communication provides exceptional undergraduate students the opportunity to earn a bachelor's and master's degree at an accelerated pace.

Communication majors with a major in Advertising and Public Relations are encouraged to apply for the Accelerated Bachelor's to Master's

Program in Communication (ABM). Students pursuing concentrations outside of Advertising and Public Relations are also encouraged to apply.

This program is designed to allow students to complete the Bachelor's degree in Advertising and Public Relations and the Master of Arts degree in Communication in five years.

## Admission Procedures

Admission will be a competitive process. The minimum standards are:

- Completed at least 90 credit hours
- Completed at least 30 credit hours at USA
- An overall GPA of 3.3 (Cumulative and AD/PR)
- Two letters of recommendation.

Admission will be based on characteristics of the applicant and research match to the Communication faculty.

Once admitted into the ABM program, students must maintain at least a 3.0 GPA and remain in good standing in order to stay in the program.

## Credit Hour Requirements

Completion of the ABM program requires students complete at least 150 approved unique credit hours. To qualify for a baccalaureate degree, a student must complete at least 120 approved semester hours. To qualify for a master's degree a student must complete a minimum of 30 approved semester hours. Generally, undergraduate students are not approved to take more than 12 credit hours of graduate coursework.

## Program Procedures

ABM students may begin taking graduate courses after completing at least 90 hours of undergraduate credit.

Upon completing the undergraduate degree, students will apply to the Master of Arts in Communication program. ABM students, who are in good standing, will be accepted into the Master of Arts in Communication program.

Completion of the Master of Arts in Communication requires successful completion of all requirements, including at least 33 graduate credit hours. Graduate credit taken while an undergraduate that is completed with at least the grade of B will be transferred into the Master's program upon acceptance into the program and will apply toward the 33 hours required for the Master of Arts in Communication degree, as long as the requirement of 150 approved unique undergraduate credit hours and 30 unique graduate credit hours is met.

A student who withdraws or is dismissed from the ABM program may not count graduate coursework towards both degrees. Graduate courses for which an undergraduate student did not earn an "A" or "B" grade, may not be counted towards the graduate degree.

An ABM student must be a full-time student and must complete all degree requirements for the master's within three semesters of the semester in which they were admitted to the Graduate School. An exception for a fourth semester may be granted where an additional semester is required for final revisions to and submission of a defended thesis. Exceptions to the ABM policy are at the discretion of the Dean of the Graduate School.

To qualify for a baccalaureate degree a student must complete a minimum of 120 approved semester hours, meet the university's general education requirements, meet the requirements of the major, and meet any specific requirements of the college or school. To qualify for a master's degree a student must complete a minimum of 30 semester hours of credit in an approved program of study.

## Communication Minor Degree Requirements

**If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.**

### Minor in Communication

Minors in Communication must complete a total of 18 hours in communication including 9 upper division hours.

Code	Title	Hours
<b>Communication - 18 hours</b>		
CA 100	Intro to Communication	3
CA 110	Public Speaking	3
Choose 12 hours, at least 9 hours must be at 300/400 level:		12
CA 200	Survey of Comm Theory	
CA 210	Argumentation	
CA 211	Interpersonal Comm	
CA 222	Rhetoric, Culture, and Society	
CA 230	Comm in Organization	
CA 260	Digital Writing and Production	
CA 275	Decision Making - Small Groups	
CA 310	Persuasion	
CA 315	Gender and Communication	
CA 330	Intercultural Communication-W	
CA 360	Comm and the Internet	
CA 410	Advanced Persuasion	
CA 411	Relational Communication	
CA 422	Rhetorical Theory	
CA 424	Rhetorical Criticism - W	
CA 430	Adv Organizational Communicatn	
CA 445	Ethics-Social Respons Comm	
CA 453	Campaign and Election Comm	
CA 456	Social Media and Politics	
CA 496	Prof Studies - Internship	

## Earth Sciences

### Department Information

Department of Earth Sciences website  
<http://southalabama.edu/colleges/artsandsci/earthsci/>

The Department of Earth Sciences includes the disciplines of Geography, Geology, and Meteorology, and it offers a B.S. degree as well as a minor in each of these three majors. Students can also earn a GIS Certificate and/or a minor in Geographic Information Technology (GIT) Geography, which is both a natural and a social science, studies the location, spatial distribution, and spatial interaction of Earth's

natural and human environments. Courses and research in the program encompass the broad subfields of Human Geography (for example, tourism, health, and social justice), Physical Geography (like climatology, natural hazards, and environmental geography), Regional Geography (International Economics and Relations), and Geographic Techniques, including Geographic Information Science and Technology (GIS/GIT) and Remote Sensing. Upon completing their degree, geography students are employed in government, industry, and nonprofits in multiple kinds of work environments (includes field, lab, computer, office and work).

Geology is an interdisciplinary physical science pertaining to the study of the Earth. Courses and research within the department address the chemical and physical properties of minerals, rocks, soils, sediments, and water; the processes that shape the Earth's surface; the stratigraphic, paleobiological, and geochemical records of Earth history; and the processes associated with deformation in the Earth's crust and mantle. Together an understanding is obtained of present-day, historical, and long-term feedbacks between global systems, as well as the origin and occurrence of our natural resources.

Meteorology is the study of atmospheric phenomena and the processes that cause weather. The science of meteorology is firmly rooted in basic physical laws governing mass, momentum, and energy. Many weather processes are simulated by complex computer models; however, accurate weather analysis and forecasting often requires meteorologists to identify and conceptualize weather patterns often missed by automated techniques.

The programs of the Department of Earth Sciences are designed to give the non-major a background in Earth and atmospheric science and the human impact on the landscape as part of a general education. Students pursuing a degree in Geography, Geology, or Meteorology must also have a minor in another discipline.

The Department of Earth Sciences offers a departmental honors program that allows exceptional students to pursue independent research. Students work with a faculty committee to choose an Earth Sciences research project (Geography, Geology, Meteorology), develop a prospectus, and complete a senior thesis. Students completing this program graduate with departmental honors.

Requirements for successful completion of an honors degree in Geography, Geology, or Meteorology include a GPA of at least 3.50 at graduation and completion of ES 492 (Honors Earth Sciences Seminar), ES 497 (Senior Thesis Prospectus), and six hours of ES 499 (Senior Honors Thesis). These classes are in addition to those required for the major in Geography, Geology, or Meteorology. All honors courses are listed under the prefix ES. Students interested in Earth Sciences honors must apply for the program by their junior year. Complete requirements are available on the departmental web page.

All first-time freshmen must successfully complete CAS 100 as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry. Students must demonstrate technology proficiency by passing the designated class in their major. GEO 331 for Geography majors, GY 301 for Geology majors, or MET 455 for Meteorology majors.

## Graduate Studies

Although the Department of Earth Sciences has no graduate degree program, courses, including Geographic Information Technology (GIT), are offered at the graduate level for students enrolled in Biology, Public Administration, Marine Sciences and Environmental Toxicology, and

others who need such course work. Contact the Department for more information.

## Degrees, Programs, or Concentrations

- Geographic Information Science (GIS) Certificate (p. 181)
- Geographic Information Technology Minor (p. 181)
- Geography (BS) (p. 181)
- Geography Minor (p. 183)
- Geology (BS) (p. 183)
- Geology Minor (p. 184)
- Meteorology (BS) - Broadcast Met Track (p. 184)
- Meteorology (BS) - Graduate School Track (p. 186)
- Meteorology (BS) - Professional Track (p. 187)
- Meteorology Minor (p. 188)

## Courses

### Earth Sciences (ES)

#### ES 301 Writing for the Earth Sci -W 3 cr

This course is designed to introduce students to basic scientific writing skills. Participants will review the general principles of clear writing and will apply these principles to writing for a specific audience. Particular emphasis will be placed on conveying the significance of research, outlining the aims, and discussing the results for scientific papers.

**Prerequisite:** EH 101 Minimum Grade of C or EH 102 Minimum Grade of C

#### ES 492 Honors Earth Sciences Sem - H 3-4 cr

Multidisciplinary (Geography, Geology, Meteorology) topics not covered in current Department of Earth Sciences courses. Topic announced prior to registration. Prerequisites: acceptance into the University Honors Program, the Earth Sciences Departmental Honors Program, or by permission of the Chair of Earth Sciences. (Completion of this course is required for the Earth Sciences Departmental Honors students)

#### ES 497 Senior Thesis Prospectus - H 2 cr

With the guidance and advice of a Senior Thesis Committee, students will identify a suitable research project in Earth Sciences (Geography, Geology, Meteorology) and develop a thesis prospectus to conduct this research during their senior year. The Senior Thesis prospectus will be evaluated by the committee which must pass it before thesis research can formally begin. Prerequisites: establishment of a senior thesis committee; acceptance into the Departmental Honors Program.

#### ES 499 Senior Honors Thesis - H - W 3 cr

With the guidance and advice of a Senior Thesis Committee, students will carry out an in-depth research project in Earth Sciences (Geography, Geology, Meteorology) according to an accepted Thesis Prospectus during their senior year. This course will be repeated for up to six (6) credits. Prerequisites: Geography, Geology, Meteorology major, senior status; acceptance into the Departmental or University Honors Program.

**Prerequisite:** ES 497 Minimum Grade of C or HON 301 Minimum Grade of C and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

### Geography (GEO)

#### GEO 101 Environmental Geography 3 cr

Study of the Earth's environment, specifically: Weather, Climate Change, Vegetation, and Ecosystem Science with an emphasis on connections between the atmosphere, biosphere, and human influence.

**Corequisite:** GEO 101L

**GEO 101L Environmental Geography Lab 1 cr**

Laboratory exercises associated with GEO 101. GEO 101 must be taken concurrently. Together, GEO 101 and GEO 101L count as one laboratory science course, partially fulfilling general education requirements.

**Corequisite:** GEO 101

**GEO 102 Earth and the Environment 3 cr**

Study of the Earth's environment, specifically volcanoes, earthquakes, and landforms created by water, ice, and wind, emphasizing human influence on the physical environment and vice versa.

**Corequisite:** GEO 102L

**GEO 102L Earth and the Environment Lab 1 cr**

Laboratory exercises associated with GEO 102. GEO 102 must be taken concurrently. Together, GEO 102 and GEO 102L count as one laboratory science course, partially fulfilling general education requirements.

**Corequisite:** GEO 102

**GEO 114 People, Places, Environment 3 cr**

Explore human interaction and manipulation of the environment through population, economics, politics, urban development, and local cultures, emphasizing geography's spatial approach to solving societal problems.

**GEO 115 World Regional Geography 3 cr**

A survey of the major regions of the world, excluding North America, and the interrelationship of environmental, cultural, economic, and political factors that characterize each. Core Course.

**GEO 201 Geography Orientation 1 cr**

This 1-credit hour course will cover topics that are important to geography students, such as: which geography courses to choose, the major sub-disciplines of geography, and career choices available for geography majors. You will meet the Geography faculty as they give brief overviews of the courses they teach and their research interests. Field trips, which will generally take place during the class time, are included in the course and will showcase examples of the research interests of faculty members. Core Course.

**GEO 312 World Economic Geog 3 cr**

Emphasis is placed on the location, spatial distribution, and spatial interaction of economic activities within a global context. Topics covered include population, natural resources, primary, secondary and tertiary activities, development and international trade and aid. Students will write technical reports using word processing and spreadsheet software.

**Prerequisite:** GEO 114 Minimum Grade of D and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**GEO 313 Geography of U.S. and Canada 3 cr**

An analysis of the environmental, historical, cultural, and economic factors that create the spatial patterns, development processes and distinctiveness of Canada and the United States.

**GEO 314 Geography of Europe 3 cr**

An analysis of the environmental, historical, social and economic factors that create the diversity of countries and their unique spatial characteristics on the subcontinent of Europe.

**GEO 315 Geography of Latin America 3 cr**

A systematic survey of Latin America landscapes. Attention is directed to natural resources, human activities and regional differentiation.

**Prerequisite:** GEO 101 Minimum Grade of D or GEO 102 Minimum Grade of D or GEO 114 Minimum Grade of D or GEO 115 Minimum Grade of D

**GEO 320 Alabama Geography 3 cr**

Spatial study of physical and human features in Alabama. Includes geomorphology, climate, vegetation, agriculture, development, population, and environmental issues within the state.

**Prerequisite:** (GEO 101 Minimum Grade of D or GEO 102 Minimum Grade of D or GEO 114 Minimum Grade of D or GEO 115 Minimum Grade of D) and (EH 102 Minimum Grade of D or EH 105 Minimum Grade of D)

**GEO 321 Nat'l Parks Conservation 3 cr**

An analysis of the motives and processes for establishing national parks and nature reserves, the primary conservation and preservation issues they have and the influences of ecology, politics, and culture on their planning and management. U.S. national parks are emphasized.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (GEO 101 Minimum Grade of D or GEO 102 Minimum Grade of D or GEO 114 Minimum Grade of D or GEO 115 Minimum Grade of D)

**GEO 331 Computer Graphs and Maps 4 cr**

Introductory review of the application of computers to the production of graphs and thematic maps for geographical analysis. Core course. Meets computer proficiency requirement for Geography majors.

**GEO 332 Remote Sensing I 4 cr**

Interpretation of maps, air photos and satellite images (identical to GY 332). Core course.

**Cross-Listed:** GY 332

**GEO 342 Severe Weather 3 cr**

A study of the cause, structure and impact of tornadoes, hurricanes, thunderstorms, and severe weather systems (Identical to MET 342).

**Prerequisite:** GEO 353 or MET 353. Minimum grade of 'C' needed in course prerequisite.

**Prerequisite:** (GEO 353 Minimum Grade of C or MET 353 Minimum Grade of C)

**Cross-Listed:** MET 342

**GEO 353 General Meteorology 4 cr**

An overall view of the field of meteorology for science majors and minors. This course uses a quantitative approach to study the composition of the atmosphere, atmospheric processes, global circulation, and storm development (identical to MET 353). Prerequisites: MET 140, MET 140L, and MA 112. Minimum grade of 'C' needed in course prerequisites.

**Prerequisite:** (MA 112 Minimum Grade of C or MA 171 Minimum Grade of C) or (MA 113 Minimum Grade of C or MA 172 Minimum Grade of C) or (MA 125 Minimum Grade of C or MA 132 Minimum Grade of C) and (MET 140 Minimum Grade of C and MET 140L Minimum Grade of C)

**Cross-Listed:** MET 353

**GEO 353L General Meteorology Lab 1 cr**

Laboratory exercises associated with GEO 353. Particular attention is given to hands-on weather analysis of meteorological charts.

**Corequisite:** GEO 353

**Cross-Listed:** MET 353L

**GEO 365 Urban Geography and Planning 3 cr**

Concentrates upon the evolution and function of the urban spatial system, and upon the internal spatial structure of an urban area's residential, commercial, and industrial land use. This course also introduces basic concepts and strategies of urban and regional planning with a focus on the domestic realm.

**Prerequisite:** GEO 114 Minimum Grade of D or GEO 115 Minimum Grade of D

**GEO 370 International Tourism 3 cr**

The study of the components of the Tourism industry, their spatial distribution, the environmental and cultural effects of Tourism, and the requisites and techniques for planning tourism development.

**Prerequisite:** (GEO 101 Minimum Grade of D or GEO 102 Minimum Grade of D or GEO 114 Minimum Grade of D or GEO 115 Minimum Grade of D)

**GEO 381 Cultural Geography 3 cr**

Study of the development and differentiation of cultural landscapes and the economic, political, technological, and cultural processes that shape them. Prerequisite: GEO 114 or GEO 115.

**Prerequisite:** (GEO 113 Minimum Grade of D or GEO 115 Minimum Grade of D) or GEO 114 Minimum Grade of D

**GEO 404 Geography of Alcohol 3 cr**

By synthesizing ideas considered in lectures, readings, discussions with industry experts, and through practical lab experiments, students will learn about the historical, political, economic, and environmental footprint of the global alcohol industry and its place in society.

**Prerequisite:** (GEO 101 Minimum Grade of C or GEO 102 Minimum Grade of C or GEO 114 Minimum Grade of C or GEO 115 Minimum Grade of C)

**GEO 405 Natural Hazards and Disasters 3 cr**

An overview of natural hazards and disasters from a scientific perspective that focuses on the occurrence and impact of environmental hazards, such as volcanoes, earthquakes, tsunamis, floods, mass movements, and coastal hazards. Mitigation techniques used to make the human environment more resilient against natural hazards are also covered. In addition, the viewpoint of hazard and emergency managers toward natural disasters will be studied.

**Prerequisite:** GEO 102 Minimum Grade of C or (GY 101 Minimum Grade of C or GY 111 Minimum Grade of C)

**GEO 409 Environmental Earth Sciences 3 cr**

This course studies environmental problems and issues from an Earth Systems Science perspective. The class will review and discuss past, present, and future environmental issues while addressing one or more of the competencies in sustainability. The topics for the course include energy and mineral resources, atmospheric and water pollution, climate change, and water resources (identical to GY 409).

**Prerequisite:** GEO 101 or GEO 102 or GY 111 or GY 112

**GEO 410 Biogeography 3 cr**

Analysis of spatial patterns of life on earth. Biogeography emphasizes the influence of the physical environment, paleogeography, and past and possible future climate change on the biomes and biogeographic realms.

**Prerequisite:** GEO 101 Minimum Grade of D

**GEO 411 Soils 3 cr**

A review of soil formation, processes and properties (identical to GY 411).

**Prerequisite:** GEO 102 Minimum Grade of D

**Cross-Listed:** GY 411

**GEO 414 Urban Geography & Planning 3 cr**

Concentrates upon the evolution and function of the urban spatial system, and upon the internal spatial structure of an urban area's residential, commercial, and industrial land use. This course also introduces basic concepts and strategies of urban and regional planning with a focus on the domestic realm.

**Prerequisite:** (GEO 114 Minimum Grade of D or GEO 115 Minimum Grade of D)

**Cross-Listed:** GEO 365

**GEO 417 Health and Place 3 cr**

This course illustrates how geographic concepts help us better understand health and well-being, through the exploration of theories, methodologies, and contributions of medical geography to the social and health sciences. Using spatial tools, such as mapping and Geographic Information Systems, this course will examine the geographical patterns of health and disease. This course encourages students to examine the theoretical and technological tools geography brings to topics related to health and provides them with a foundation for studying geographic differences in health and health services.

**Prerequisite:** EH 102 Minimum Grade of C

**GEO 420 Geostatistics 3 cr**

Applied bivariate and multivariate statistics to problems in Geography, Geology, and Meteorology; parametric and non-parametric procedures in correlation, regression, analysis of variance, etc. Time series analysis, trend surface analysis, and kriging and analysis of spatial (map) data. Identical to GY 420.

**Prerequisite:** ((GY 111 Minimum Grade of C and GY 111L Minimum Grade of C) or GY 101 Minimum Grade of C) or ((GY 112 Minimum Grade of C and GY 112L Minimum Grade of C) or GY 103 Minimum Grade of C) and (MA 112 Minimum Grade of C or MA 171 Minimum Grade of C) or (ST 210 Minimum Grade of C or ST 175 Minimum Grade of C)

**Cross-Listed:** GY 420

**GEO 435 Research Methods Geography 3 cr**

This course serves as an introduction to geography as a research discipline. Emphasis is placed on geographic problem solving, data collection, data analysis, and reporting. Micro computer oriented statistical and mapping packages will be used to analyze geographic data. Prerequisites: Junior standing. Core course.

**Prerequisite:** ST 210 (may be taken concurrently) Minimum Grade of D

**GEO 440 Coastal Zone Management 2 cr**

A review of ecological features and of management policies for coastal communities with a description of relevant federal and state programs. Taught only at Dauphin Island Sea Lab.

**GEO 441 Coastal Climatology 2 cr**

Study of the controlling factors and features of the world's climates, with particular attention to coastal areas, and application and interpretation of climate data. Taught only at Dauphin Island Sea Lab.

**GEO 442 Remote Sensing II 4 cr**

Analysis of remotely sensed digital data for detection and mapping of earth resources (identical to GY 442). Prerequisite: GEO 332 or GY 332. Minimum grade of 'B' needed in course prerequisite.

**Prerequisite:** GEO 332 Minimum Grade of B or GY 332 Minimum Grade of B

**Cross-Listed:** GY 442

**GEO 443 Climatology-W 3 cr**

Analysis of global climate as aggregate weather. Component elements, factors controlling distribution, resulting area patterns, and climatic classification are studied (identical to MET 443). Fee

**Prerequisite:** MET 140 Minimum Grade of C or GEO 101 Minimum Grade of C

**Cross-Listed:** MET 443

**GEO 460 Introduction to GIS 4 cr**

Fundamentals of Geographic Information Systems technology, including software functionality (ArcGIS), data processing, cartography and spatial analysis (identical to GY 460.) Prerequisite: CIS 150 with a grade of B or better or passing the computer proficiency exam.

**Prerequisite:** CIS P or CIS 150 Minimum Grade of B

**Cross-Listed:** GY 460

**GEO 461 GIS Apps I-Environment 4 cr**

Application of Geographic Information Systems to studies of the natural environment (identical to GY 461). Permission Prerequisite: GEO 460 or GY 460 or permission of instructor. Minimum grade of 'B' needed in course prerequisite. Fee

**Prerequisite:** GEO 460 Minimum Grade of B or GY 460 Minimum Grade of B

**Cross-Listed:** GY 461

**GEO 462 GIS Apps II-Business/Social Sc 4 cr**

Application of Geographic Information Systems to Business and the Social Sciences. Prerequisite: GEO 460 or GY 460 or permission of instructor. Minimum grade of 'B' needed in course prerequisite.

**Prerequisite:** GEO 460 Minimum Grade of B or GY 460 Minimum Grade of B

**GEO 475 Field Work in Geography 1-6 cr**

Students will travel to pre-determined location to perform field work for a project that was pre-determined by the professor and student. Once in the field, students will gather data and learn about the landscape(s).

**Prerequisite:** EH 102 Minimum Grade of D

**GEO 485 Seminar Geographic Thought - W 3 cr**

This course serves as the capstone course for geography majors in which students integrate their knowledge of human and physical geography, as well as the geographic techniques, to investigate real-world problems with a spatial component. Students gain experience in working in small groups and in written and oral presentation of project results. Students will also lead discussions on key or pertinent research articles in geography. Taught Spring only.

**Prerequisite:** GEO 435 (may be taken concurrently) and GEO 331 and GEO 332 (may be taken concurrently)

**GEO 490 Special Topics 2-4 cr**

Geographic topics not covered in current geography courses. May be repeated when content varies for a maximum of 8 credit hours.

**GEO 492 Seminar - 1-3 cr**

Departmental seminar investigating a selected field of geography. May be repeated when content varies for a maximum of 3 credit hours.

**GEO 494 Directed Studies 1-4 cr**

Independent research under the direction of a member of the geography faculty. No more than 8 hours of Directed Studies is allowed.

**GEO 496 Internship in Geography 1-4 cr**

On-the-job learning through occupational or professional work with an approved firm or agency. Open to geography majors only. No more than 4 hours of Internship credit is allowed.

**GEO 542 Remote Sensing II 4 cr**

Analysis of remotely sensed digital data for detection and mapping of earth resources. Credit for both GEO 442 or GY 442 and GEO 542 is not allowed. Prerequisite: GEO 332 or GY 332. Special project required.

**Prerequisite:** GEO 332 Minimum Grade of B or GY 332 Minimum Grade of B

**Cross-Listed:** GEO 442, GY 442

**GEO 560 Introduction to GIS 4 cr**

Fundamentals of Geographic Information Systems technology, including software functionality (ArcGIS), data processing, cartography and spatial analysis. Credit for both GEO 460 or GY 460 and GEO 560 is not allowed. Prerequisite: CIS 150 with a grade of 'B' or better or computer proficiency exam. Special project required.

**Prerequisite:** CIS 150 Minimum Grade of B or CIS P

**Cross-Listed:** GEO 460, GY 460

**GEO 561 GIS Apps I-Environment-C 4 cr**

Application of Geographic Information Systems to studies of the natural environment. Credit for both GEO 461 or GY 461 and GEO 561 is not allowed. Prerequisite: GEO 560 or GEO 460 or GY 460 with a grade of 'B' or better or permission of instructor. Special project required.

**Prerequisite:** GEO 560 Minimum Grade of B or GEO 460 Minimum Grade of B or GY 460 Minimum Grade of B

**Cross-Listed:** GEO 461, GY 461

**GEO 562 GIS Apps II-Business/Social 4 cr**

Application of Geographic Information Systems to Business and the Social Sciences. Credit for both GEO 462 and GEO 562 is not allowed. Prerequisite: GEO 560 or GEO 460 or GY 460 with a grade of 'B' or better or permission of instructor. Special project required.

**Prerequisite:** GEO 560 Minimum Grade of B or GEO 460 Minimum Grade of B or GY 460 Minimum Grade of B

**Cross-Listed:** GEO 462

**GEO 590 Sp Top - 1-6 cr**

An in-depth course for advanced students in geography. Topics and titles will be selected to examine the subject matter in an area of current interest to students and in an area of particular faculty expertise. Includes specialized topics not currently listed in the Bulletin course offerings.

**GEO 594 Grad Dir Study in Geography- 1-4 cr**

Independent research in Geography at the graduate level. May be used to learn new techniques or explore research questions of special interest under the direction of a member of the Geography graduate faculty.

**Geographic Info Techn (GIT)****GIT 420 Computer Apps in Earth Science 4 cr**

An introduction to basic Python programming, with examples and exercises pertinent to Earth Science and GIS applications.

**Prerequisite:** MA 112 Minimum Grade of D or MA 110 Minimum Grade of C

**Cross-Listed:** MET 420

**GIT 442 Remote Sensing II 4 cr**

Analysis of remotely sensed digital data for detection and mapping of Earth resources. Minimum grade of "B" needed in course prerequisite.

**Prerequisite:** (GEO 332 Minimum Grade of B or GY 332 Minimum Grade of B)

**GIT 460 Intro to GIT 4 cr**

Fundamentals of Geographic Information Systems technology, including software functionality (ArcGIS), data processing, cartography and spatial analysis.

**GIT 461 Environmental GIS 4 cr**

Application of Geographic Information Systems to the studies of the natural environment.

**Prerequisite:** (GIT 460 Minimum Grade of C or GEO 460 Minimum Grade of C or GY 460 Minimum Grade of C)

**GIT 462 GIT Apps II-Business/Soc Sci 4 cr**

Application of Geographic Information Systems to Business and the Social Sciences. Prerequisite: GIS 460, with a grade of "C" or better, or permission of instructor.

**Prerequisite:** (GIT 460 Minimum Grade of C or GEO 460 Minimum Grade of C or GY 460 Minimum Grade of C)

**GIT 463 GIS for Business and Urban Analysis 4 cr**

In GIS for Business and Urban Analysis, students will learn advanced spatial analysis methods and spatial statistics, providing a robust theoretical foundation while equipping students with hands-on proficiency in GIS (ArcGIS Pro) and geostatistical software (GeoDa) applications. Through exploration of business, public health, crime, demographic, and transportation-related research questions, students will gain practical insights into the pivotal role of GIS in addressing real-world challenges. Throughout the course, students will engage in various case studies that guide them through the entire lifecycle of advanced GIS projects. From crafting an executable research design to data acquisition, analysis, and the visualization of results, participants will develop a comprehensive skill set.

**Prerequisite:** (GIT 460 Minimum Grade of C or GEO 460 Minimum Grade of C or GY 460 Minimum Grade of C)

**GIT 490 Special Topics 2-4 cr**

Geographic Information Technology topics not covered in current GIT courses. May be repeated when content varies for a maximum of 8 credit hours.

**Prerequisite:** GIT 460 Minimum Grade of C or GEO 460 Minimum Grade of C or GY 460 Minimum Grade of C

**GIT 494 Directed Studies 2-4 cr**

Geographic Information Technology topics not covered in current GIT courses. May be repeated when content varies for a maximum of 8 credit hours.

**Prerequisite:** GIT 460 Minimum Grade of C or GEO 460 Minimum Grade of C or GY 460 Minimum Grade of C

**GIT 496 Internship in GIT 1-4 cr**

On-the-job learning through occupational or professional work with an approved firm or agency. Open to geography majors only. No more than 4 hours of internship credit is allowed.

**Prerequisite:** GIT 460 Minimum Grade of C or GEO 460 Minimum Grade of C or GY 460 Minimum Grade of C

**GIT 520 Computer Applications in Earth Sciences 4 cr**

An introduction to basic Python programming, with examples and exercises pertinent to Earth Sciences and GIS applications.

**Prerequisite:** MA 112 Minimum Grade of D or MA 110 Minimum Grade of D

**GIT 542 Remote Sensing II 4 cr**

Analysis of remotely sensed digital data for detection and mapping of Earth resources. Minimum grade of "B" needed in course prerequisite.

Special project required.

**Prerequisite:** (GEO 332 Minimum Grade of B or GY 332 Minimum Grade of B)

**GIT 560 Intro to GIT 4 cr**

Fundamentals of Geographic Information Systems technology, including software functionality (ArcGIS), data processing, cartography and spatial analysis. Credit for GIT 460 and GIT 560 not allowed. Special project required.

**GIT 561 Environmental GIS 4 cr**

Application of Geographic Information Systems to the studies of the natural environment. Credit for GIT 461 and GIT 561 not allowed. Special project required.

**Prerequisite:** (GIT 460 Minimum Grade of C or GIT 560 Minimum Grade of C or GEO 460 Minimum Grade of C or GY 460 Minimum Grade of C or GEO 560 Minimum Grade of C)

**GIT 562 GIT Apps II-Business/Soc Sci 4 cr**

Application of Geographic Information Systems to business and the social science. Credit for GIT 462 and GIT 562 not allowed. Special project required.

**Prerequisite:** (GIT 460 Minimum Grade of C or GEO 460 Minimum Grade of C or GY 460 Minimum Grade of C or GIT 560 Minimum Grade of C or GEO 560 Minimum Grade of C)

**GIT 563 GIS for Business and Urban Analysis 4 cr**

In GIS for Business and Urban Analysis, students will learn advanced spatial analysis methods and spatial statistics, providing a robust theoretical foundation while equipping students with hands-on proficiency in GIS (ArcGIS Pro) and geostatistical software (GeoDa) applications. Through exploration of business, public health, crime, demographic, and transportation-related research questions, students will gain practical insights into the pivotal role of GIS in addressing real-world challenges. Throughout the course, students will engage in various case studies that guide them through the entire lifecycle of advanced GIS projects. From crafting an executable research design to data acquisition, analysis, and the visualization of results, participants will develop a comprehensive skill set.

**Prerequisite:** (GIT 460 Minimum Grade of C or GIT 560 Minimum Grade of C or GEO 460 Minimum Grade of C or GY 460 Minimum Grade of C)

**GIT 590 Special Topics - 2-4 cr**

Geographic Information Technology topics not covered in current GIT courses. May be repeated when content varies for a maximum of 8 credit hours.

**Prerequisite:** GIT 460 Minimum Grade of C or GIT 560 Minimum Grade of C or GEO 460 Minimum Grade of C or GY 460 Minimum Grade of C or GEO 560 Minimum Grade of C

**GIT 594 Directed Studies 1-4 cr**

Graduate level independent study under the direction of a member of the graduate faculty. May be used to learn new techniques or to explore research questions of special interests.

**Geology (GY)****GY 111 Physical Geology 3 cr**

Materials that make up the Earth as well as the properties and geological processes that operate in the Earth. Special topics include plate tectonics, mineral chemistry, the rock cycle, sedimentary processes, metamorphism and geological map reading. Core course.

**Corequisite:** GY 111L

**GY 111L Physical Geology Lab 1 cr**

Laboratory course for Physical Geology.

**Corequisite:** GY 111

**GY 112 Earth History 3 cr**

The origin and history of the earth as seen in the rocks and their contained life record. Core Course.

**Corequisite:** GY 112L

**GY 112L Earth History Lab 1 cr**

Laboratory course for Earth History.

**Prerequisite:** GY 111 Minimum Grade of D and GY 111L Minimum Grade of D

**Corequisite:** GY 112

**GY 113 Honors Geoscience Field - H 3 cr**

A two-week field course emphasizing the recognition and understanding of geologic processes in the field environment. The course is based in the Taos Ski Valley, New Mexico, with field trips ranging across northern New Mexico and southern Colorado during the interim session.

**Prerequisite:** ((GY 101 Minimum Grade of D or (GY 111 Minimum Grade of D and GY 111L Minimum Grade of S) and ((GY 103 Minimum Grade of D or (GY 112 Minimum Grade of D and GY 112L Minimum Grade of S))

**GY 301 Geomorphology 3 cr**

Principles of landform development as it relates to specific processes (fluvial erosion, glacial erosion, etc.), construction of topographic base maps with Alidade/Total Station, GPS navigation and surveying, and rock/mineral resource evaluation.

**Prerequisite:** (GY 101 Minimum Grade of D or GY 111 Minimum Grade of D)

**GY 302 Crystallography and Mineralogy 4 cr**

Introduction to elementary crystallography, crystal chemistry, and atomic structure of minerals, as well as the identification, characterization and use of common rock-forming minerals and important ore minerals.

**Prerequisite:** (GY 101 Minimum Grade of D or (GY 111 Minimum Grade of D and GY 111L Minimum Grade of D)) and (GY 103 Minimum Grade of D or (GY 112 Minimum Grade of D and GY 112L Minimum Grade of D)) and (CH 131 (may be taken concurrently) Minimum Grade of D or CH 115 Minimum Grade of D)

**GY 303 Igneous & Meta Petrology 4 cr**

The study of the formation and classification of igneous and metamorphic rocks.

**Prerequisite:** (GY 101 Minimum Grade of D or GY 111 Minimum Grade of D) and (GY 232 Minimum Grade of D or GY 302 Minimum Grade of D or GY 342 Minimum Grade of D)

**GY 304 Stratigraphy - W 3 cr**

The development of the stratigraphic column; correlation and field procedures.

**Prerequisite:** (EH 102 (may be taken concurrently) Minimum Grade of C or EH 105 Minimum Grade of C) and (GY 103 Minimum Grade of D or GY 112 Minimum Grade of D)

**GY 305 Geophysics 4 cr**

Application of classical physics to the study of the Earth and the solution of problems in Earth sciences, including analysis of seismic refraction and reflection surveys, earthquakes, gravity and magnetic fields, and electrical geophysical surveys.

**Prerequisite:** GY 111 Minimum Grade of D and GY 301 Minimum Grade of D

**GY 306 Sedimentology & Stratigraphy-W 4 cr**

Study the principles pertaining to the description and classification of sedimentary rocks, with emphasis on sedimentary processes and depositional environments.

**Prerequisite:** GY 111 Minimum Grade of D and GY 111L Minimum Grade of D and GY 112 Minimum Grade of D and EH 102 Minimum Grade of C or EH 105 Minimum Grade of C

**Cross-Listed:** GY 344, GY 402

**GY 310 Environmental Earth Science 3 cr**

A spatial perspective on major global environmental problems. Topics include population pressure, loss of biodiversity, ozone depletion, global warming, water, energy and mineral resources, food supplies, waste disposal, geological hazards and political/economic forces (identical to GEO 310).

**Prerequisite:** GY 111 Minimum Grade of D or GEO 101 Minimum Grade of D or GEO 102 Minimum Grade of D

**Cross-Listed:** GEO 310

**GY 332 Remote Sensing I 4 cr**

Interpretation of maps, air photos and satellite images (identical to GEO 332).

**Prerequisite:** GEO 102 (may be taken concurrently) Minimum Grade of C and GEO 102L (may be taken concurrently) Minimum Grade of C and GY 301 Minimum Grade of C

**Cross-Listed:** GEO 332

**GY 401 Paleontology - W 4 cr**

Evolutionary, ecological, and environmental processes from the study of marine invertebrate fossil groups.

**Prerequisite:** (EH 102 Minimum Grade of C) and (GY 111 Minimum Grade of D) or (GY 112 Minimum Grade of D and GY 112L Minimum Grade of D)

**GY 403 Structural Geology 4 cr**

Study of the deformation of the internal Earth and the structures that result.

**Prerequisite:** (GY 101 Minimum Grade of D or GY 111 Minimum Grade of D) and (GY 301 Minimum Grade of D or GY 325 Minimum Grade of D) and ((PH 112 Minimum Grade of D or PH 114 Minimum Grade of D) or (PH 201 Minimum Grade of D or PH 216 Minimum Grade of D))

**GY 409 Environmental Earth Sciences 3 cr**

This course studies environmental problems and issues from an Earth Systems Science perspective. The class will review and discuss past, present, and future environmental issues while addressing one or more of the competencies in sustainability. The topics for the course include energy and mineral resources, atmospheric and water pollution, climate change, and water resources (identical to GY 409).

**Prerequisite:** GEO 101 or GEO 102 or GY 111 or GY 112

**GY 411 Soils 3 cr**

A review of soil formation, processes and properties (identical to GEO 411).

**Prerequisite:** (GEO 102 Minimum Grade of D and GEO 102L Minimum Grade of D and GY 301 Minimum Grade of D)

**Cross-Listed:** GEO 411

**GY 413 Coastal Geomorphology 2 cr**

An introduction to coastal sediment processes and their applied coastal geomorphology with emphasis on waves, tides, sediments, and their interactions including the impacts of anthropogenic influences. Taught only at Dauphin Island Sea Lab.

**GY 420 Geostatistics 3 cr**

Applied bivariate and multivariate statistics to problems in Geography, Geology, and Meteorology; parametric and non-parametric procedures in correlation, regression, analysis of variance, etc. Time series analysis, trend surface analysis, kriging and analysis of spatial (map) data. Identical to GEO 420.

**Prerequisite:** (GY 111 Minimum Grade of C and GY 112 Minimum Grade of C) and (MA 112 Minimum Grade of C or ST 210 Minimum Grade of C)

**Cross-Listed:** GEO 420, GY 520

**GY 421 Applied Environ Geology - W 3 cr**

A geological applications course designed to familiarize students with techniques used by environmental and engineering geologists in their studies of land use, land development and assessment of geological hazards. Material is illustrated with case studies from the Mobile area.  
**Prerequisite:** (GY 101 Minimum Grade of D or GY 111 Minimum Grade of D) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**GY 422 Sedimentary Geology 3 cr**

A course examining sedimentation with emphasis on environments of deposition, sea-level and other controls on sedimentation in the rock record, and petroleum exploration. Credit for both GY 422 and GY 522 will not be allowed.

**Prerequisite:** (GY 101 Minimum Grade of D or GY 111 Minimum Grade of D) and (GY 103 Minimum Grade of D or GY 112 Minimum Grade of D)

**GY 425 Hydrology 4 cr**

Principles of sources, occurrences, and movement of groundwater. Surface and subsurface investigations of groundwater and elementary groundwater hydrology and chemistry. Credit for both GY 425 and GY 525 will not be allowed.

**GY 426 Contaminant Hydrogeology 3 cr**

Flow systems, mass transport in the vadose and saturated zones; advection and dispersion; transformation, retardation and attenuation of solutes; low temperature geochemical processes and kinetics of chemical reactions; contaminant modeling using finite difference-finite element methods. Credit for both GY 426 and GY 526 will not be allowed.  
**Prerequisite:** (GY 425 Minimum Grade of D or GY 475 Minimum Grade of D)

**GY 431 Optical Mineralogy-Crystallogr 4 cr**

Theory and use of the petrographic microscope in the recognition and identification of crystallographic and optical properties in non-opaque minerals.

**Prerequisite:** (GY 232 Minimum Grade of D or GY 302 Minimum Grade of D or GY 342 Minimum Grade of D)

**GY 433 X-Ray Analytical Methods 4 cr**

Theory and use of x-ray diffraction systems as applied to crystallography, mineralogy, chemistry, and metallurgy.

**Prerequisite:** GY 302 Minimum Grade of D

**Cross-Listed:** GY 533

**GY 442 Remote Sensing II 4 cr**

Analysis of remotely sensed digital data for detection and mapping of Earth resources (identical to GEO 442). Prerequisite: GY 332 or GEO 332. Minimum grade of 'B' needed in course prerequisite.

**Prerequisite:** GEO 332 Minimum Grade of B or GY 332 Minimum Grade of B

**Cross-Listed:** GEO 442

**GY 446 Marine Geology 4 cr**

A study of the geology of the ocean basins, with special emphasis on the continental shelves, their sediments, and sedimentary processes at work there.

**Prerequisite:** (GY 101 Minimum Grade of D or GY 111 Minimum Grade of D) and (GY 103 Minimum Grade of D or GY 112 Minimum Grade of D)

**GY 450 Thin-Section Techniques 1 cr**

A laboratory based course illustrating techniques employed by geologists to prepare thin-sections from geological materials. Students will produce thin-sections and write up reports detailing the petrography of the samples examined.

**Prerequisite:** (GY 232 Minimum Grade of D or GY 302 Minimum Grade of D or GY 342 Minimum Grade of D) and (GY 233 Minimum Grade of D or GY 303 Minimum Grade of D or GY 343 Minimum Grade of D) and (GY 344 Minimum Grade of D or GY 402 (may be taken concurrently) Minimum Grade of D)

**GY 460 Introduction to GIS 4 cr**

Fundamentals of Geographic Information Systems technology, including software functionality (ArcGIS), data processing, cartography and spatial analysis (identical to GEO 460). Prerequisite: CIS 150 with a grade of B or better or passing the computer proficiency exam.

**Prerequisite:** CIS P or CIS 150 Minimum Grade of B

**Cross-Listed:** GEO 460

**GY 461 GIS Apps I-Environment 4 cr**

Application of Geographic Information Systems to studies of the natural environment (identical to GEO 461). Prerequisite: GY 460 or GEO 460 or permission of instructor. Minimum grade of 'B' needed in course prerequisite.

**Prerequisite:** GEO 460 Minimum Grade of B or GY 460 Minimum Grade of B

**Cross-Listed:** GEO 461

**GY 480 Field Geology 6 cr**

A six-week, summer field course on the methods of geologic surveying, the nature and construction of geologic maps and cross-sections, measurements of stratigraphic sections and preparation of geologic reports. This course serves as a capstone class for geology majors.

**Prerequisite:** (GY 303 Minimum Grade of D and GY 403 Minimum Grade of D and GY 402 Minimum Grade of D and HS 170 Minimum Grade of P)

**GY 490 Special Topics 1-4 cr**

Geological topics not covered in current geology courses. Prerequisite: Junior or Senior standing.

**GY 492 Seminar - 1-3 cr**

Departmental seminar investigating a selected field of geology (topic announced prior to registration). May be repeated when content varies for a maximum of 3 credits

**GY 494 Directed Studies 1-4 cr**

Independent research in the field or laboratory under the direction of a member of the Geology faculty. Students must have an acceptable project approved before registering for this course. Prerequisite: Permission of the Chair, Junior or Senior standing. No more than 8 hours of directed study is allowed.

**GY 496 Internship in Geology 1-3 cr**

On-the-job training through occupational or professional work through an approved geological organization. Only open to geology majors. Prerequisite: Permission of chair; Junior or Senior standing. No more than 3 hours of internship is allowed.

**GY 520 Geostatistics 4 cr**

Applied bivariate and multivariate statistics to problems in Geography, Geology, and Meteorology; parametric and non-parametric procedures in correlation, regression, analysis of variance, etc. Time series analysis, trend surface analysis, kriging and analysis of spatial (map) data. Identical to GEO/GY 420. Credit for both GY 420 and GY 520 will not be allowed.

**Prerequisite:** (ST 175 Minimum Grade of B or ST 210 Minimum Grade of B) or (MA 125 Minimum Grade of C or MA 132 Minimum Grade of C)

**Cross-Listed:** GEO 420, GY 420

**GY 531 Optical Mineralogy-Crystallogr 4 cr**

Theory and use of the petrographic microscope in the recognition and identification of crystallographic and optical properties in non-opaque minerals. Graduate credit will require an additional project specified by the instructor. Credit for both GY 431 and GY 531 will not be allowed.

**Prerequisite:** (GY 232 Minimum Grade of D or GY 302 Minimum Grade of D or GY 342 Minimum Grade of D)

**GY 533 X-Ray Analytical Methods 4 cr**

Theory and use of x-ray diffraction systems as applied to crystallography, mineralogy, chemistry, and metallurgy.

**Prerequisite:** (GY 231 Minimum Grade of D or GY 341 Minimum Grade of D)

**Cross-Listed:** GY 433

**GY 543 Sel Appls in Remote Sensing 3 cr**

Critical assessment of selected remote sensing applications in earth science. Application subject designation prior to registration. Graduate credit will require an additional project specified by the instructor. Credit for both 443 and 543 will not be allowed.

**Prerequisite:** GY 332 Minimum Grade of D or GEO 332 Minimum Grade of D

**Cross-Listed:** GY 442

**GY 544 Sedimentary Geology 3 cr**

A study examining sedimentation with emphasis on environments of deposition, sea-level and other controls on sedimentation in the rock record, and petroleum exploration. Credit for both GY 444 and GY 544 will not be allowed.

**Prerequisite:** MAS 603 Minimum Grade of C or GY 344 Minimum Grade of D

**Cross-Listed:** GY 444

**GY 575 Hydrology 4 cr**

Principles of sources, occurrences, and movement of ground water. Surface and sub-surface investigations of ground water and elementary ground water hydrology and chemistry.

**Prerequisite:** (GY 232 Minimum Grade of D or GY 342 Minimum Grade of D)

**Cross-Listed:** GY 475

**GY 576 Contaminant Hydrogeology 4 cr**

Flow systems, mass transport in the vadose and saturated zones; advection and dispersion; transformation, retardation and attenuation of solutes; low temperature geochemical processes and kinetics of chemical reactions; contaminant modeling using finite difference-finite element methods. Credit for both GY 426 and GY 576 will not be allowed.

**Prerequisite:** GY 425 Minimum Grade of D or GY 475 Minimum Grade of D or GY 575 Minimum Grade of D

**Cross-Listed:** GY 476

**GY 590 Sp Top - 1-6 cr**

An in-depth course for advanced students in geology. Topics and titles will be selected to examine the subject matter in an area of current interest to students and in an area of particular faculty expertise. To include specializing topics not currently listed in Bulletin course offerings.

**GY 592 Seminar - 1-6 cr**

Students and faculty meet weekly in an interactive discussion of current literature in geological sciences. The focus will be on 'state of the art' theories and methodologies as they occur in the primary literature. Student presentation is required to receive credit.

**GY 594 Directed Research 1-6 cr**

Independent research under the direction of a member of the graduate faculty. May be used to learn new techniques or to explore research questions of special interest. A maximum of 6 hours may be earned for this course.

**Meteorology (MET)****MET 110 Orientation to Meteorology 1 cr**

In this course, freshmen meteorology students are introduced to the Meteorology program at the University of South Alabama and to the profession of meteorology in general, including career opportunities. The course will provide students with information about the curriculum and how to succeed in the major. They will be presented with information about scholarships, internships, and extracurricular activities such as working for the South Alabama Mesonet and undergraduate research opportunities. Guest lectures from meteorology faculty and professionals in the field will be included. Successful alumni will talk about their careers and how the Meteorology program at South helped them get there. The course will be interlaced with map discussions, field trips, and other hands-on weather-related activities. Student outputs will include several reflection paper assignments and a professional resume.

**MET 140 Introduction to Meteorology 3 cr**

This course focuses on introducing the student to the basic concepts of meteorology. Major topics include the structure of our atmosphere, heat balance, meteorological measurements, atmospheric stability, atmospheric motion, and wind circulations on both the global and local scales. Other areas covered may include an introduction to air masses, fronts, and precipitation processes. The analysis of US Government weather charts is also introduced. Core course.

**Corequisite:** MET 140L

**MET 140L Intro to Meteorology Lab 1 cr**

Laboratory exercises associated with MET 140.

**Corequisite:** MET 140

**MET 150 Weather Graphics for Broadcast Meteorology 2 cr**

In this course, broadcast meteorology students will learn how to build weather graphics using the Baron Lynx broadcast software system. The system is detailed, extensive, and powerful, but has a relatively steep learning curve. Knowing how to build a professional weather forecast show using the Baron software early in their curriculum, will allow broadcast meteorology students to focus on their on camera performance later in the curriculum. Knowing the details of building a professional show in Baron, will give students a huge advantage on the job market. This course will focus on the nuts and bolts of building a weather forecast show, on camera presenting and building a sound forecast are emphasized in other courses.

**MET 191 Tropical Weather Discussion 1 cr**

Tropical Weather Discussion is an introductory course in current or recently-active tropical weather systems. This course mainly reviews the structure, behavior, history and potential forecasts of tropical cyclones in the Atlantic, Pacific, and Indian Ocean basins from a meteorological perspective with special emphasis on activity in the Atlantic basin. The course is taught during the Fall Semester because it overlaps with the most active period of the Atlantic Hurricane Season. Other tropical weather topics such as El Nino, La Nina, monsoon troughs, tropical upper-tropospheric troughs, Madden Julian Oscillation, and hurricane climatology are discussed during weeks of inactivity when no tropical cyclones may be occurring. This course may be repeated for credit up to two times for a total of three hours; however, the course may only count once toward a meteorology elective.

**MET 340 Introduction to Meteorology 4 cr**

Analysis of weather phenomena and patterns on a global and local scale. Major topics include the heat balance, stability, precipitation processes, cyclonic activity, severe weather and forecasting techniques. Particular attention is devoted to the jet stream and its effect on surface weather.

**Prerequisite:** GEO 101 Minimum Grade of C

**Cross-Listed:** GEO 340

**MET 342 Severe Weather 3 cr**

A study of the causes, structure and impact of tornadoes, hurricanes, thunderstorms and severe weather systems (Identical to GEO 342).

**Prerequisite:** MET 353 Minimum Grade of C or GEO 353 Minimum Grade of C

**MET 353 General Meteorology 4 cr**

An overall view of the field of meteorology for science majors and minors. This course uses a quantitative approach to study the composition of the atmosphere, atmospheric processes, global circulation, and storm development. Laboratory exercises pay particular attention to hands-on analysis of meteorological charts (identical to GEO 353.)

**Prerequisite:** (MET 140 Minimum Grade of D and MET 140L Minimum Grade of D) and ((MA 112 Minimum Grade of C or MA 171 Minimum Grade of C) or (MA 113 Minimum Grade of C or MA 172 Minimum Grade of C) or (MA 125 Minimum Grade of C or MA 132 Minimum Grade of C))

**Cross-Listed:** GEO 353

**MET 353L General Meteorology Lab 1 cr**

Laboratory exercises associated with MET 353. Particular attention is given to hands-on weather analysis of meteorological charts.

**Corequisite:** MET 353

**Cross-Listed:** GEO 353L

**MET 354 Dynamic Meteorology I 3 cr**

Dynamic meteorology is the study of atmospheric motions that control our weather and climate. Using fundamental laws of physics (fluid dynamics and thermodynamics), a set of mathematical equations that describe how the atmosphere behaves, is derived. These equations are too complex to solve analytically, but with certain assumptions they can be simplified so that approximate solutions can be found. Even though approximate, these solutions still give useful information about the current state of the atmosphere and its evolution into the future. The theories derived in dynamic meteorology underlie all forecasting rules and techniques. Thorough understanding of these theories is invaluable to becoming a skilled forecaster.

**Prerequisite:** (MA 126 Minimum Grade of C or MA 233 Minimum Grade of C) and (PH 201 Minimum Grade of C or PH 216 Minimum Grade of C)

**MET 355 Dynamic Meteorology II 3 cr**

The circulation of the atmosphere and the structure of storms is quantitatively analyzed using equations of atmospheric flow. The jet stream, atmospheric waves, mid-latitude cyclones, and the concept of vorticity are given considerable attention.

**Prerequisite:** MET 354 Minimum Grade of C or GEO 344 Minimum Grade of C or GEO 354 Minimum Grade of C

**MET 356 Physical Meteorology 3 cr**

A detailed investigation of adiabatic processes, thermodynamic diagrams, atmospheric stability, and precipitation processes. Additional topics include atmospheric composition and aerosols, radiation and electricity.

**Prerequisite:** (MET 353 (may be taken concurrently) Minimum Grade of C or GEO 353 (may be taken concurrently) Minimum Grade of C) and (MA 126 (may be taken concurrently) Minimum Grade of C or MA 233 (may be taken concurrently) Minimum Grade of C) and (PH 201 (may be taken concurrently) Minimum Grade of C or PH 216 (may be taken concurrently) Minimum Grade of C)

**MET 357 Meteorological Instrumentation 2 cr**

Design, calibration, use and maintenance of existing and newly developed meteorological instruments and instrumentation systems. Analysis of data collected by instruments and instrument systems.

**Prerequisite:** (MET 353 Minimum Grade of C or GEO 353 Minimum Grade of C)

**MET 358 Radar Meteorology 4 cr**

This course is designed to give the student a three-fold introduction to weather radar and its value in the workplace. Basic radar principles and assumptions applicable to all radars are presented; the Doppler function and limitations are covered in depth with final emphasis on properly utilizing weather radar in an operations setting.

**Prerequisite:** (MET 354 Minimum Grade of C or GEO 344 Minimum Grade of C or GEO 354 Minimum Grade of C) and (PH 202 Minimum Grade of C or PH 217 Minimum Grade of C)

**MET 359 Introduction to TV Weather 2 cr**

This course gives the students the basic skills necessary for broadcasting weather information on TV. This course will focus on the basic principles and techniques of effective TV weather broadcasting.

**Prerequisite:** (MET 353 Minimum Grade of C or GEO 353 Minimum Grade of C)

**MET 360 Atmospheric Analysis 1 cr**

Analysis of meteorological charts. Provides additional preparation prior to Synoptic.

**Prerequisite:** (MET 353 Minimum Grade of C or GEO 353 Minimum Grade of C) and (MET 354 Minimum Grade of C or GEO 344 Minimum Grade of C or GEO 354 Minimum Grade of C)

**MET 370 Satellite Meteorology 3 cr**

This course is an introduction to the weather satellite and its influence on meteorological observations and forecasting. Both radiative propagation theory and satellite interpretation of meteorological features will be covered extensively.

**Prerequisite:** MET 356 Minimum Grade of C and (PH 202 Minimum Grade of C or PH 217 Minimum Grade of C)

**MET 401 Weather Forecasting I 2 cr**

A course specifically designed for students minoring in Meteorology. Students are introduced to weather forecasting concepts and methods.

**Prerequisite:** (MET 353 Minimum Grade of C or GEO 353 Minimum Grade of C)

**MET 402 Weather Forecasting II 2 cr**

A course specifically designed for students minoring in Meteorology. Weather forecasting techniques are discussed with an emphasis on the use of meteorological models and severe weather forecasting.

**Prerequisite:** MET 401 Minimum Grade of C

**MET 410 MET Phenomenology - W 3 cr**

This class is an introduction to reading meteorological journal and professional writings and to writing some of the standard scientific forms common in both operational and research meteorology: summaries, conference abstracts, and scientific journal articles. The students will engage in brief examination of some of the fundamental phenomena in the atmosphere through selected journal articles and write about these topics in an appropriate manner as inquisitive meteorologists.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (MET 353 Minimum Grade of C or GEO 353 Minimum Grade of C) and ((MET 354 Minimum Grade of C or GEO 344 Minimum Grade of C or GEO 354 Minimum Grade of C) or MET 401 Minimum Grade of C)

**MET 420 Computer Apps in Earth Science 4 cr**

An introduction to basic Python programming, with examples and exercises pertinent to Earth Science and GIS applications.

**Prerequisite:** MA 112 Minimum Grade of D or MA 110 Minimum Grade of C

**Cross-Listed:** GIT 420

**MET 430 Mesoscale Meteorology 3 cr**

Assessment of mesoscale phenomena, including frontogenesis and frontolysis, low-level jet streams, nocturnal boundary layer wind maxima, sea and land breezes, gravity waves, dry lines, lake-effect snow, and deep moist convection. Emphasis on scale analysis, subsynoptic-scale dynamics, interactions with larger-scale processes, and case study examples.

**Prerequisite:** (MET 355 Minimum Grade of C or GEO 345 Minimum Grade of C or GEO 355 Minimum Grade of C)

**MET 440 Air Pollution Meteorology 2 cr**

Air Pollution Meteorology is a survey course in air pollution topics taught primarily from an atmospheric perspective. This course covers topics on air pollution history, methods of measuring air quality, sources of air pollution, basic atmospheric pollution dispersion concepts, basic principles of air pollution modeling and prediction, and an overview of the impacts of polluted air on human health and the environment.

**Prerequisite:** MET 140 Minimum Grade of C or GEO 101 Minimum Grade of C and MA 110 Minimum Grade of C

**MET 442 Tropical Meteorology 3 cr**

This course presents an overview of meteorology in the tropics. The tropical realm is defined and the importance of solar radiation and distribution of temperature, moisture and precipitation in driving tropical weather systems is discussed. The general circulation in the tropics is explored along with seasonal and non-seasonal variations, including the Monsoon and El Nino/La Nina. Certain mesoscale and local circulations common to the tropics are also discussed. Several weeks will be spent investigating tropical cyclones.

**Prerequisite:** MET 353 Minimum Grade of C or GEO 353 Minimum Grade of C

**MET 443 Climatology - W 3 cr**

Analysis of global climate as aggregate weather. Component elements, factors controlling distribution, resulting area patterns, and climatic classification are studied (identical to GEO 443). Fee

**Prerequisite:** MET 140 Minimum Grade of C or GEO 101 Minimum Grade of C

**Cross-Listed:** GEO 443

**MET 454 Synoptic Meteorology I 6 cr**

Principles of dynamic and physical meteorology are applied to current surface and upper air analyses of frontal cyclones. An emphasis is placed on forecasting techniques, daily weather discussions, continuity and analysis.

**Prerequisite:** MET 355 Minimum Grade of C and MET 356 Minimum Grade of C

**MET 455 Synoptic Meteorology II 6 cr**

This course continues the development of principles learned in MET 454. Principles of atmospheric dynamics and conceptual models will be studied and employed through the use of surface and upper air analyses, satellite and radar data. A multi-week overview of numerical weather prediction principles and concepts will be accomplished along with the integration and interpretation of model guidance of actual modeling simulations using basic concepts of numerical weather prediction. Topics on mid-latitude cyclones and fronts will continue to be expanded beyond Synoptic I. Ensemble prediction and atmospheric oscillations will be discussed along with intrinsic predictability limitations. This course serves as the capstone class for meteorology majors.

**Prerequisite:** MET 454 Minimum Grade of C

**MET 456 Applied Climatology - W 3 cr**

Training in the application of climatology to solve real world problems. In addition to an examination of present day climate patterns, their causes, and mechanisms, the course focuses on the El Nino, recent and past climates, the natural and human impact on the Earth's energy balance, global warming, ozone hole and the chaos theory.

**Prerequisite:** (EH 102 (may be taken concurrently) Minimum Grade of C or EH 105 Minimum Grade of C) and (MET 353 (may be taken concurrently) Minimum Grade of C or GEO 353 Minimum Grade of C) and (MET 341 Minimum Grade of C or GEO 341 Minimum Grade of C)

**MET 490 Sp Top - 1-4 cr**

Meteorological topics not covered in current meteorology courses. May be repeated when content varies for a maximum of four hours. May require permission of instructor.

**MET 492 Seminar - 1-4 cr**

Departmental seminar investigating a special field of meteorology. (Topic announced prior to registration.) May be repeated when content varies for a maximum of eight hours. Requires permission of instructor.

**MET 494 Directed Studies 1-4 cr**

Independent research in field, laboratory, or library under the direction of a member of the meteorology faculty. Prerequisite: Requires permission of instructor. May be taken for a total of eight hours.

**MET 495 Mesonet Internship 1 cr**

Students will learn various aspects of mesonet (mesoscale weather station network) operation and maintenance. Students will take part in routine weather station site visits, emergency site visits when a sensor malfunctions, and quality control of incoming data. Once a year every weather station receives a complete retrofit where all sensors are replaced with freshly calibrated sensors. If such a retrofit occurs during the semester of a student's internship, the student will be given the opportunity to take part in this process as well. A large component of this course will consist of field work. Depending on student schedules and mesonet behavior, time will also be spent in the lab performing manual data quality control using the USA Mesonet website.

**Prerequisite:** (MET 353 Minimum Grade of C or GEO 353 Minimum Grade of C)

**MET 496 Internship in Meteorology 1-3 cr**

On-the-job learning through occupational, professional, or research work with an approved firm, agency, or meteorology faculty member. Open only to meteorology majors. Prerequisite: Permission of department chair.

**MET 497 Broadcast Meteorology Pract I 3 cr**

This course focuses on introducing the student to the ever evolving technology in broadcast meteorology. Emphasis is placed on the application of meteorological data through the use of professional television weather graphics systems in order to develop a "weather story". Particular attention is given to the use of chroma key mechanics/ techniques for public viewing.

**Prerequisite:** MET 359 Minimum Grade of C

**MET 498 Broadcast Meteorology Prac II 3 cr**

This course focuses on communicating accurate forecasts and other important weather information to the public. Attention is given to fine-tuning the on-air weather presentation style, as well as developing a professional resume tape of weather shows in order to gain employment as a broadcast meteorologist. Special attention is given to severe weather cut-ins and accurately conveying severe weather threats to the public.

**Prerequisite:** (MET 355 (may be taken concurrently) Minimum Grade of C or GEO 345 Minimum Grade of C or GEO 355 Minimum Grade of C) and MET 497 Minimum Grade of C

**MET 540 Topics in Air Pollution MET 3 cr**

Topics in Air Pollution Meteorology is a graduate course on advanced air pollution topics taught primarily from an atmospheric perspective. This course provides an overview of "dry" meteorological processes, such as temperature, pressure, wind, and general circulation combined with topics on air pollution history, methods of measuring air quality, sources of air pollution, atmospheric pollution dispersion concepts, principles of air pollution modeling and prediction, and the impacts of polluted air on human health and the environment.

**MET 590 Meteorology 1-6 cr**

An in-depth course for advanced students in meteorology. Topics and titles will be selected to examine the subject matter in an area of current interest to students and in an area of particular faculty expertise. Includes specialized topics not currently listed in the Bulletin.

**MET 594 Grad Dir St in Meteorology- 1-4 cr**

Graduate level independent study in Meteorology under the direction of a member of Meteorology's Graduate Faculty. Student must have an approved topic and must be accepted by a Graduate Faculty mentor before registering for this class. Prerequisite: Graduate standing.

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
ALLISON, DAVID T. (dallison@southalabama.edu)	Earth Sciences	Associate Professor	BS, University of Alabama PHD, Florida State University
BEEBE, DONALD ALEXANDER (dbeebe@southalabama.edu)	Earth Sciences	Professor	BS, University of South Alabama PHD, Clemson University
CAMARDA, SAMANTHA L. (scamarda@southalabama.edu)	Earth Sciences	Instructor	BA, Louisiana State University BA, Louisiana State University MS, Louisiana State University
DE OLIVEIRA, GABRIEL (deoliveira@southalabama.edu)	Earth Sciences	Assistant Professor	BS, Univ Fed Do Rio Grande Do Sul MS, Inst Nacional De Pesquisas Esp  PHD, Inst Nacional De Pesquisas Esp
KIMBALL, SYTSKE KAMMINGA (skimball@southalabama.edu)	Earth Sciences	Professor	BS, Delft University of Technology MS, Monash University PHD, Pennsylvania State University
LANICCI, JOHN M (lanicci@southalabama.edu)	Earth Sciences	Professor	BS, Manhattan College BS, Pennsylvania State University MS, Pennsylvania State University PHD, Pennsylvania State University
MCLEOD, JORDAN T (jtmcleod@southalabama.edu)	Earth Sciences	Instructor	BA, University of NC- Chapel Hill MS, University of Georgia
MUJICA, FRANCES C. (fcmujica@southalabama.edu)	Earth Sciences	Assistant Professor	BA, University of Memphis MA, Louisiana State University PHD, Louisiana State University
OLSEN, TIFFANY THU (tolsen@southalabama.edu)	Earth Sciences	Instructor	BS, Texas A & M University MS, University of Alabama
SAWYER, CAROL F. (sawyer@southalabama.edu)	Earth Sciences	Associate Professor	BS, Montana State U-Bozeman MS, Texas State Univ - San Marcos PHD, Texas State Univ - San Marcos
SCHULTZE, STEVEN R. (schultze@southalabama.edu)	Earth Sciences	Associate Professor	BA, University of Florida MA, Western Michigan University PHD, Michigan State University

TERBECK, FABIAN J. Earth Sciences  
(fterbeck@southalabama.edu)

WILEY, JACOB E. Earth Sciences  
(jakewiley@southalabama.edu)

Instructor BS, West Faelische Wilhelms Univ  
MS, Leipzig University  
PHD, University of Connecticut  
Assistant Professor BS, Mississippi State University  
MS, Mississippi State University  
PHD, Mississippi State University

# Geographic Information Science (GIS) Certificate

## Degree Requirements

Students who want to earn a GIS (Geographic Information Science) Certificate must take all six of the following courses:

Code	Title	Hours
GEO 331	Computer Graphs and Maps	4
GEO/GYALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)332	Remote Sensing I	4
GIT 442	Remote Sensing II	4
GIT 460	Intro to GIT	4
GIT 461	Environmental GIS	4
GIT 462	GIT Apps II-Business/Soc Sci	4
<b>Total Hours</b>		<b>24</b>

For students to earn a GIS Certificate, they must have a 3.0 overall GPA and at least a "B" in each of the six courses that make up the GIS Certificate. If students receive less than a B in a class, it may still count as credit, but not towards the certificate.

# Geographic Information Technology Minor

## Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Minor in Geographic Information Technology

A minimum of 22 hours of Geographic Information Technology related classes.

Code	Title	Hours
<b>Core Courses</b>		
GIT 460	Intro to GIT	4
GIT 461	Environmental GIS	4
or GIT 462	GIT Apps II-Business/Soc Sci	

MET/GITALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)420	Computer Apps in Earth Science	4
or CIS 110	Intro to Comp-Info Sciences	

### Electives

Select three of the following:		11-12
GEO 331	Computer Graphs and Maps	
GEO 332	Remote Sensing I	
or MET 370	Satellite Meteorology	
GY 301	Geomorphology	
GIT 442	Remote Sensing II	
GIT 461	Environmental GIS	
GIT 462	GIT Apps II-Business/Soc Sci	
Other GIT electives		

**Total Hours 23-24**

# Geography (BS)

## Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		<b>47</b>
A. Complete the following:		
GEO 101	Environmental Geography	4
& 101L	and Environmental Geography Lab	
GEO 102	Earth and the Environment	4
& 102L	and Earth and the Environment Lab	
GEO 114	People, Places, Environment	3
GEO 115	World Regional Geography	3
GEO 201	Geography Orientation	1
GEO 331	Computer Graphs and Maps	4
GEO 332	Remote Sensing I	4
GEO 435	Research Methods Geography	3
GEO 485	Seminar Geographic Thought - W	3
B. Select at least one upper level course from each of the following four categories:		
Human Geography courses:		
GEO 312	World Economic Geog	

GEO 321	Nat'l Parks Conservation
GEO 365	Urban Geography and Planning
GEO 370	International Tourism
GEO 417	Health and Place

## Physical Geography courses:

GEO 310	
GEO 405	Natural Hazards and Disasters
GEO 410	Biogeography
GEO 411	Soils
GEO 440	Coastal Zone Management
GEO 441	Coastal Climatology
GEO 443	Climatology-W

## Regional Geography courses:

GEO 313	Geography of U.S. and Canada
GEO 314	Geography of Europe
GEO 315	Geography of Latin America
GEO 475	Field Work in Geography

## Technical Geography courses:

GIT 442	Remote Sensing II
GIT 460	Intro to GIT
GIT 461	Environmental GIS
GIT 462	GIT Apps II-Business/Soc Sci
GIT 490	Special Topics

**Minor Requirements**

A minor is required for this degree program 18-24

**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

Only two courses in the GIT minor may be counted toward the Geography major.

Complete at least 15 semester hours in residence in major at the 300 and/or 400 level. A minimum GPA of 2.0 is required in major.

**Additional Information**

The Geography degree also requires: One additional Natural science course, one additional social science course outside of Geography, and ST 210.

Note that a portion of Area IV (GEO 114, GEO 115) of the General Education requirements and the Natural Sciences portion of Area III (GEO 101, GEO 102, ST 210) of the General Education requirements are fulfilled by the major requirements specified above.

**Graduation Plan**

(47 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I	3
CAS 100	First Yr Exp -	2
Fine Arts course	Area III, C <sup>1</sup>	3
GEO 114	People, Places, Environment	3
GEO 101	Environmental Geography	3

GEO 101L	Environmental Geography Lab	1
<b>Hours</b>		<b>15</b>

<b>Spring</b>		
EH 102	English Composition II	3
CA 110	Public Speaking	3
MA 110	Finite Mathematics (or higher)	3
GEO 115	World Regional Geography	3
GEO 102	Earth and the Environment	3
GEO 102L	Earth and the Environment Lab	1

**Hours 16**

**Second Year****Fall**

Literature	Area II, D <sup>1</sup>	3
LG or LGS	Foreign Language - 1st semester	3
Minor course	Course to satisfy minor	3
History	Area IV, A <sup>1</sup>	3
GEO 201	Geography Orientation	1

**Hours 13**

**Spring**

History or English Sequence	Area II, D or Area IV, A <sup>1</sup>	3
LG or LGS	Foreign Language - 2nd semester	3
Minor course	Course to satisfy minor	3
Geography elective	Upper level geography course (300+) (need 6 GEO elective courses)	3
GEO 332	Remote Sensing I	4

**Hours 16**

**Third Year****Fall**

Minor course	Course to satisfy minor	3
ST 210	Stat Reason and Application	3
Humanities and Fine Arts elective	Area II, E <sup>1</sup>	3
Geography elective	Upper level geography course (300+) (need 6 GEO elective courses)	3
GEO 331	Computer Graphs and Maps	4

**Hours 16**

**Spring**

Minor course	Course to satisfy minor	3
Minor course	Course to satisfy minor	3
Natural Science	Area III, B <sup>1</sup>	3
Natural Science Lab	Area III, B <sup>1</sup>	1
Geography elective	Upper level geography course (300+) (need 6 GEO elective courses)	3
Humanities and Fine Arts elective	Area II, E <sup>1</sup>	3

**Hours 16**

**Fourth Year****Fall**

Geography elective	Upper level geography course (300+) (need 6 GEO elective courses)	3
Social & Behavioral Sciences	Area IV, B <sup>1</sup>	3
Minor course	Course to satisfy minor	3
GEO 435	Research Methods Geography	3
Geography elective	Upper level geography course (300+) (need 6 GEO elective courses)	3

**Hours 15**

**Spring**

Minor course	Course to satisfy minor	3
Social & Behavioral Sciences	Area IV, B <sup>1</sup>	3
Elective	Elective to reach 120 hours	3

GEO 485	Seminar Geographic Thought - W	3
Geography elective	Upper level geography course (300+) (need 6 GEO elective courses)	3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>122</b>

<sup>1</sup> See General Education Requirements

**Note:**

(W) Writing-Intensive Course - 2 required

## Geography Minor Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Minor in Geography

A minimum of 20 hours of Geography related classes.

Code	Title	Hours
GEO 101 & 101L or GEO 102 & 102L	Environmental Geography and Environmental Geography Lab Earth and the Environment and Earth and the Environment Lab	4
GEO 114 or GEO 115	People, Places, Environment World Regional Geography	3
GEO 331 or GEO 332	Computer Graphs and Maps Remote Sensing I	4
GEO Upper Division (300/400) Electives		9
<b>Total Hours</b>		<b>20</b>

A geography faculty advisor is recommended for planning an appropriate minor curriculum with the remaining upper level courses to suit the student's interests and needs.

## Geology (BS) Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		<b>40</b>
<i>Geology Major Core</i>		
A. Complete the following:		
GY 111 & 111L	Physical Geology and Physical Geology Lab	4
GY 112 & 112L	Earth History and Earth History Lab	4
GY 301	Geomorphology	3
GY 302	Crystallography and Mineralogy	4
GY 303	Igneous & Meta Petrology	4
GY 306	Sedimentology & Stratigraphy-W	4
GY 403	Structural Geology	4
GY 480	Field Geology	6

### Geology Major Elective

A. Select eight hours from the following:		8
GY 304	Stratigraphy - W	
GY 305	Geophysics	
GY 401	Paleontology - W	
GY 425	Hydrology	
GY 446	Marine Geology	
GY 494	Directed Studies	

### Other STEM Requirements

See list below.

### Minor Requirements

A minor is required for this degree program 18-24

**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

### Other STEM Requirements

The Geology degree also requires:

Code	Title	Hours
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
PH 114 & 114L or PH 201 & 201L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab Calculus-Based Physics I and Calculus-Based Physics I Lab	5
PH 115 & 115L or PH 202 & 202L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab Calculus-Based Physics II and Calculus-Based Physics II Lab	5
MA 125	Calculus I	4
MA 126	Calculus II	4

## Graduation Plan

(40 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
GY 111	Physical Geology	3
GY 111L	Physical Geology Lab	1
CA 110	Public Speaking	3
EH 101	English Composition I	3
CH 131	General Chemistry I	3
CH 131L	General Chemistry I Lab	1
CAS 100	First Yr Exp -	2
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
GY 112	Earth History	3
GY 112L	Earth History Lab	1
EH 102	English Composition II	3
CH 132	General Chemistry II	3
CH 132L	General Chemistry II Lab	1
Social Science 1 (History Sequence 1)		3
<b>Hours</b>		<b>14</b>

**Second Year**

Fall		
GY 301	Geomorphology	3
MA 125	Calculus I	4
Social Science 2 (History Sequence 2)		
EH 225	Am Lit before 1865 (Survey of American Literature I)	3
Foreign Language 1		3
<b>Hours</b>		<b>16</b>

Spring		
GY 306	Sedimentology & Stratigraphy-W	4
MA 126	Calculus II	4
EH 226	Am Lit after 1865 (Survey of American Literature II)	3
Foreign Language 2		3
<b>Hours</b>		<b>14</b>

**Third Year**

Fall		
GY 302	Crystallography and Mineralogy	4
PH 115 or PH 202	Physics with Algebra -Trig II or Calculus-Based Physics II	4
PH 115L or PH 202L	Alg-Trig Based Physics II Lab or Calculus-Based Physics II Lab	0
Social Science 3		3
Social Science 4		3
<b>Hours</b>		<b>14</b>

Spring		
GY 303	Igneous & Meta Petrology	4
PH 115 or PH 202	Physics with Algebra -Trig II or Calculus-Based Physics II	4
PH 115L or PH 202L	Alg-Trig Based Physics II Lab or Calculus-Based Physics II Lab	0
Minor course 1		3-4
Minor course 2		3-4
<b>Hours</b>		<b>14-16</b>

**Fourth Year**

Fall		
GY elective	Geology elective 1	3
Minor course 3		3-4
Minor course 4		3-4
Humanities 3/Fine Arts 1		3
<b>Hours</b>		<b>12-14</b>

Spring		
GY 403	Structural Geology	4
GY elective	Geology elective 2	3
Minor course 5		3-4
Minor course 6		3-4
<b>Hours</b>		<b>13-15</b>

Summer		
GY 480	Field Geology	6
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>119-125</b>

See General Education Requirements

## Geology Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

## Minor in Geology

A minimum of 18 hours of Geology related classes.

Code	Title	Hours
<b>Required Courses</b>		
GY 111 & 111L	Physical Geology and Physical Geology Lab	4
GY 112 & 112L	Earth History and Earth History Lab	4
GY 301	Geomorphology	3
<b>Remaining Requirements</b>		
At least 7 hours of any GY course numbered 300 or higher may be used, from core or elective courses, to satisfy remaining minor course requirements.		7
<b>Total Hours</b>		<b>18</b>

Possible core Geology courses include:

Code	Title	Hours
GY 302	Crystallography and Mineralogy	4
GY 303	Igneous & Meta Petrology	4
GY 306	Sedimentology & Stratigraphy-W	4
GY 403	Structural Geology	4
GY 480	Field Geology	6

Possible elective Geology courses include:

Code	Title	Hours
GY 304	Stratigraphy - W	3
GY 305	Geophysics	4
GY 401	Paleontology - W	4
GY 425	Hydrology	4
GY 494	Directed Studies	1-4

A geology faculty advisor is recommended for planning an appropriate minor curriculum past the initial introductory sequence.

## Meteorology (BS) - Broadcast Met Track

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		<b>47</b>
<i>Meteorology Major Core</i>		

A. Complete the following:

MET 140 & 140L	Introduction to Meteorology and Intro to Meteorology Lab	4
MET 443	Climatology - W	3
MET 353	General Meteorology	4
MET 354	Dynamic Meteorology I	3
MET 355	Dynamic Meteorology II	3
MET 356	Physical Meteorology	3
MET 454	Synoptic Meteorology I	6

MET 490	Sp Top - (Orientation to Meteorology)	1
MET 455	Synoptic Meteorology II	6

**Broadcast Meteorology Track****A. Complete the following:**

MET 490	Sp Top - (Baron Graphics)	1
MET 342	Severe Weather	3
MET 358	Radar Meteorology	4
MET 359	Introduction to TV Weather	2
MET 496	Internship in Meteorology	1
MET 497	Broadcast Meteorology Pract I	3

**B. Select one hour from the following:**

MET 191	Tropical Weather Discussion	
MET 357	Meteorological Instrumentation	
MET 370	Satellite Meteorology	
MET 410	MET Phenomenology - W	
MET 420	Computer Apps in Earth Science	
MET 430	Mesoscale Meteorology	
MET 440	Air Pollution Meteorology	
MET 442	Tropical Meteorology	
MET 456	Applied Climatology - W	
MET 490	Sp Top -	
MET 495	Mesonet Internship	
GY 425	Hydrology	
GIT 460	Intro to GIT	
MGT 300	Management Theory and Practice	
MKT 320	Principles of Marketing	

**Other STEM Requirements**

See list below.

**Minor Requirements**

A minor is required for this degree program 18-24

**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

**Other STEM Requirements**

The Meteorology degree also requires:

Code	Title	Hours
MA 125	Calculus I	4
MA 126	Calculus II	4
MA 227	Calculus III	4
MA 238	Differential Equations I	3
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	4
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	4
ST 315	Applied Probability-Statistics	3

Note that Area III General Education requirements are fulfilled by these major requirements.

**Graduation Plan**

(47 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
MA 125	Calculus I	4
MET 140	Introduction to Meteorology	3
MET 140L	Intro to Meteorology Lab	1
GEO 115	World Regional Geography (Area IV, B) <sup>1,2</sup>	3
CAS 100	First Yr Exp -	2
MET 490	Sp Top - (Orientation to Meteorology)	1
EH 101	English Composition I	3
		<b>Hours</b>
		<b>17</b>
<b>Spring</b>		
MA 126	Calculus II	4
MET 353	General Meteorology	4
MET 443	Climatology - W	3
EH 102	English Composition II	3
MET 490	Sp Top - (Baron Graphics)	1
		<b>Hours</b>
		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
MA 227	Calculus III	4
PH 201	Calculus-Based Physics I	4
PH 201L	Calculus-Based Physics I Lab	0
History	Area IV, A <sup>2</sup>	3
CA 110	Public Speaking	3
MET 357	Meteorological Instrumentation	2
		<b>Hours</b>
		<b>16</b>
<b>Spring</b>		
MA 238	Differential Equations I	3
PH 202	Calculus-Based Physics II	4
PH 202L	Calculus-Based Physics II Lab	0
Literature	Area II, B <sup>2</sup>	3
MET 342	Severe Weather	3
MET 359	Introduction to TV Weather	2
		<b>Hours</b>
		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
ST 315	Applied Probability-Statistics	3
MET 354	Dynamic Meteorology I	3
MET 356	Physical Meteorology	3
MET 497	Broadcast Meteorology Pract I	3
Foreign Language I	Area V, A <sup>2</sup>	3
		<b>Hours</b>
		<b>15</b>
<b>Spring</b>		
Math Minor elective	MA/ST 300+ elective <sup>1,2</sup>	3
MET 355	Dynamic Meteorology II	3
MET 358	Radar Meteorology	4
Foreign Language II	Area V, A <sup>2</sup>	3
Social/Behavioral Science	Area IV, B <sup>2</sup>	3
		<b>Hours</b>
		<b>16</b>
<b>Fourth Year</b>		
<b>Fall</b>		
MET 454	Synoptic Meteorology I	6
MET 496	Internship in Meteorology	1
Fine Arts	Area II, C <sup>2</sup>	3
Humanities/Fine Arts	Area II, D <sup>2</sup>	3
Elective		3
		<b>Hours</b>
		<b>16</b>
<b>Spring</b>		
MET 455	Synoptic Meteorology II	6
Humanities/Fine Arts	Area II, D <sup>2</sup>	3

Social/Behavioral Science Area IV, B <sup>2</sup>	3
Elective	3
<b>Hours</b>	<b>15</b>
<b>Total Hours</b>	<b>125</b>

<sup>1</sup> Recommended Course

<sup>2</sup> See General Education Requirements

Upon completion of Meteorology major requirements, students are only one course short of a minor in Mathematics. This recommended template incorporates a Math minor. However, students are free to choose a different minor or double-minor. Many Broadcast Track Meteorology students pursue a minor in Communication.

Many Broadcast Track Meteorology majors choose to complete an internship during the summer between the junior and senior year in addition to another internship during typical senior year classes. Completion of a summer internship is not mandatory; however, the Meteorology faculty strongly recommend completing two internships with one emphasizing broadcasting and the other emphasizing reporting/producing.

## Meteorology (BS) - Graduate School Track

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		<b>47</b>
<i>Meteorology Major Core</i>		
A. Complete the following:		
MET 140 & 140L	Introduction to Meteorology and Intro to Meteorology Lab	4
MET 443	Climatology - W	3
MET 353	General Meteorology	4
MET 354	Dynamic Meteorology I	3
MET 355	Dynamic Meteorology II	3
MET 356	Physical Meteorology	3
MET 454	Synoptic Meteorology I	6
MET 490	Sp Top - (Orientation to Meteorology)	1
MET 455	Synoptic Meteorology II	6
<i>Graduate School Meteorology Track</i>		
A. Complete the following:		
MET 420	Computer Apps in Earth Science	4
B. Complete the following:		
MET 358 or MET 370	Radar Meteorology or Satellite Meteorology	3-4
C. Select 6-7 hours from the following, including at least one 2+ hour 400-level course:		
MET 191	Tropical Weather Discussion	
MET 342	Severe Weather	
MET 357	Meteorological Instrumentation	
MET 358	Radar Meteorology	
MET 359	Introduction to TV Weather	

MET 370	Satellite Meteorology
MET 410	MET Phenomenology - W
MET 430	Mesoscale Meteorology
MET 440	Air Pollution Meteorology
MET 442	Tropical Meteorology
MET 456	Applied Climatology - W
MET 490	Sp Top -
MET 495	Mesonet Internship
MET 496	Internship in Meteorology
MET 497	Broadcast Meteorology Pract I
GY 425	Hydrology
GIT 460	Intro to GIT
MGT 300	Management Theory and Practice
MKT 320	Principles of Marketing

#### Other STEM Requirements

See list below.

#### Minor Requirements

A minor is required for this degree program 18-24

**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

### Other STEM Requirements

The Meteorology degree also requires:

Code	Title	Hours
MA 125	Calculus I	4
MA 126	Calculus II	4
MA 227	Calculus III	4
MA 238	Differential Equations I	3
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	4
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	4
ST 315	Applied Probability-Statistics	3

Note that Area III General Education requirements are fulfilled by these major requirements.

### Graduation Plan

(47 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
MA 125	Calculus I	4
MET 140	Introduction to Meteorology	3
MET 140L	Intro to Meteorology Lab	1
GEO 115	World Regional Geography (Area IV, B) <sup>1,2</sup>	3
CAS 100	First Yr Exp -	2
MET 490	Sp Top - (Orientation to Meteorology)	1
EH 101	English Composition I	3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
MA 126	Calculus II	4
MET 353	General Meteorology	4

CA 110	Public Speaking	3
EH 102	English Composition II	3
<b>Hours</b>		<b>14</b>
<b>Second Year</b>		
<b>Fall</b>		
MA 227	Calculus III	4
PH 201	Calculus-Based Physics I	4
PH 201L	Calculus-Based Physics I Lab	0
MET 420	Computer Apps in Earth Science	4
MET 357	Meteorological Instrumentation (MET elective) <sup>1</sup>	2
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
MA 238	Differential Equations I	3
PH 202	Calculus-Based Physics II	4
PH 202L	Calculus-Based Physics II Lab	0
MET 342	Severe Weather (MET Concentration) <sup>1,2</sup>	3
MET 443	Climatology - W	3
History	Area IV, A <sup>2</sup>	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
MA 332	Differential Equations II (Math minor elective) <sup>1,2</sup>	3
MET 354	Dynamic Meteorology I	3
MET 356	Physical Meteorology	3
Fine Arts	Area II, C <sup>2</sup>	3
Foreign Language I	Area V, A <sup>2</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ST 315	Applied Probability-Statistics	3
MET 355	Dynamic Meteorology II	3
MET 358	Radar Meteorology (MET Concentration) <sup>1,2</sup>	4
Foreign Language II	Area V, A <sup>2</sup>	3
Literature	Area II, B <sup>2</sup>	3
<b>Hours</b>		<b>16</b>
<b>Fourth Year</b>		
<b>Fall</b>		
MET 454	Synoptic Meteorology I	6
MET 410	MET Phenomenology - W (MET Concentration) <sup>1,2</sup>	3
Humanities/Fine Arts	Area II, D <sup>2</sup>	3
Social/Behavioral Science	Area IV, B <sup>2</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
MET 455	Synoptic Meteorology II	6
Social/Behavioral Science	Area IV, B <sup>2</sup>	3
Humanities/Fine Arts	Area II, D <sup>2</sup>	3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>122</b>

<sup>1</sup> Recommended Course

<sup>2</sup> See General Education Requirements

Upon completion of Meteorology major requirements, students are only one course short of a minor in Mathematics. This recommended template incorporates a Math minor specifying MA 332 (Differential Equations II, Partial Differential Equations) since most Meteorology graduate programs require it.

## Meteorology (BS) - Professional Track

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		<b>47</b>
<i>Meteorology Major Core</i>		
A. Complete the following:		
MET 140 & 140L	Introduction to Meteorology and Intro to Meteorology Lab	4
MET 443	Climatology - W	3
MET 353	General Meteorology	4
MET 354	Dynamic Meteorology I	3
MET 355	Dynamic Meteorology II	3
MET 356	Physical Meteorology	3
MET 454	Synoptic Meteorology I	6
MET 490	Sp Top - (Orientation to Meteorology)	1
MET 455	Synoptic Meteorology II	6
<i>Professional Meteorology Track</i>		
A. Complete the following:		
MET 357	Meteorological Instrumentation	2
B. Complete the following:		
MET 358	Radar Meteorology	3-4
	or MET 370 Satellite Meteorology	
C. Select 8-9 hours from the following: ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/earth-sciences/footnote1/">http://bulletin.southalabama.edu/programs-az/arts-sciences/earth-sciences/footnote1/</a> ) <sup>1</sup>		8-9
MET 191	Tropical Weather Discussion	
MET 342	Severe Weather	
MET 358	Radar Meteorology	
MET 359	Introduction to TV Weather	
MET 370	Satellite Meteorology	
MET 410	MET Phenomenology - W	
MET 420	Computer Apps in Earth Science	
MET 430	Mesoscale Meteorology	
MET 440	Air Pollution Meteorology	
MET 442	Tropical Meteorology	
MET 456	Applied Climatology - W	
MET 490	Sp Top -	
MET 495	Mesonet Internship	
MET 496	Internship in Meteorology	
MET 497	Broadcast Meteorology Pract I	
GY 425	Hydrology	
GIT 460	Intro to GIT	
MGT 300	Management Theory and Practice	
MKT 320	Principles of Marketing	

#### Other STEM Requirements

See list below.

#### Minor Requirements

A minor is required for this degree program **18-24**  
**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

**Footnote**

<sup>1</sup> At least 1 course must be a 400-level course.

**Other STEM Requirements**

The Meteorology degree also requires:

Code	Title	Hours
MA 125	Calculus I	4
MA 126	Calculus II	4
MA 227	Calculus III	4
MA 238	Differential Equations I	3
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	4
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	4
ST 315	Applied Probability-Statistics	3

Note that Area III General Education requirements are fulfilled by these major requirements.

**Graduation Plan**

(47 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
MA 125	Calculus I	4
MET 140	Introduction to Meteorology	3
MET 140L	Intro to Meteorology Lab	1
GEO 115	World Regional Geography (Area IV, B) <sup>1,2</sup>	3
CAS 100	First Yr Exp -	2
EH 101	English Composition I	3
MET 490	Sp Top - (Orientation to Meteorology)	1
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
MA 126	Calculus II	4
MET 353	General Meteorology	4
CA 110	Public Speaking	3
EH 102	English Composition II	3
<b>Hours</b>		<b>14</b>
<b>Second Year</b>		
<b>Fall</b>		
MA 227	Calculus III	4
PH 201	Calculus-Based Physics I	4
PH 201L	Calculus-Based Physics I Lab	0
MET 420 or GIT 460	Computer Apps in Earth Science or Intro to GIT	4
MET 357	Meteorological Instrumentation	2
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
MA 238	Differential Equations I	3
PH 202	Calculus-Based Physics II	4
PH 202L	Calculus-Based Physics II Lab	0

MET 443	Climatology - W	3
History	Area IV, A <sup>2</sup>	3
Literature	Area II, B <sup>2</sup>	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
ST 315	Applied Probability-Statistics	3
MET 354	Dynamic Meteorology I	3
MET 356	Physical Meteorology	3
Fine Arts	Area II, C <sup>2</sup>	3
Foreign Language I	Area V, A <sup>2</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Math minor elective	MA/ST 300+ elective <sup>1,2</sup>	3
MET 355	Dynamic Meteorology II	3
MET 358	Radar Meteorology (MET Concentration) <sup>1,2</sup>	4
MET 342	Severe Weather (MET Concentration) <sup>1,2</sup>	3
Foreign Language II	Area V, A <sup>2</sup>	3
<b>Hours</b>		<b>16</b>
<b>Fourth Year</b>		
<b>Fall</b>		
MET 454	Synoptic Meteorology I	6
Social/Behavioral Science	Area IV, B <sup>2</sup>	3
Humanities/Fine Arts	Area II, D <sup>2</sup>	3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
MET 455	Synoptic Meteorology II	6
Social/Behavioral Science	Area IV, B <sup>2</sup>	3
Humanities/Fine Arts	Area II, D <sup>2</sup>	3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>122</b>

<sup>1</sup> Recommended Course  
<sup>2</sup> See General Education Requirements

Upon completion of Meteorology major requirements, students are only one course short of a minor in Mathematics. This recommended template incorporates a Math minor.

**Meteorology Minor Degree Requirements**

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

**Minor in Meteorology**

A student must take 20 semester hours of Meteorology including

Code	Title	Hours
MET 140 & 140L	Introduction to Meteorology and Intro to Meteorology Lab	4
MET 353	General Meteorology	4
MET 443	Climatology - W	3
Select nine hours of electives from the following:		9
MET 191	Tropical Weather Discussion (see footnote table below (p. 189)) <sup>1</sup>	

MET 342	Severe Weather
MET 354	Dynamic Meteorology I
MET 355	Dynamic Meteorology II
MET 356	Physical Meteorology
MET 357	Meteorological Instrumentation
MET 358	Radar Meteorology
MET 359	Introduction to TV Weather
MET 370	Satellite Meteorology
MET 401	Weather Forecasting I
MET 402	Weather Forecasting II
MET 410	MET Phenomenology - W
MET 420	Computer Apps in Earth Science
MET 430	Mesoscale Meteorology
MET 440	Air Pollution Meteorology
MET 442	Tropical Meteorology
MET 456	Applied Climatology - W
MET 497	Broadcast Meteorology Pract I
<b>Total Hours</b>	<b>20</b>

## Footnote

<sup>1</sup> MET 191 may be taken up to 3 times for credit but will only count once toward the meteorology minor.

# English

## Department Information

Department of English website  
<https://www.southalabama.edu/colleges/artsandsci/english> (<https://www.southalabama.edu/colleges/artsandsci/english/>)

Through its focus on the interpretation, analysis, and production of literary and other texts, the English Department teaches students how those texts shape and are shaped by the world around them. In so doing, the Department helps students acquire the critical skills they need to analyze and participate in these interactions and contribute to the shaping of their worlds. The faculty's teaching and research in literature, creative writing, and composition/rhetoric combine to foster excellence in critical reading, creative thinking, and effective writing.

For all students, the Department provides the composition skills essential for success at the University and offers courses introducing the cultural diversity and historical breadth of British, American, and world literatures. For students majoring or minoring in English, the Department teaches critical strategies needed for intensive study in creative writing, professional writing, and in diverse literatures in English. For students pursuing graduate study in English, the Department provides advanced training in creative writing, literary analysis, rhetoric, methods of scholarly research, and critical theory. In all cases, by asking students to read, discuss, and write about a wide variety of texts, the Department promotes an inclusive and evolving understanding of English Studies.

All first-time freshmen must successfully complete CAS 100, as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry.

## Honors in English

To be awarded Departmental Honors in English a student must:

1. Complete all the standard requirements for the major in English.
2. Maintain a 3.5 overall GPA (University requirement) and a 3.5 GPA in all course work in English.
3. Receive permission from the Department Chair and agreement from a Department member to serve as mentor.
4. Complete a Senior Honors Thesis (EH 499), with a grade of "A" or "B" in addition to the standard requirements for the English major. EH 499 (six semester hours credit), may be counted toward three hours of the 39 hours required for the major and toward three hours of the nine 400-level hours required for the major. Thus, the student receiving honors in English will be required to take a total of 42 hours in English instead of 36. In EH 499 the student will normally take three hours in the Fall semester for research and three in the Spring for writing. A final committee of three or more faculty members, including a representative of the University Honors College, will conduct an oral defense. The thesis must be approved by the director of the University Honors College.

*Please Note:* To be eligible to undertake an honors thesis in creative writing, the student must first complete four creative writing courses at the University of South Alabama. This policy on creative writing theses not only applies to students seeking departmental honors but also to students enrolled in the Honors College.

## The Accelerated Bachelor's to Master's Program in English (ABM)

The Accelerated Bachelor's to Master's in English degree program provides undergraduate students with the opportunity to earn a bachelor's and master's degree in English at an accelerated pace. English majors applying for the Accelerated Bachelor's to Master's program must meet the Graduate School requirements for the program and have a 3.5 GPA in English classes at the 300 and 400 levels in order to receive departmental approval. ABM students typically count 6 credit hours of graduate course work towards the graduate degree. USA accelerated bachelor's to master's (ABM) in English provides exceptional undergraduate students the opportunity to earn a bachelor's and master's degree at an accelerated pace in English. While still an undergraduate, ABM students may count up to 6 credit hours of graduate course work towards their graduate degree.

### Eligibility Requirements

Undergraduate students must meet the following criteria:

- 3.0 cumulative undergraduate GPA
- Completed at least 90 credit hours
- Completed at least 30 credits at USA
- At least a 3.5 GPA in EH 300- and 400-level classes.

Admission will be based on the applicant's meeting these criteria and the approval of the graduate program coordinator. Once admitted into the ABM program, students must maintain at least a 3.0 GPA and remain in good standing to progress into the graduate program.

### Credit Hour Requirements

Completion of the ABM program requires students complete at least 150 approved unique credit hours. To qualify for a baccalaureate degree, a student must complete at least 120 approved semester hours. To qualify for a master's degree a student must complete a minimum of 30

approved semester hours. Generally, undergraduate students are not approved to take more than 12 credit hours of graduate coursework.

### Program Procedures

ABM students may begin taking graduate courses after completing at least 90 hours of undergraduate credit. Up to 6 hours can count toward both degrees (Bachelor's and Master's) if the courses are completed with grades of at least B. Courses with a grade of C can count toward the undergraduate degree but not the graduate degree. Courses with a grade below C cannot count toward the undergraduate or graduate degree. Upon completing the undergraduate degree, students will apply to the English Master's program. ABM students who are in good standing will be accepted in the English Master's program.

Completion of the English M.A. program requires successful completion of all requirements, including at least 36 graduate credit hours. Graduate credit taken while an undergraduate that is completed with at least the grade of B will be transferred into the Master's program upon acceptance and will apply toward the 36 hours required for the Master of Arts degree.

A student who withdraws or is dismissed from the ABM program may not count graduate coursework towards both degrees. Graduate courses for which an undergraduate student did not earn an "A" or "B" grade, may not be counted towards the graduate degree.

An ABM student must be a full-time student and must complete all degree requirements for the master's within three semesters of the semester in which they were admitted to the Graduate School. An exception for a fourth semester may be granted where an additional semester is required for final revisions to and submission of a defended thesis. Exceptions to the ABM policy are at the discretion of the Dean of the Graduate School.

### Graduate Studies

The Master of Arts degree program in English is designed to meet the needs of students pursuing a terminal M.A. and of those planning to work toward the Ph.D. and a career in university teaching. The terminal M.A. serves such career tracks as junior college or secondary-school teaching and writing or editing in the business or corporate community. Creative writers find the degree meaningful in careers both in and out of the academic community since the M.A. provides guidance towards book publication and time to study successful literary texts.

### Requirements for Admission

Students are admitted each semester. The following criteria supplement the Graduate School criteria (see Categories of Admission):

1. For the Literature Concentration, applicants normally have an undergraduate major or minor in English or at least 21 semester hours of course work in English beyond the freshman level, at least 12 of these hours in upper-division literature courses. For the Creative Writing Concentration, applicants normally have 15 semester hours of course work in English beyond the freshman level. Students lacking prior coursework can complete additional upper-division courses in English to strengthen their applications.
2. Applicants to graduate programs in Arts and Sciences typically have a minimum GPA of at least a 3.0 on all undergraduate work. In exceptional cases, applicants may be considered with at least a 2.5 GPA on all undergraduate work, or at least a 2.75 GPA on the last 60 hours of undergraduate work. The English Department normally requires a minimum GPA of 3.0 in junior- and senior-level courses presented in fulfillment of requirement 1.

3. All applicants should submit a personal statement of no more than 500 words, a writing sample of 5-15 pages in the area of concentration (creative writing or literature) and three letters of recommendation.<sup>1</sup>
4. All applicants for whom English is a second language should submit a TOEFL IBT score of at least 79 or IELTS score of at least 6.5. (Note that ESL applicants must apply through the International Admissions Office at USA.)

<sup>1</sup> Students must specify their concentration at the time of application and may not thereafter change concentrations without the specific approval of the English Department's Graduate Committee.

### Graduate Assistantships

The English Department awards both teaching assistantships and research assistantships. Teaching assistantships involve responsibility for freshman composition classes. Graduate students holding research assistantships are usually assigned tasks involving tutoring, research, editing, or administrative/clerical tasks. Awards are normally made for the academic year; occasionally, assistantships become available for spring semester. Applications are taken continuously; competition for appointments begins in February for the following year. See Graduate Coordinator for information and application. (See also Bulletin section on Graduate School, "Assistantships and Fellowships.")

## Degrees, Programs, or Concentrations

- English (BA) (p. 199)
- English (BA) - Creative Writing Concentration (p. 200)
- English (BA) - Professional Writing and Editing Concentration (p. 202)
- English (MA) - Literature Concentration (p. 203)
- English (MA) Creative Writing Concentration (p. 204)
- English Creative Writing Minor (p. 204)
- English Minor (p. 205)
- English Professional Writing Minor (p. 205)

## Courses

### EH 101 English Composition I 3 cr

Prepares students for diverse types of college writing. Covers the writing process, general criteria used to evaluate writing, collaborative writing, and rhetoric, especially audience analysis. Some sections require an ACT Reading score of 19 or higher or an SAT Critical Reading score of 26 or higher. Grading is "A", "B", "C", and "U". Core Course.

**Prerequisite:** A01 19 or S13 26 or S01 450 or (ESL 015 Minimum Grade of C or T03R 5.5 or T04R 20) and (T04W 20 or T03W 5.5 or ESL 016 Minimum Grade of C)

### EH 102 English Composition II 3 cr

EH 102 prepares students for college writing by focusing on argumentation, research, and the critical thinking required to argue effectively. Students must earn a C or higher in EH 102 to fulfill the University writing requirement for composition. Core course.

**Prerequisite:** A01 27 or S01 610 or S13 33 or EH 101 Minimum Grade of C or EH 010 Minimum Grade of S or USEH P

**Cross-Listed:** EH 105

**EH 105 Honors Composition - H 3 cr**

This course emphasizes the types of writing that students will do in college and reflects goals of the Honors Program with advanced work in critical thinking and research. Prerequisite: students must have been accepted in the Honors Program.

**Prerequisite:** A01 27 or S01 610 or S13 33 or EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or EH 010 Minimum Grade of S or USEH P

**Cross-Listed:** EH 102

**EH 200 Intro to Creative Writing 3 cr**

This course will introduce students to writing creatively in four major genres: poetry, fiction, nonfiction, and drama. Fundamentals of craft to be studied will include plot and character in fiction; sound and image in poetry; dialogue in drama; and form and research in creative nonfiction. Analysis of literary models, critiques of students' work, and craft discussions will aid students in creating a final portfolio.

**Prerequisite:** EH 102 (may be taken concurrently) Minimum Grade of C or EH 101 (may be taken concurrently) Minimum Grade of C or EH 105 (may be taken concurrently) Minimum Grade of C

**EH 203 Literary Genres - 3 cr**

Variable-content course featuring literary forms. May be repeated once for a total of 6 credits. Prerequisites: EH 101 and EH 102.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 204 Literary Themes - 3 cr**

Variable-content course treating particular concepts that recur in literature. May be repeated once for a total of 6 credits when topics vary. Prerequisites: EH 101 and EH 102.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 207 Literature and Gender 3 cr**

A variable-topics course to study gender issues in literary texts. Can only be taken for a maximum of 3 credits.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 215 Brit Lit before 1785 3 cr**

This course introduces students to the cultural heritage of the British Isles by studying representative literary works from the Middle Ages through the 18th Century.

**Prerequisite:** (EH 102 (may be taken concurrently) Minimum Grade of C or EH 105 (may be taken concurrently) Minimum Grade of C)

**EH 216 Brit Lit after 1785 3 cr**

This course introduces the student to the cultural heritage of the British Isles by studying representative literary works from the 19th Century to the present.

**Prerequisite:** (EH 102 (may be taken concurrently) Minimum Grade of C or EH 105 (may be taken concurrently) Minimum Grade of C)

**EH 225 Am Lit before 1865 3 cr**

This course traces the development of American literature from its beginning through 1865 by studying the works of representative writers. Core course.

**Prerequisite:** (EH 102 (may be taken concurrently) Minimum Grade of C or EH 105 (may be taken concurrently) Minimum Grade of C)

**EH 226 Am Lit after 1865 3 cr**

This course traces the development of American literature from 1865 to the present by studying the works of representative writers. Core Course.

**Prerequisite:** (EH 102 (may be taken concurrently) Minimum Grade of C or EH 105 (may be taken concurrently) Minimum Grade of C)

**EH 235 World Lit before 1650 3 cr**

A survey of literature from the Ancient World, the Middle Ages, and the Renaissance, featuring selections in translation. Core Course.

**Prerequisite:** (EH 102 (may be taken concurrently) Minimum Grade of C or EH 105 (may be taken concurrently) Minimum Grade of C)

**EH 236 World Lit after 1650 3 cr**

A survey of literature from Neoclassicism, Romanticism, Nineteenth-century Realism and Naturalism, and the Modern World, featuring selections in translation. Core course.

**Prerequisite:** (EH 102 (may be taken concurrently) Minimum Grade of C or EH 105 (may be taken concurrently) Minimum Grade of C)

**EH 242 Black Writers in America 3 cr**

A survey of literature by major African-American authors from the days of slavery to the present. Readings will include fiction, poetry, drama, autobiography, and polemical prose.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** EH 357

**EH 288 Academic Writing - W 3 cr**

Practice in the writing necessary in various academic disciplines.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 290 Sp Top 3 cr**

A variable-content course treating selected topics in literature and language. May be repeated once for a total of 6 credits when topic varies.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 300 Intro to Literary Study 3 cr**

This course offers an introduction to the study of literature with special emphasis on critical writing. Required for 400-level literature classes.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 301 Poetry Crit Reading-Analysis 3 cr**

Introduction to close reading and interpretation of poetry, including written explications and analysis.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 302 Drama Crit Reading-Analysis 3 cr**

Introduction to close reading and interpretation of drama, including written analysis. Prerequisites: EH 101 and EH 102.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 303 Fiction Critical Rdnng Analysis 3 cr**

Introduction to close reading and interpretation of fiction, including written analysis.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 310 Classical Mythology 3 cr**

Through the disciplines of English and Philosophy, this course will provide an introduction to myths and to the literature that recounts the myths, legends, and folktales of ancient Greece and Rome. Not only will this course offer a survey of Greek and Roman myth, but it will also look at how different writers treat the material and why their treatments vary. Cross-listed with PHL 310 and REL 310. Credit cannot be received for both EH 310 and either PHL 310 or REL 310.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** CLA 310, PHL 310, REL 310

**EH 314 Medieval Literature 3 cr**

This course will introduce students to major texts of medieval literature, including narrative poetry, drama, prose, and lyric poetry.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 315 Chaucer 3 cr**

This course will introduce students to Chaucer's major works in the original language; no prior knowledge of Middle English is required.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 320 Shakespeare's Plays 3 cr**

Study of Shakespeare's plays from across all the kinds he wrote: tragedies, histories, comedies, and romances.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 321 Renaissance Literature 3 cr**

Non-dramatic literature of the English Renaissance through 1600.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 324 17th Century Literature 3 cr**

Non-dramatic literature 1600-1660.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 331 American Novel to 1900 3 cr**

American novel from its beginning to 1900.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 332 American Nonfiction Prose 3 cr**

Major American nonfiction prose.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 334 American Poetry to 1900 3 cr**

American poetry from its beginning to 1900.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 335 Native American Literature 3 cr**

Survey of Native American Literature from the 18th century to the present.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 340 Restoration Early 18th Lit 3 cr**

Literature of the period, including such authors as Behn, Dryden, Finch, Defoe, Pope, Montagu, Swift, and Fielding.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 342 Later 18th Century Lit - W 3 cr**

Literature of the period, including such authors as Gray, Boswell, Johnson, Sheridan, Radcliffe, Wollstonecraft, Blake, and Austen.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 343 18th Century British Novel 3 cr**

Eighteenth-Century British novel.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 351 British Romanticism 3 cr**

The poetry and prose of Romantic-era writers, including Wordsworth, Coleridge, Byron, Keats and Shelley.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 352 Victorian Poetry 3 cr**

A study of poetry of the Victorian period.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 353 Victorian Prose 3 cr**

A study of prose, emphasizing nonfiction, of the Victorian period.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 354 19th Century British Novel 3 cr**

Novels of the Romantic and Victorian periods.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 357 Black Writers in America 3 cr**

A survey of literature by African-American authors from the early colonial period to the present. Readings will include fiction, poetry, drama, autobiography, and polemical prose.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 360 Anglo-Am Poetry since 1900 3 cr**

A study of Anglo-American poets such as D.H. Lawrence, T.S. Eliot, Ezra Pound, Robert Graves, W.H. Auden, Dylan Thomas, Derek Walcott, Paul Muldoon, Eavan Boland, Seamus Heaney, Galway Kinnel, Adrienne Rich, Robert Penn Warren, John Crowe Ransom, Margaret Walker, Elizabeth Bishop, Gwendolyn Brooks, Gary Snyder, Charles Olson, Allen Ginsberg, Anne Sexton, and Sylvia Plath.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 361 American Novel since 1900 3 cr**

Twentieth-century American novel. Prerequisites: EH 101 and EH 102.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 362 Am. Novel from 1900 to 1945 3 cr**

A study of the American novel from 1900 to 1945.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 363 American Novel since 1945 3 cr**

A study of the American novel since 1945.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 364 Brit. Novel from 1900 to 1945 3 cr**

A study of the British novel from 1900 to 1945.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 365 British Novel since 1945 3 cr**

A study of the British novel since 1945.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 366 Contemporary Fiction 3 cr**

An introduction to literary fiction of the contemporary era.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 367 British Novel since 1900 3 cr**

Twentieth-century British novel. Prerequisite: EH 101 and EH 102.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 369 Modern Short Story 3 cr**

Representative modern short story writers.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 370 History of English Language 3 cr**

A study of the development from Old English through Middle English to Modern English.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 371 Approaches to Eng Grammar - W 3 cr**

A course designed primarily to help education majors translate between the languages of conventional grammar and the syntactical grammar relevant to the teaching of English at pre-college levels. Consideration will also be given to the rationales basic to the formation of different grammars and to methods of presenting grammatical material in a classroom situation. Non-education majors interested in a sophisticated approach to the study of grammar might also benefit from this course.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** ARG 371

**EH 372 Technical Writing - W 3 cr**

The purpose of this course is to train students in the kinds of written reports required of practicing professionals, aiming to improve mastery of the whole process of report writing from conceptual stage through editing stage.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 373 Writing in Professions - W 3 cr**

Practice in the kinds of writing done in such professions as speech pathology and audiology, nursing, teaching, criminal justice, and business. Assignments, which emphasize persuasive writing, may include position papers, correspondence, and reports.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 379 Horror 3 cr**

A study of the history and themes of horror from the early 19th century to the present, including representative texts, films, and scholarship.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 380 Science Fiction 3 cr**

Study of the history and themes of science fiction literature and film from the end of the nineteenth century to the present.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 390 Sp Top - 3 cr**

A variable-content course addressing selected topics in literature and writing. May be repeated for a total of 6 credits when course content varies.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 391 Fiction Writing 3 cr**

Intensive practice in the short story with contemporary readings.

Constructive, critical discussions are conducted on each composition.

Emphasis is on the creation of compelling short fiction.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and EH 200 Minimum Grade of C

**EH 393 Creative Nonfiction Writing 3 cr**

Intensive study of and practice in writing creative nonfiction - nonfiction that stresses personal voice and the use of literary elements. Concentrates on genres of creative nonfiction (personal or narrative essay, travel and nature writing, cultural criticism, memoir) with an emphasis on producing high-quality writing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and EH 200 Minimum Grade of C

**EH 395 Poetry Writing 3 cr**

Intensive study in different modes and forms in contemporary poetry such as fixed, open, and spoken word. Readings in contemporary poetry will serve as models for students' creation of new poems. Workshops a primary component of the class.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and EH 200 Minimum Grade of C

**EH 401 Teaching Composition-W 3 cr**

Study of theories of composition and their applications for teaching writing at the secondary school level.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 402 Rhetoric-Ancient and Modern-W 3 cr**

Readings in rhetorical theory, ancient and modern, are applied in specific writing assignments which encourage students to adopt a point of view and address a specific audience.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** ARG 402, CLA 402

**EH 404 Grant Proposal Writing 3 cr**

Extensive preparation in the discourse and generic conventions of grant proposals written by practicing professionals, aiming to promote mastery of the whole process of grant writing from conceptual stage through editing stage.

**Prerequisite:** (EH 101 Minimum Grade of C and EH 102 Minimum Grade of C) or EH 105 Minimum Grade of C

**EH 405 Editing and Document Design 3 cr**

Covers general editing principles, levels and types of editing, and technical editing terms, along with theories and aesthetic principles of document design and production. The course offers extensive, hand-on experience in both areas.

**Prerequisite:** (EH 101 Minimum Grade of C and EH 102 Minimum Grade of C) or EH 105 Minimum Grade of C

**EH 421 Literary Criticism to 1900-W 3 cr**

Classical, Neo-Classical, Romantic, and Victorian literary theory. Identical to PHL 421. Credit cannot be received for both PHL 421 and EH 421.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** PHL 421

**EH 422 Lit Criticism Since 1900-W 3 cr**

Modern and contemporary literary theory. Identical to PHL 422. Credit cannot be received for both EH 422 and PHL 422.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** PHL 422

**EH 461 Tudor and Stuart Drama 3 cr**

A historical and generic study of plays by authors including Kyd, Marlowe, Dekker, Jonson, Middleton, Beaumont, Fletcher, and Webster.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 462 Restor-18th Century Drama - W 3 cr**

A historical and generic study of plays by authors such as Wycherley, Etheridge, Behn, Dryden, Otway, Congreve, Steele, Goldsmith, and Sheridan.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 463 Drama 1890 to Present 3 cr**

Twentieth-century British, American, and Continental drama, with major emphasis on the plays of Ibsen, Chekhov, Shaw, Pirandello, O'Neill, and Beckett.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 465 Middle English Literature 3 cr**

Major romances and dream-visions of the late Middle Ages such as Sir Gawain and the Green Knight, Troilus and Criseyde, Sire Orfeo, Pearl, and Parliament of Birds.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 467 Milton 3 cr**

Milton's major poems, with emphasis on Paradise Lost.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 468 Contemporary Black Fiction 3 cr**

A close reading of selected fiction published since World War II by such authors as James Baldwin, Ralph Ellison, Alice Walker, Toni Morrison, Ernest J. Gaines, Gloria Naylor, and Julius Lester.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 470 Medieval Lit 3 cr**

A variable content course in specific topics from medieval literature. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 471 Renaissance Lit 3 cr**

A variable content course in specific topics from Renaissance literature. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 472 Shakespeare 3 cr**

A variable content course in specific topics on Shakespeare. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 474 Restoration Lit 3 cr**

A variable content course in specific topics in Restoration and 18th Century literature. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 475 19th Century Lit 3 cr**

A variable content course in specific topics from 19th Century literature. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 476 Studies in 20th Century Lit 3 cr**

A variable content course in specific topics from 20th-Century literature. May be repeated once for credit when course content varies for up to six credit hours.

**Prerequisite:** (EH 102 Minimum Grade of C) or EH 105 Minimum Grade of C

**EH 477 Genre 3 cr**

A variable content course in specific topics from various genres. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 478 Film 3 cr**

A variable content course in specific topics from film studies. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 479 Mod/Postmodern Poetry 3 cr**

A variable content course in specific topics from modern/postmodern poetry. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 480 Gender and Lit 3 cr**

A variable content course in specific topics dealing with gender and literature. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 481 Comp and Rhetoric - W 3 cr**

A variable content course in specific topics concerned with writing, rhetoric, or language studies. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** ARG 481

**EH 482 Am Literature 3 cr**

A variable content course in specific topics from American literature. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 483 Advanced Fiction Writing 3 cr**

Innovative study in various forms of fiction for students with experience in the techniques of fiction writing. Discussion include cultural and critical context as well as foundational models.

**Prerequisite:** EH 102 Minimum Grade of C or EH 105 Minimum Grade of C and EH 200 Minimum Grade of C and EH 391 Minimum Grade of C

**EH 485 Advanced Poetry Writing 3 cr**

Advanced poetry writing course that explores different styles of contemporary American poetry such as political poetry, eco-poetry, ekphrastic poetry and more. Students will create at least ten new poems and submit them for workshop.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (EH 200 Minimum Grade of C and EH 395 Minimum Grade of C)

**EH 487 Screenwriting for Film 3 cr**

Craft talks and guided workshops on how to create a feature-length screenplay.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and EH 200 Minimum Grade of C

**EH 488 Screenwriting for Television-W 3 cr**

Craft talks and guided workshops on how to create a television series and write the pilot episode.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** CA 488

**EH 489 Folklore and Ways of Listening 3 cr**

This course focuses on the collection of folklore and expressive culture, providing a contemporary glimpse at collective memory. Students learn ethnographic fieldwork methods, oral history interviewing techniques, transcription, and the evaluation of oral evidence.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C and EH 300 (may be taken concurrently) Minimum Grade of C)

**EH 490 Special Topics 1-3 cr**

Selected topics in writing in literary studies. May be repeated for a total of 9 credits when course content varies.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 491 Special Topics in Creative Writing 3 cr**

Selected topics in creative writing. May be repeated for a total of 9 credits when course content varies.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (EH 200 Minimum Grade of C)

**Corequisite:** EH 300

**EH 492 Seminar - 3 cr**

Specific topics in literature. Can be taken twice for a total of 6 credits when topics vary.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 494 Directed Studies 1-3 cr**

Directed individual study. Requires permission of the directing professor and department chair. Course can be repeated for a total of 8 credits.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 496 Professional Studies - Intern 1-2 cr**

On-the-job experience related to the student's classroom work in the field of English. A maximum of two hours of credit may be earned in internships. Students consult with the English department chair regarding internship opportunities and eligibility. English majors and minors who are juniors or seniors may enroll. Pre-requisites: Permission of English department chair and the supervising professor, completion of EH 101 and EH 102 (or EH 105), 3.0 GPA, and junior or senior standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 497 Adv Creative Nonfiction Writ. 3 cr**

Advanced study and practice of writing creative nonfiction.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 499 Senior Honors Project-H 3-6 cr**

With the guidance of a faculty mentor, Honors Students will identify and carry out an independent scholarly project in English. The outcome of the project will include a formal presentation and defense before the faculty and a written senior thesis. The Honors Senior Project will be evaluated and graded by three members of the faculty and chaired by the project faculty mentor. The student must complete a total of six hours of Honors Senior work, be accepted to the University Honors Program or the Department Honors Program, and have an approved project prospectus. University Honors Program participants must have completed HON 301.

**Prerequisite:** HON 301 Minimum Grade of D and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 501 Introduction to Crit Theory 3 cr**

Required of all M.A. students in the Literature Concentration in their first year of work. Surveys current literary theory from structuralism to the present. The purpose is to introduce the conceptual lexicons and reading strategies of advanced literary analysis. Topics treated include structuralism, deconstruction, psychoanalysis, hermeneutics, Marxism, feminism, and reception theory.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 502 Graduate Writing for English 3 cr**

A course preparing students for research and academic writing at the graduate level in English studies. Required of all MA students in their first year of work. Prerequisite: Admitted to Graduate Program

**EH 505 Teaching College Writing 3 cr**

A study of contemporary theories in writing and rhetoric, with an emphasis on their application in a college level curriculum.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 506 Composition Theory & Research 3 cr**

Traces development of theoretical movements in composition, addressing research methodologies as well. Covers pedagogy but also theoretical and empirical issues such as relationship of composition to cultural criticism, ways of knowing and assessment.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 507 Topics in Rhetoric/Composition 3 cr**

A variable-content course treating selected topics in Rhetoric/Composition Studies. Possible topics include histories of rhetoric, digital literacy in composition and rhetorical analyses of texts.

**Prerequisite:** EH 502 Minimum Grade of C

**EH 508 Workplace Writing Contexts 3 cr**

Study of theories, practices, and histories of professional writing.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 510 Introduction to Old English 3 cr**

Old English poetry and prose studied in its original linguistic form.

**EH 511 Beowulf 3 cr**

A study of the Old English poem Beowulf in its original linguistic form.

**Prerequisite:** EH 510

**EH 513 Studies in Chaucer 3 cr**

A study of selections of Chaucer's Canterbury Tales and dream visions.

**Prerequisite:** EH 502 Minimum Grade of C

**EH 514 Renaissance Poetry 3 cr**

Examination of non-dramatic Renaissance poetic development, including the sonnet.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 520 Studies in Shakespeare 3 cr**

Study of Shakespeare's plays from across all the kinds that he wrote: tragedies, histories, comedies, and romances.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 521 17th Century Poetry 3 cr**

A historical and formal study of the poetry of the early seventeenth century, including the works of Donne, Jonson, Herbert, Vaughn, Herrick, Marvell, Wroth, Lanyer, and Philips. The course will emphasize the close reading of poems.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 525 Restor-Early 18th Century Lit 3 cr**

A study of literature in the period, including such authors as Dryden, Rochester, Behn, Congreve, Defoe, Pope, Swift, and Gay.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 532 Early Romantics 3 cr**

A study of early Romantic poetry and prose, with emphasis on the poetry of William Wordsworth and S.T. Coleridge.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 534 Late Romantics 3 cr**

A study of late romantic poetry and prose, with emphasis on the poetry of Lord Byron, Percy Shelley, and John Keats.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 536 Victorian and Edwardian Poetry 3 cr**

A study of poetry of the Victorian and Edwardian periods.

**EH 538 Victorian and Edwardian Prose 3 cr**

A study of novels and short fiction of the Victorian and Edwardian periods.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 543 American Romanticism 3 cr**

A study of writers of the American Romantic Movement, such as Irving, Emerson, Thoreau, Douglass, Whitman, and Dickinson, focusing primarily on nonfiction prose and poetry.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 544 Antebellum American Fiction 3 cr**

Examines the emergence and development of American fiction before the Civil War, focusing on the tale and the novel, and including such figures as Cooper, Hawthorne, Poe, Melville, and Stowe.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 545 American Realism 3 cr**

A study of writers of the American Realist Movement, such as Twain, James, Crane, Dreiser, Chopin, Cheitnutt, and Jewett.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 548 Native American Fiction 3 cr**

Study of fiction written by Native Americans since 1900.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 551 African Am. Lit. to 1900 3 cr**

Study of literature written by African Americans to 1900.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 552 African Am. Lit. since 1900 3 cr**

Study of literature written by African Americans since 1900.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 562 20th Century Poetic Revolution 3 cr**

A study of the key figures in the shaping of modern poetry - Yeats, Eliot, Pound, Stevens, and Frost.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 570 Studies in Medieval Literature 3 cr**

Theme-based study of Medieval texts; possible topics include late medieval chivalry, medieval sexualities, Arthurian tradition.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 571 Modern British Fiction 3 cr**

Examination of selected works of such authors as Conrad, D.H. Lawrence, Woolf, Forster, Joyce, Greene, and Lessing.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 572 Modern American Fiction 3 cr**

Examination of selected works of such authors as Anderson, Dickey, Faulkner, Fitzgerald, and Hemingway.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 573 Contemporary Fiction 3 cr**

Examines significant trends in contemporary literary fiction.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 574 Folklore and Ways of Listening 3 cr**

This course focuses on the collection of folklore and expressive culture, providing a contemporary glimpse at collective memory. Students learn ethnographic fieldwork methods, oral history interviewing techniques, transcription, and the evaluation of oral evidence.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 577 Studies in Genre - 3 cr**

Seminar in specific topics from various genres. May be repeated once for credit when content varies.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 581 Screenwriting Workshop 3 cr**

Screenwriting Workshop. May be repeated for a total of 6 credits when course content varies.

**EH 583 Grad Fiction Writing Wksp I 3 cr**

Special individual instruction in fiction writing. This course requires special permission.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 584 Grad Fiction Writing Wksp II 3 cr**

Special individual instruction in fiction writing. This course requires special permission.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 585 Grad Poetry Writing Wksp I 3 cr**

Special individual instruction in poetry writing. This course requires special permission.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 586 Grad Poetry Writing Wksp II 3 cr**

Special individual instruction in poetry writing. This course requires special permission.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 588 Writing and Diversity 3 cr**

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 589 Creative Nonfiction Writing 3 cr**

Intensive study of and practice in writing creative nonfiction that stresses personal voice and the use of literary elements. Focus on the personal or narrative essay, travel and nature writing, and cultural criticism.

**EH 590 Special Topics - 3 cr**

A graduate seminar designed to allow close study of selected literary topics or figures. May be repeated twice for credit when the subject offerings are from different literary areas.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 591 Topics in Creative Writing 3 cr**

Selected topics in creative writing. May be repeated for a total of 6 credits when the course content varies.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 592 Seminar - 3 cr**

A specific subject in American or British literature to be assigned prior to each semester. May be taken once for credit when the subject offerings are from different literary areas.

**Prerequisite:** EH 502 Minimum Grade of C

**EH 594 Dir St - 1-8 cr**

Directed individual study on a topic not covered by an existing course.

**Prerequisite:** Prior permission of the directing professor and the department chair. May be taken for a total of 8 credits.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 596 Professional Studies--Intern 1,2 cr**

On-the-job experience related to the student's classroom work in the field of English. A maximum of two hours of credit may be earned in internships. Students consult with the English Department Graduate Coordinator regarding internship opportunities and eligibility. **Prerequisites:** Permission from the Graduate Coordinator and the English Department Chair.

**EH 598 Literature Capstone 3 cr**

The literature Capstone is a directed study class required for students completing the Literature Concentration in their last semester of coursework. Working with a mentor, students create a research portfolio and give a departmental presentation.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 599 Thesis - 6 cr**

One to six credits per semester with a maximum of six hours of credit.

**Pre-requisite:** Admitted to the Graduate Program.

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
AMARE, NICOLE ERVIN (namare@southalabama.edu)	English	Professor	BA, University of Wisconsin-Madison MA, Kansas State University MA, University of Alabama PHD, University of Alabama
ARRAS, JENNIFER O'FARRILL (jarras@southalabama.edu)	English	Instructor	BA, Spring Hill College MA, University of NC- Chapel Hill
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BEASON, LARRY (lbeason@southalabama.edu)	English	Professor	BS, Stephen F Austin State U MA, Stephen F Austin State U PHD, Texas A & M University
CESARINI, J PATRICK (pcesarini@southalabama.edu)	English	Associate Professor	BA, Amherst College PHD, Rutgers State Univ New Bruns
COLEMAN, ROBERT L. (rcoleman@southalabama.edu)	English	Associate Professor	BS, Virginia Commonwealth U MA, Virginia Commonwealth U PHD, Rutgers State Univ New Bruns
COWLEY, CHRISTOPHER MICHAEL (cmcowley@southalabama.edu)	English	Senior Instructor	BA, University of South Alabama MA, University of Florida
DAIL, HEATHER NOELLE WILKINS (hdail@southalabama.edu)	English	Instructor	BA, University of South Alabama MA, University of South Alabama
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FRYE, DORIS ANN (dfrye@southalabama.edu)	English	Senior Instructor	BA, Saint Leo College MA, Louisiana State University PHD, Louisiana State University
GIBSON, DYLAN SKYE (dylangibson@southalabama.edu)	English	Part-Time Instructor	BA, Auburn University MA, University of South Alabama
GUZY, ANN M. (aguzy@southalabama.edu)	English	Associate Professor	BS, Southern Illinois U-Edwardsvi MA, Southern Illinois U-Edwardsvi PHD, New Mexico State U-Main Campus

HALBROOKS, JOHN VERNON (jvhalbrooks@southalabama.edu)	English	Associate Professor	BA, University of NC- Chapel Hill MA, College of William and Mary PHD, Tulane University
HARRINGTON, ELLEN BURTON (eharrington@southalabama.edu)	English	Professor	BA, Fordham University MA, Tulane University PHD, Tulane University
HILLYER, RICHARD (rhillyer@southalabama.edu)	English	Professor	BA, University of Exeter, UK MA, University of Michigan-Ann Arb PHD, University of Michigan-Ann Arb
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JOHNSON, CALEB (calebjohnson@southalabama.edu)	English	Assistant Professor	BA, University of Alabama MFA, University of Wyoming
LANG, MAURA MCKENNA (mlang@southalabama.edu)	English	Instructor	BA, University of South Alabama MA, University of South Alabama
MCLAUGHLIN, BECKY RENEE (bmclaugh@southalabama.edu)	English	Professor	BA, Goshen College MA, University of Arkansas- Fayette PHD, SUNY at Buffalo
O'BERRY, ROBERT EDWARD (oberry@southalabama.edu)	English	Part-Time Instructor	BA, University of South Alabama MA, University of South Alabama
OWSLEY, JESSICA SIMS (jessicasims@southalabama.edu)	English	Instructor	BA, Auburn University MA, Auburn University PHD, Auburn University
PENCE, CHARLOTTE JEANE (cpence@southalabama.edu)	English	Associate Professor	BA, University of Tennessee-Knox MFA, Emerson College PHD, University of Tennessee-Knox
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RODDY, LISA MARIE (lroddy@southalabama.edu)	English	Instructor	BA, University of CA-Santa Cruz MA, University of Texas- Austin
SHAW, PATRICK J. (pjshaw@southalabama.edu)	English	Associate Professor	BA, University of Pittsburgh-Johns MA, University of Missouri-Columb PHD, University of Missouri-Columb
ST. CLAIR, JUSTIN MICHAEL (jmstclair@southalabama.edu)	English	Professor	BA, Washington and Lee University MA, University of Iowa PHD, University of Iowa
VOLF, STEPHANIE L. (stephanievolf@southalabama.edu)	English	Instructor	AB, University of Michigan-Ann Arb MA, Arizona State University-Main PHD, Arizona State University-Main
VRANA, LAURA ELIZABETH (vrana@southalabama.edu)	English	Assistant Professor	BA, Yale University MA, Pennsylvania State University PHD, Pennsylvania State University

# English (BA)

## Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		<b>39</b>
<i>English BA Major Core</i>		
A. Survey Sequence - Select six hours from the following:		6
EH 215 & EH 216	Brit Lit before 1785 and Brit Lit after 1785	
EH 225 & EH 226	Am Lit before 1865 and Am Lit after 1865	
EH 235 & EH 236	World Lit before 1650 and World Lit after 1650	
B. Gateway Course		
EH 300	Intro to Literary Study (see footnote table below (p. 199)) <sup>1</sup>	3
C. Literature prior to 1660 - Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/english/footnote1/">http://bulletin.southalabama.edu/programs-az/arts-sciences/english/footnote1/</a> ) <sup>2</sup>		3
EH 314	Medieval Literature	
EH 315	Chaucer	
EH 320	Shakespeare's Plays	
EH 321	Renaissance Literature	
EH 324	17th Century Literature	
EH 461	Tudor and Stuart Drama	
EH 465	Middle English Literature	
EH 467	Milton	
EH 470	Medieval Lit	
EH 471	Renaissance Lit	
EH 472	Shakespeare	
D. British or American Literature, 1660-1900 - Select one of the following:		3
EH 331	American Novel to 1900	
EH 332	American Nonfiction Prose	
EH 334	American Poetry to 1900	
EH 340	Restoration Early 18th Lit	
EH 342	Later 18th Century Lit - W	
EH 343	18th Century British Novel	
EH 351	British Romanticism	
EH 352	Victorian Poetry	
EH 353	Victorian Prose	
EH 354	19th Century British Novel	
EH 462	Restor-18th Century Drama - W	
EH 474	Restoration Lit	
EH 475	19th Century Lit	
E. Literature after 1900 - Select one of the following:		3
EH 360	Anglo-Am Poetry since 1900	
EH 362	Am. Novel from 1900 to 1945	
EH 363	American Novel since 1945	
EH 364	Brit. Novel from 1900 to 1945	
EH 365	British Novel since 1945	

EH 366	Contemporary Fiction	
EH 369	Modern Short Story	
EH 380	Science Fiction	
EH 463	Drama 1890 to Present	
EH 468	Contemporary Black Fiction	
EH 476	Studies in 20th Century Lit	
EH 478	Film	
EH 479	Mod/Postmodern Poetry	
F. Criticism, Theory, Rhetoric - Select one of the following:		3
EH 402	Rhetoric-Ancient and Modern-W	
EH 421	Literary Criticism to 1900-W	
EH 422	Lit Criticism Since 1900-W	
G. Culture and Community - Select one of the following:		3
EH 207	Literature and Gender	
EH 335	Native American Literature	
EH 357	Black Writers in America	
EH 468	Contemporary Black Fiction	
EH 480	Gender and Lit	
H. English Electives - Five additional EH courses ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/english/footnote1/">http://bulletin.southalabama.edu/programs-az/arts-sciences/english/footnote1/</a> ) <sup>3</sup>		15
I. 400-level courses ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/english/footnote1/">http://bulletin.southalabama.edu/programs-az/arts-sciences/english/footnote1/</a> ) <sup>4</sup>		9

### Minor Requirements

A minor is required for this degree program 18-24

**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

### Footnote

<sup>1</sup> Should be completed prior to enrollment in any 400-level English course. Also fulfills technology requirement.

<sup>2</sup> Classical Mythology EH 310/PHL 310/REL 310/CLA 310 cannot satisfy this requirement.

<sup>3</sup> Any EH course qualifies, not just those listed above. See limits on 200-level courses.

<sup>4</sup> These can simultaneously fulfill requirements C-G above, with one being Item F

### Additional Information

Coursework requirements for the English BA include:

- 9 hours of 400-level coursework in English at USA.
- 30 hours of 300- or 400-level coursework at USA.
- 39 hours of English coursework, excluding composition. (Only four 200-level courses can count toward this requirement.)
- 15 hours of 300- or 400-level coursework in English at USA.

### Graduation Plan

(39 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2

EH 101	English Composition I	3
MA 110	Finite Mathematics (or higher)	3
Foreign Language I		3
Fine Arts Elective		3
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
EH 102	English Composition II (or Honors)	3
Humanities Elective		3
Foreign Language II		3
CA 110	Public Speaking	3
Natural Science with Lab		4
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
Natural Science with Lab		4
Social/Behavioral Science Elective		3
Literature Survey		3
Social/Behavioral Elective <sup>1</sup>		3
Minor course		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Social/Behavioral Elective		3
Natural Science with Lab		4
History	US or Western Civilization	3
Literature Survey <sup>1</sup>		3
EH 300	Intro to Literary Study	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
English Core: C - Prior to 1660		3
English Core: D - British or American Lit 1660-1900		3
English Elective	200 level or higher	3
Minor course		3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
English Elective	400 level	3
Minor course	300 level or higher	3
Minor course		3
Elective	300 level or higher	3
Select one of the following:		3
EH 402	Rhetoric-Ancient and Modern-W	
EH 421	Literary Criticism to 1900-W	
EH 422	Lit Criticism Since 1900-W	
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
English Elective	400 level	3
English Elective	300 level or higher	3
Minor Course		3
English Elective	300 level or higher	3
English Core: G - Diversity, Equity, and Inclusion		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
English Elective	300 level or higher	3
Elective		3
Elective		3
English Elective	400 level or higher	3

Minor course	3
<b>Hours</b>	<b>15</b>
<b>Total Hours</b>	<b>122</b>

<sup>1</sup> See General Education Requirements

## English (BA) - Creative Writing Concentration

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		<b>39</b>
A. Survey Sequence - Select six hours from the following:		6
EH 215	Brit Lit before 1785	
& EH 216	and Brit Lit after 1785	
EH 225	Am Lit before 1865	
& EH 226	and Am Lit after 1865	
EH 235	World Lit before 1650	
& EH 236	and World Lit after 1650	
B. Gateway Course		
EH 300	Intro to Literary Study (see footnote table below (p. 201)) <sup>1</sup>	3
C. Literature prior to 1660 - Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/english/footnote1/">http://bulletin.southalabama.edu/programs-az/arts-sciences/english/footnote1/</a> ) <sup>2</sup>		3
EH 314	Medieval Literature	
EH 315	Chaucer	
EH 320	Shakespeare's Plays	
EH 321	Renaissance Literature	
EH 324	17th Century Literature	
EH 461	Tudor and Stuart Drama	
EH 465	Middle English Literature	
EH 467	Milton	
EH 470	Medieval Lit	
EH 471	Renaissance Lit	
EH 472	Shakespeare	
D. British or American Literature, 1660-1900 - Select one of the following:		3
EH 331	American Novel to 1900	
EH 332	American Nonfiction Prose	
EH 334	American Poetry to 1900	
EH 340	Restoration Early 18th Lit	
EH 342	Later 18th Century Lit - W	
EH 343	18th Century British Novel	
EH 351	British Romanticism	
EH 352	Victorian Poetry	
EH 353	Victorian Prose	
EH 354	19th Century British Novel	
EH 462	Restor-18th Century Drama - W	
EH 474	Restoration Lit	
EH 475	19th Century Lit	

E. Literature after 1900 - Select one of the following:	3
EH 360 Anglo-Am Poetry since 1900	
EH 362 Am. Novel from 1900 to 1945	
EH 363 American Novel since 1945	
EH 364 Brit. Novel from 1900 to 1945	
EH 365 British Novel since 1945	
EH 366 Contemporary Fiction	
EH 369 Modern Short Story	
EH 380 Science Fiction	
EH 463 Drama 1890 to Present	
EH 468 Contemporary Black Fiction	
EH 476 Studies in 20th Century Lit	
EH 478 Film	
EH 479 Mod/Postmodern Poetry	

F. Criticism, Theory, Rhetoric - Select one of the following:	3
EH 402 Rhetoric-Ancient and Modern-W	
EH 421 Literary Criticism to 1900-W	
EH 422 Lit Criticism Since 1900-W	

G. Creative Writing Core courses	
EH 200 Intro to Creative Writing	3
EH 391 Fiction Writing	3
EH 395 Poetry Writing	3

H. Additional Creative Writing courses - Select six hours with one course being 400-level	6
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I. Culture and Community - Select one of the following:	3
EH 207 Literature and Gender	
EH 335 Native American Literature	
EH 357 Black Writers in America	
EH 468 Contemporary Black Fiction	
EH 480 Gender and Lit	

J. 400-level courses - Select at least nine hours ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/english/footnote1/">http://bulletin.southalabama.edu/programs-az/arts-sciences/english/footnote1/</a> ) <sup>4</sup>	9
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<b>Minor Requirements</b>	
A minor is required for this degree program	18-24
<b>A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE</b>	<b>120</b>

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

## Footnote

<sup>1</sup> Should be completed prior to enrollment in any 400-level English course. Also fulfills technology requirement.

<sup>2</sup> Classical Mythology EH 310/PHL 310/REL 310/CLA 310 cannot satisfy this requirement.

<sup>3</sup> Any EH course qualifies, not just those listed on this page.

<sup>4</sup> These can simultaneously fulfill requirements C-G above, with one being from F.

## Additional Information

Coursework requirements for the English BA include:

- 9 hours of 400-level coursework in English at USA.
- 30 hours of 300- or 400-level coursework at USA.

- 39 hours of English coursework, excluding composition. (Only four 200-level courses can count toward this requirement.)
- 15 hours of 300- or 400-level coursework in English at USA.

## Graduation Plan

(39 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
EH 101	English Composition I <sup>1</sup>	3
MA 110	Finite Mathematics (or higher)	3
Social/Behavioral Elective		3
Fine Arts Elective		3
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
EH 102	English Composition II (or Honors)	3
Humanities Elective		3
CA 110	Public Speaking	3
Natural Science with Lab		4
Social/Behavioral Elective		3
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
Literature Survey <sup>2</sup>		3
Natural Science with Lab		4
Foreign Language I		3
Social/Behavioral Science		3
Minor course		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Natural Science with Lab		4
History	US or Western Civilization	3
Foreign Language II		3
Literature Survey <sup>2</sup>		3
EH 300	Intro to Literary Study	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
English Elective	Prior to 1660	3
English Elective	British or American Lit 1660-1900	3
Elective		3
Minor course		3
Select one English elective <sup>3</sup>		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
English Elective	After 1900	3
Select one of the following (Rhetoric or Literary Criticism):		3
EH 401	Teaching Composition-W	
EH 421	Literary Criticism to 1900-W	
EH 422	Lit Criticism Since 1900-W	
Elective		3
Elective		3
Minor course		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
Select one English elective <sup>3</sup>		3
DEI Requirement <sup>5</sup>		3
Select one English elective <sup>4</sup>		3

Minor Course	3
Minor Course	3
<b>Hours</b>	<b>15</b>
<b>Spring</b>	
Select one English elective <sup>3</sup>	3
Select one English elective <sup>4</sup>	3
Minor course	3
Elective	3
Elective	3
<b>Hours</b>	<b>15</b>
<b>Total Hours</b>	<b>122</b>

- <sup>1</sup> Recommended Course
- <sup>2</sup> See General Education Requirements
- <sup>3</sup> EH 391, EH 395, EH 483, EH 488, or EH 497
- <sup>4</sup> EH 483, EH 488, or EH 497
- <sup>5</sup> EH 207, EH 335, EH 357, EH 468, or EH 480

# English (BA) - Professional Writing and Editing Concentration

## Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		
A. Survey Sequence - Select six hours from the following:		6
EH 215 & EH 216	Brit Lit before 1785 and Brit Lit after 1785	
EH 225 & EH 226	Am Lit before 1865 and Am Lit after 1865	
EH 235 & EH 236	World Lit before 1650 and World Lit after 1650	
B. Gateway Course		
EH 300	Intro to Literary Study (see footnote table below (p. 203)) <sup>1</sup>	3
C. Literature prior to 1660 - Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/english/footnote1/">http://bulletin.southalabama.edu/programs-az/arts-sciences/english/footnote1/</a> ) <sup>2</sup>		3
EH 314	Medieval Literature	
EH 315	Chaucer	
EH 320	Shakespeare's Plays	
EH 321	Renaissance Literature	
EH 324	17th Century Literature	
EH 461	Tudor and Stuart Drama	
EH 465	Middle English Literature	
EH 467	Milton	
EH 470	Medieval Lit	
EH 471	Renaissance Lit	
EH 472	Shakespeare	
D. British or American Literature, 1660-1900 - Select one of the following:		3
EH 331	American Novel to 1900	
EH 332	American Nonfiction Prose	
EH 334	American Poetry to 1900	

EH 340	Restoration Early 18th Lit	
EH 342	Later 18th Century Lit - W	
EH 343	18th Century British Novel	
EH 351	British Romanticism	
EH 352	Victorian Poetry	
EH 353	Victorian Prose	
EH 354	19th Century British Novel	
EH 462	Restor-18th Century Drama - W	
EH 474	Restoration Lit	
EH 475	19th Century Lit	
E. Literature after 1900 - Select one of the following:		3
EH 335	Native American Literature	
EH 357	Black Writers in America	
EH 360	Anglo-Am Poetry since 1900	
EH 362	Am. Novel from 1900 to 1945	
EH 363	American Novel since 1945	
EH 364	Brit. Novel from 1900 to 1945	
EH 365	British Novel since 1945	
EH 366	Contemporary Fiction	
EH 369	Modern Short Story	
EH 380	Science Fiction	
EH 463	Drama 1890 to Present	
EH 468	Contemporary Black Fiction	
EH 476	Studies in 20th Century Lit	
EH 478	Film	
EH 479	Mod/Postmodern Poetry	
EH 480	Gender and Lit	
F. Criticism, Theory, Rhetoric - Select one of the following:		3
EH 402	Rhetoric-Ancient and Modern-W	
EH 421	Literary Criticism to 1900-W	
EH 422	Lit Criticism Since 1900-W	
G. Professional Writing and Editing Core courses		
EH 371	Approaches to Eng Grammar - W	
EH 404	Grant Proposal Writing	
or EH 405	Editing and Document Design	
H. Culture and Community course		
EH 373	Writing in Professions - W	
I. Professional Writing and Editing courses - Select additional classes from this list to reach 9 hours from the following: <sup>3</sup>		9
EH 372	Technical Writing - W	
EH 404	Grant Proposal Writing	
EH 405	Editing and Document Design	
EH 481	Comp and Rhetoric - W	
EH 496	Professional Studies - Intern (1 or 2 credits)	
H. 400-level courses ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/english/footnote1/">http://bulletin.southalabama.edu/programs-az/arts-sciences/english/footnote1/</a> ) <sup>4</sup>		9
<b>Minor Requirements</b>		
A minor is required for this degree program		18-24
<b>A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE</b>		<b>120</b>

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

## Footnote

- <sup>1</sup> Should be completed prior to enrollment in any 400-level English course. Also fulfills technology requirement.
- <sup>2</sup> Classical Mythology EH 310/PHL 310/REL 310/CLA 310 cannot satisfy this requirement.
- <sup>3</sup> EH 404 and 405 can apply to either the core requirements or additional courses, not both. EH 481 and EH 496 can be repeated for credit with approval.
- <sup>4</sup> These can simultaneously fulfill requirements C-I above, with one being Item F.

## Additional Information

Coursework requirements for the English BA include:

- 9 hours of 400-level coursework in English at USA.
- 30 hours of 300- or 400-level coursework at USA.
- 39 hours of English coursework, excluding composition. (Only four 200-level courses can count toward this requirement.)
- 15 hours of 300- or 400-level coursework in English at USA.

## Graduation Plan

(39 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
EH 101	English Composition I <sup>1</sup>	3
MA 110	Finite Mathematics (or higher)	3
Social/Behavioral Elective		3
Fine Arts Elective		3
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
EH 102	English Composition II (or Honors)	3
Humanities Elective		3
CA 110	Public Speaking	3
Natural Science with Lab		4
Social/Behavioral Elective		3
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
English Literature		3
Natural Science with Lab		4
Foreign Language I		3
Social/Behavioral Science		3
Minor course		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Natural Science with Lab		4
History	US or Western Civilization	3
Foreign Language II		3
English Literature <sup>2</sup>		3
EH 300	Intro to Literary Study	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
English Elective		3
English Elective		3
Elective		3

Minor Course		3
EH 372 or EH 373	Technical Writing - W (English Elective) or Writing in Professions - W	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
English Elective		3
After 1900		3
Select one of the following:		3
EH 401	Teaching Composition-W	
EH 421	Literary Criticism to 1900-W	
EH 422	Lit Criticism Since 1900-W	
Elective		3
Elective		3
Minor course		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
EH 405	Editing and Document Design	3
Select two of the following English Electives:		6
EH 371	Approaches to Eng Grammar - W	
EH 372	Technical Writing - W	
EH 373	Writing in Professions - W	
EH 481	Comp and Rhetoric - W	
EH 496	Professional Studies - Intern	
Minor Course		3
Minor Course		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EH 404	Grant Proposal Writing	3
Select one of the following English Electives:		3
EH 371	Approaches to Eng Grammar - W	
EH 372	Technical Writing - W	
EH 373	Writing in Professions - W	
EH 481	Comp and Rhetoric - W	
EH 496	Professional Studies - Intern	
Minor course		3
Elective		3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>122</b>

<sup>1</sup> Recommended Course

<sup>2</sup> See General Education Requirements

## English (MA) - Literature Concentration

### Degree Requirements

A. Coursework. A minimum of thirty-six semester hours of credit is required beyond the bachelor's degree with a grade of "A" or "B," to include the following two courses in the first year of course work.

Code	Title	Hours
EH 501	Introduction to Crit Theory	3
EH 502	Graduate Writing for English	3
Early Literature Requirement: Two courses from literary periods pre-1800		6
Later Literature Requirement: Two courses from literary periods post-1800		6

Culture and Community Requirement: One course from this list (which may be in literature or creative writing): EH 548, EH 551, EH 552, or EH 588	3
Additional Coursework: Select 9 hours of additional courses	9
Thesis or Capstone Requirement: Thesis Option (6 hours) or Capstone Option (3 hours + 1 additional course). See information below.	6
<b>Total Hours</b>	<b>36</b>

*Note on dual-listed courses:* No more than 18 hours of dual-listed courses (courses listed simultaneously at both the 400 level and the 500 level) may be counted towards the minimum hours required for a degree. In addition, graduate students will receive graduate credit only when they enroll in the 500-level version of any dual-listed course.

B. Thesis or Capstone Requirement. The literature concentration requires either a literature thesis or a capstone, which is included in the program requirement of 36 hours.

1. Thesis option (6 hours). The literature thesis is the preferred option for students who plan to enter a doctoral program in English. Students write a thesis, which may draw on a student's previous written work in courses, but which must also involve substantial further research under the supervision of a thesis director. An oral defense, which will situate the thesis in the comprehensive objectives of the creative writing concentration, will be required one to two weeks prior to the Thesis First Submission Deadline for the Graduate School. Six hours of thesis credit will be granted on the successful completion and oral defense of the thesis.
2. Capstone option (3 hours + 1 additional course). Students produce a capstone project, which may draw on a student's previous written work in courses, but which must also involve significant further research, meeting the comprehensive objectives of the literature concentration under the supervision of a capstone mentor. Each capstone requires an annotated bibliography, a major researched essay or an essay/digital presentation, and a presentation in the department. In order to qualify for graduation, all capstone work must be completed by April 15 (spring) or November 15 (fall) and receive the approval of the capstone mentor and the Graduate Committee. Departmental presentations will be scheduled between the deadline and the end of the semester. NOTE: Students who choose the capstone option must take an additional course in order to complete the program requirement of 36 hours.

C. Foreign Language Proficiency Requirement. All students pursuing the M.A. in English must demonstrate a reading proficiency in Spanish, French, German, or Latin before registering for the comprehensive exam or for thesis hours. Foreign nationals for whom English is not native may offer their native language. Credit in reading courses in acceptable languages may not count toward the 36 hour credit requirement for the M.A. in English.

## English (MA) Creative Writing Degree Requirements

- A. Coursework: A minimum of thirty-six semester hours of credit is required beyond the bachelor's degree with a grade of "A" or "B," including the following course in the first year of coursework.

Code	Title	Hours
EH 502	Graduate Writing for English	3
	Culture and Community Requirement: One course from this list (which may be in literature or creative writing): EH 548, EH 551, EH 552, or EH 588	3
	Literature Coursework: Twelve additional hours of courses in literature chosen from EH 501, EH 505, EH 506, EH 507, EH 508, EH 513, EH 514, EH 520, EH 521, EH 526, EH 527, EH 532, EH 534, EH 536, EH 538, EH 543, EH 544, EH 545, EH 547, EH 548, EH 551, EH 552, EH 562, EH 570, EH 571, EH 572, EH 573, EH 574, EH 577, EH 590, EH 592	12
	Creative Coursework: Twelve additional hours of courses in creative writing chosen from these courses: EH 583, EH 584, EH 585, EH 586, EH 588, EH 589, EH 591	12
	Thesis or Capstone Requirement: Thesis Option (6 hours) or Capstone Option (3 hours + 1 additional course). See information below.	6
<b>Total Hours</b>		<b>36</b>

*Note on dual-listed courses.* No more than 18 hours of dual-listed courses (courses listed simultaneously at both the 400 level and the 500 level) may be counted towards the minimum hours required for a degree. In addition, graduate students will receive graduate credit only when they enroll in the 500-level version of any dual-listed course.

B. Thesis or Capstone Requirement. The creative writing concentration requires either a creative thesis or a capstone, which is included in the program requirement of 36 hours.

1. Thesis option (6 hours). The thesis is a substantial body of fiction, non-fiction, poetry, or other genres. An oral defense, which will situate the thesis in the comprehensive objectives of the creative writing concentration, will be required one to two weeks prior to the Thesis First Submission Deadline for the Graduate School. Six hours of thesis credit will be granted on the successful completion and oral defense of the thesis.
2. Capstone option (3 hours + 1 additional course). The capstone is a collection of fiction, non-fiction, poetry, or other genres, which grows out of previous coursework. NOTE: Students who choose the capstone option must take an additional course in order to complete the program requirement of 36 hours.

C. Foreign Language Requirement. All students pursuing the M.A. in English must demonstrate a reading proficiency in Spanish, French, German, or Latin before registering for capstone or thesis hours. Students for whom English is not native may offer their native language to satisfy the foreign language requirement. Credit earned in foreign language courses does not count toward the 36-hour credit requirement for the M.A. in English.

## English Creative Writing Minor Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Minor in Creative Writing

The minor in creative writing invites students from any major to explore literature and creative writing. While there are many ways to pursue

creative writing, this minor provides those who want more sustained work in creative writing, a structure for that work, and a community of support. In addition, the creative writing minor fosters skills that employers have come to expect of students who study literature, such as the ability to comprehend complex material, analyze subtext, and communicate their ideas clearly.

To achieve a minor in creative writing, a student will need a minimum of 21 semester hours in English, exclusive of freshman English composition (EH 101 and EH 102). The other details and requirements are:

Code	Title	Hours
<b>Core Courses</b>		
EH 200	Intro to Creative Writing	3
EH 391	Fiction Writing	3
EH 395	Poetry Writing	3
<b>Additional Creative Writing Course</b>		
Select one additional course		3
<b>Additional English Courses</b>		
Select three additional English courses from the following: ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/english/footnote1/">http://bulletin.southalabama.edu/programs-az/arts-sciences/english/footnote1/</a> ) <sup>1</sup>		9
EH 200	Intro to Creative Writing	
EH 391	Fiction Writing	
EH 393	Creative Nonfiction Writing	
EH 395	Poetry Writing	
EH 483	Advanced Fiction Writing	
EH 485	Advanced Poetry Writing	
EH 487	Screenwriting for Film	
EH 488	Screenwriting for Television-W	
<b>Total Hours</b>		<b>21</b>

## Footnote

<sup>1</sup> One of which must be a literature class higher than EH 300.

## English Minor Minor Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Minor in English

- A minimum of 21 semester hours in English is required, exclusive of freshman English.
- The minor requires at least four courses at the 300 level or above, two of which must be literature courses. (Contact English Department for list of approved literature courses.)
- Students who wish to take 400-level courses must first take EH 300.

## English Professional Writing Minor Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Minor in Professional Writing

The minor in English: Professional Writing provides students with the conceptual foundations and hands-on practice necessary for communicating and writing proficiently in technical and professional contexts. The minor is intended to prepare students for producing the forms of writing they will encounter in the workplace (feasibility studies, technical reports, business letters, and grants, for example), and to provide a broad understanding of the rhetorical dimensions of written communication, especially nonacademic texts.

Code	Title	Hours
<b>Core Courses</b>		
EH 372 or EH 373	Technical Writing - W Writing in Professions - W	3
EH 402	Rhetoric-Ancient and Modern-W	3
EH 481	Comp and Rhetoric - W	3
<b>Other Courses</b>		
Select one of the following:		3
EH 371	Approaches to Eng Grammar - W	
EH 372	Technical Writing - W <sup>1</sup>	
EH 373	Writing in Professions - W <sup>1</sup>	
EH 401	Teaching Composition-W	
EH 404	Grant Proposal Writing	
EH 405	Editing and Document Design	
EH 496	Professional Studies - Intern <sup>2</sup>	
<b>Additional English Courses</b>		
Select three additional English courses including but not limited to courses in the second section above		9
<b>Total Hours</b>		<b>21</b>

<sup>1</sup> Students can take either or both of these two courses.

<sup>2</sup> EH 496 is 1-2 credits per semester; students must take 3 credits to complete the required hours.

## Environmental Toxicology Department Information

Environmental Toxicology website

<https://www.southalabama.edu/colleges/graduateschool/etox/>

The University of South Alabama, through its Stokes School of Marine and Environmental Sciences, offers an interdisciplinary Master's program in Environmental Toxicology. Its students focus on understanding how toxins, pollutants, and other stressors affect the health of people, food webs, and ecosystems. Students in this program will learn to:

- Evaluate the impact of toxins, pollutants, and other stressors in the environment

- Perform laboratory and/or field studies to evaluate the impacts of toxins, pollutants, and stressors at a molecular level, as well as in organisms, populations, food webs, ecosystems, and in communities.
- Optimize and/or develop field or laboratory methods to identify and evaluate toxic substances in biota and in the environment
- Evaluate strategies to prevent, mitigate, monitor and/or control and manage toxic substances relevant to environmental and human health

Graduates from this program will be able to seek opportunities across multiple employment sectors including academic research, State and Federal Government research and policy, industry, non-governmental organizations, and private consulting and/or environmental monitoring. Alternatively, students may continue their education by pursuing a Ph.D. degree in Environmental Toxicology or related areas (e.g., Marine Sciences, Biology, Biomedical Sciences). In addition, these graduates will be qualified for jobs requiring M.S. degrees in their original areas of concentration.

## Minimum Requirements for Admission

Students applying to this program must fulfill all the requirements for admission specified by the Graduate School. Additional requirements include:

- B.S./B.A. degree from an accredited four-year college or university. The program is designed for graduates holding baccalaureate degrees in Biology, Biomedical Sciences, Chemistry, Engineering or related fields.
- An undergraduate GPA of 3.00 or above is required.
- In addition, students applying to this program must have completed the following undergraduate courses: Biology (2 semesters); Statistics (1 semester); Calculus (1 semester); Organic Chemistry (2 semesters); Biochemistry.
- It is recommended (but not required) that students applying to the program have completed at least 6 credit hours of undergraduate Biochemistry. Those students who have only taken the minimum 3 hours of undergraduate biochemistry will have to include an additional 3 hours of graduate Biochemistry among the elective courses to complete the program.
- The GRE score is not required for admission. You may optionally submit your GRE scores if you wish for them to be considered as part of your application to any graduate program, but this is not required. Individual faculty members may consider available GRE scores as part of a holistic evaluation of the candidates.

The applicant will also be required to submit:

1. A completed application including a 1-2 page statement indicating the students interests and professional goals
2. Official transcripts from all undergraduate institutions attended
3. At least two professional letters of recommendation with current contact information

Assessment of credentials will be supplemented by evaluation of letters of recommendation and the educational background of the student. Foreign applicants must meet all University entrance requirements and meet a minimum TOEFL score of 71 (or equivalent). More details for foreign applicants can be found here: <https://www.southalabama.edu/departments/international/requirements-deadline.html>

To ensure compatibility between the student's research interests and faculty expertise, particular attention will be given to the written statement of interest from applicants. A University faculty member will be asked to act as a "mentor" for the applicant based on the statement of interest, and if necessary, a follow-up interview. Through this process, the student's interests will be matched to the expertise available at the University. Where possible student's should contact potential mentors in advance or work with the graduate coordinator to find a potential mentor when applying to the program.

## Fellowships and Assistantships

The Graduate School offers a limited number of competitive research and/or teaching assistantships to students in the Environmental Toxicology program at the University of South Alabama. These include tuition remission and waiver of out-of-state fees. Additional research assistantships may be possible through extramural grants and contracts.

## Deadline for Applications to the Environmental Toxicology Program

Students entering the program in the fall are encouraged to submit applications by June 1. Students may also apply for admission during spring and summer. Early applications and inquiries are welcomed to assist in identification of potential faculty mentors.

## Environmental Toxicology (MS) Master of Science in Environmental Toxicology

The Master of Science degree in Environmental Toxicology is awarded in recognition of a student's demonstrated ability to successfully complete a prescribed program of courses and original scholarly research. Original scholarly research will be evaluated based on a student's ability to write and defend an acceptable research thesis.

## Degree Requirements

Required Credit

A minimum of thirty-two (32) semester hours of course credit beyond the baccalaureate degree is required for students pursuing this MS degree.

## Residence, Full-Time Study, and Continuous Registration

A minimum of two consecutive semesters of fulltime study in residence is required. The residency requirements may be met at the University of South Alabama, the Dauphin Island Sea Lab, or the Mitchell Cancer Institute.

## Time Limit

All requirements for the MS degree must be completed within four (4) years from the date of matriculation. A student who has not satisfactorily completed a MS degree in a five year period must apply for a defined extension to complete the degree. This request must be recommended by a major professor, the program coordinator, the Director of Graduate studies, and approved by the Dean of the Graduate School. If the student does not complete the degree requirements in the defined extension period, the Director of Graduate studies may recommend, and the Dean of the Graduate School may take, whatever action is necessary up to and including dismissal.

Failure to complete the work in the periods specified shall necessitate reevaluation of the student's program, and may result in a recommendation of dismissal by the Director of Graduate studies to the graduate Dean.

Students will be required to take twelve (12) semester hours of core classes including Environmental Chemistry (CH 514 and CH 514L); Environmental Toxicology (EXT 515); and Environmental Statistics (ST 550) plus a Research Integrity Seminar (GIS 501). Additional coursework will be determined by the student's advisory committee and approved by the Environmental Toxicology program coordinator. Elective courses should be selected from the recommended list of electives where possible (see below) to make up an additional six (6) semester hours of credit towards the degree. Directed studies conducted under the supervision of a student's advisor or an advisory committee member should comprise up to six (6) semester hours of credit. Lastly, students will be expected to demonstrate research capability, preferably through the completion of an acceptable written thesis and oral defense of the research. At least eight (8) semester hours should be included in the MS degree program of study to meet this thesis requirement.

## Course Requirements

The student and her/his advisory committee will be responsible for designing the curriculum that best fits the student's professional goals. If, in the opinion of the student's committee, the student lacks adequate undergraduate preparation, the student will be required to make up such deficiencies.

Code	Title	Hours
<b>Core Courses</b>		
CH 514 & 514L	Environmental Chemistry and Environmental Chemistry Lab	4
EXT 515	Environmental Toxicology	4
GIS 501	Responsible Conduct of Research	1
ST 550	Environmental Statistics	3
<b>Directed Studies (maximum)</b>		<b>6</b>
Thesis hours (maximum)		
Thesis hours are taken to conduct research on a subject identified jointly by the student and the Advisory Committee.		8
<b>Electives</b>		
Select at least six hours of graduate courses, for example		6
MAS 601	Physical Oceanography	
CE 579	Fundamentals Environmental Eng	
SY 567	Environmental Sociology	
CH 540	Biochemistry I	
CH 541	Biochemistry II	
BLY 544	Molecular Biology	
PHA 643	Molecular-Cellular Toxicology	
<b>Total Hours</b>		<b>32</b>

## Forensic Science

### Department Information

Title	Name
Director	Dr. Lesley Gregoricka

Forensic Science at USA is an interdisciplinary program offering students the opportunity to gain foundation-level exposure to the various social

and physical sciences from which forensic applications are derived. Students will acquire broad-based knowledge and skills in a combination of areas such as chemistry, anthropology, criminal justice and biology.

The minor is designed to prepare students for future graduate education or job training in specialized fields within forensic science, including the search for and recovery of human remains, human identification, crime scene investigation, evidence collection, and laboratory analyses. Although all students at USA are welcome to minor in FS, the minor will be especially useful for students in anthropology, biology, biomedical sciences, chemistry, and criminal justice. Students who plan to pursue careers in forensic science will benefit from a broader understanding of the criminal justice system, offender behavior, and due process law. Students who plan to pursue careers in the criminal justice system will benefit from a broader understanding of forensic science so that they understand what happens to evidence once it is taken to a lab for processing.

## Degrees, Programs, or Concentrations

- Forensic Science Minor (p. 207)

## Forensic Science Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Minor in Forensic Science

Code	Title	Hours
<b>Core Courses</b>		
AN 250	Forensic Anthropology	3
CH 201 & 201L	Organic Chemistry I and Organic Chemistry I Lab	4
or CH 265 & 265L	Introductory Analysis and Introductory Analysis Lab	
CJ 105	Introduction to Criminal Justice	3
CJ 223	Intro to Forensic Science	3
<b>Upper-Division Courses</b>		
Select two of the following:		6
Students must take at least one upper division course outside of their major discipline.		
AN 335	Field Work in Archaeology	
AN 365	Human Osteology	
BLY 302	Genetics	
BLY 354	General Entomology	
CH 440	Biochemistry I	
CH 465	Instrumental Analysis	
CJ 332	Criminal Law	
CJ 360	Theories of Offending	
CJ 380	Drugs and Crime	
CJ 422	Criminal Investigations	
PSY 425	Mental Health and Law	
<b>Total Hours</b>		<b>19</b>

# Gender Studies

## Department Information

Department of Gender Studies website  
<https://www.southalabama.edu/genderstudies> (<https://www.southalabama.edu/genderstudies/>)

(251) 460-7373

Title	Name
Director	Dr. Claire Cage

The Gender Studies Program offers a minor in the interdisciplinary study of contemporary and historical gender theory and gender issues on a global level. The program allows students to acquire depth of knowledge in specific areas of gender-related focus and gender theory, as well as a wide range of research skills and methodologies from across the disciplines. The program offers courses from numerous departments within the College of Arts and Sciences, as well as service learning and community internship opportunities.

Gender Studies deepens students' understanding of areas of study such as historical and contemporary constructions of femininity and masculinity and their representations; sexuality; feminist theory; LGBTQIA + studies; male and female physiology; gender and health, business and politics; and the intersection of race, class, gender and sexuality. The Gender Studies Program encourages students to become actively engaged in gender-focused research and its practical applications, and provides numerous opportunities for students to interact with faculty members to discuss their current research.

For further information about the program, contact

Dr. Claire Cage  
 Gender Studies Program  
 Department of History, HUMB 344  
 University of South Alabama  
 Mobile, AL 36688-0002  
 Phone (251) 460-7373  
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## Degrees, Programs, or Concentrations

- Gender Studies Minor (p. 211)

## Courses

### African-American Studies (AFR)

#### AFR 101 Intro to African Amer Studies 3 cr

An interdisciplinary investigation of the origins, experiences, conditions, accomplishments and contributions of people of African ancestry in the United States.

### College of Arts/Sciences (CAS)

#### CAS 100 First Yr Exp - 2 cr

A course for first-year students majoring in the College of Arts & Sciences that assists with maximizing the student's potential to achieve academic success and to adjust responsibly to the individual and interpersonal challenges presented by college life. Taught in small groups, the course provides an introduction to the nature of higher education and a general orientation to the functions and resources of the University.

#### CAS 190 Special Topics - 1-3 cr

This variable content course deals with selected topics from any of the disciplines in the College of Arts and Sciences. Topics will focus on current and relevant issues and may contain a service-learning component. The course may be repeated for credit when the topic varies for a maximum of six credit hours.

## Gerontology (GRN)

#### GRN 272 Gender and Aging 3 cr

This course examines the dynamics of gender and aging within society from an interdisciplinary perspective. Students will be introduced to controversies in gender over the life course. These include, but are not limited to, definitions and cultural boundaries, gender in childhood, gender and relationships, gender in education and the workplace, gender and sexuality, as well as gender in late life.

#### GRN 290 Special Topics - 3 cr

This designation is used for interdisciplinary courses on aging on a variety of subjects. This course does not replace any course in a single discipline. May be repeated as long as the topic changes, to maximum of six semester hours.

#### GRN 435 Health Disparities Life Span 3 cr

This course examines differences in health status across the life span. The course will focus heavily on racial/ethnic and socioeconomic disparities in health applying a social determinants' of health framework. Issues that will be considered include how income, education, neighborhood conditions, access to health care, and other community factors shape opportunities to be healthy. The course is cross-listed as SY 435 and GRN 435 and has been approved as an elective for the Undergraduate Certificate in Gerontology and the interdisciplinary minor in Gerontology.

**Prerequisite:** SY 109 Minimum Grade of D

**Cross-Listed:** SY 435

#### GRN 490 Special Topics 3 cr

This course is designated for upper division students and graduate students, particularly those pursuing studies for the Certificate of Gerontology. The course content focuses on interdisciplinary treatments on various topics on aging. This course does not replace any course in a single discipline. (Examples of special topics: Trends and Issues in Gerontology; Leadership and Advocacy in Gerontology; Housing and Lifestyle Changes over the Life Course). May be repeated as long as the topic changes, to maximum of six semester hours.

**Prerequisite:** SY 372 Minimum Grade of D

#### GRN 494 Directed Studies 1-3 cr

Under the guidance of a faculty member, the student will pursue directed research on readings of an approved topic in Gerontology. May be repeated as long as the topic changes, to a maximum of six semester hours. Requires permission of Director of Gerontology.

**Prerequisite:** SY 372 Minimum Grade of D

#### GRN 496 Internship - Gerontology 3,6 cr

This course is to provide a practicum experience in gerontology in a setting selected by the student and approved by the Program Director. The course emphasis is on the experiential learning process and outcomes. The undergraduate student will apply theoretical concepts in specific areas of interest related to aging and intergenerational relations. Interns will meet as a group three times during the semester for orientation, professional development, and evaluation activities. The 3-hour internship requires 100 contact hours; the 6-hour internship requires 200 hours. Permission of Director of Gerontology is required.

**Prerequisite:** SY 372 Minimum Grade of C

**GRN 535 Health Disparities Life Span 3 cr**

The main purpose of this seminar is to provide students with an understanding of how social factors contribute to racial/ethnic, socioeconomic and gender disparities in health and health care. We will examine how dyadic relationships such as interpersonal forms of discrimination, marriage, and social ties may contribute to health disparities. We will also examine the ways in which neighborhood and community context, as well as inequalities in socioeconomic status materially shape health and access to health care services. The course is cross-listed as GRN 435/535 and SY 435/535 and has been approved as an elective for the Undergraduate/Graduate Certificate in Gerontology and the interdisciplinary minor in Gerontology.

**Cross-Listed:** SY 535

**GRN 594 Dir St in Gerontology - 1-3 cr**

Under the guidance of a faculty member, the student will pursue directed research or readings of an approved topic in Gerontology. May be repeated as long as the topic changes, to maximum of six credit hours. Requires permission of the Director of Gerontology.

**GRN 596 Internship - Gerontology 3,6 cr**

This course is to provide a practicum experience in gerontology in a setting selected by the student and approved by the Program Director. The course emphasis is on the experiential learning process and outcomes. The graduate student will apply theoretical concepts to leadership roles, conducting research and influencing social and health care policies related to aging and intergenerational relationships. Interns will meet as a group three times during the semester for orientation, professional development, and evaluation activities. The 3-hour internship requires 100 contact hours; the 6-hour internship requires 200 hours. Permission of Director of Gerontology is required.

**Prerequisite:** SY 523 Minimum Grade of B

**GRN 597 GRN Teaching Apprenticeship 1-3 cr**

Directed Studies/Apprenticeship that focuses on teaching Gerontology. The student will work directly with a member of the Gerontology graduate faculty to learn pedagogy, innovation in teaching, and course content that will equip the student for future teaching assignments. Many PhD programs offer both Teaching Assistantships and Research Assistantships. Gerontology students need to show evidence that they have had some teaching-related experience to compete strongly for the TA position. This course is also appropriate for students who anticipate careers in teaching within the field of Gerontology (aging or intergenerational studies). Arrangements must be made prior to registration. Permission of the Program Director is required.

**Prerequisite:** SY 372 Minimum Grade of C

**Gender Studies (GS)****GS 101 Intro to Gender Studies 3 cr**

This course provides an interdisciplinary, multicultural overview of the concept of gender and gender roles in patriarchal society. This course examines the social construction of gender in our society and how that has shaped such areas as economics, politics, cultural/social values, and the impact upon women and men in historical and contemporary terms.

**GS 290 Sp Tp-#MeToo, Black Lives Matter & Beyond 3 cr**

Study of selected topics with an area in gender studies. May be repeated for credit when content varies.

**GS 301 Moving Beyond Diversity 3 cr**

This course explores ways of fighting injustice and dismantling systemic oppression for those who are being disproportionately impacted generationally. The course offers a framework for activism that focuses on creating a culture that stands up for what is right by fighting against normalizing cycles of perpetuated injustices. Students will examine diverse perspectives that center on the capacity to mobilize solidarity for those efforts, strategies, and practices that negate performative allyship with systems-changing action for today's realities.

**GS 302 Black Women and Activism 3 cr**

This fully online three-hour credit course is interdisciplinary in nature and addresses the need to recognize and validate contributions made by Black women that sought and continue to uplift Black America throughout the late 19th and early 21st centuries. This cadre of activism will be contextualized through both womanist and feminist theories. Central to these works will be an examination for how multiple oppressions have shaped Black women's lives throughout their ongoing efforts to redefine self and bring empowerment to their communities through racial solidarity and advancement as a people. These women's underlying resistance strategies and intellectual discourse for offsetting the negative effects of racism and other oppressive measures will be mirrored through the use of race and gender as a socio-political construct. A postmodern response depicted through the lens of contemporary Black feminists for how both mainstream feminism and Black America have responded to these heroic forms of activism will be analyzed. These activists' contributions will unfold through the following curricula foci: 1) early roots of nationalism, 2) the emergence of both Black Feminist and Womanist Thought, and 3) political movements involving Black women activists. Additional cornerstones for learning will include participating in a posting process that involve sharing research and writing projects which in return will facilitate lively discussions on today's black women activism from their own respective domain (e.g. music, spirituality, film, arts and letters, judicial system, the intellectual and socio-political arenas).

**GS 304 #Me Too, Black Lives Matter & 3 cr**

The velocity of national protests fighting for human rights across the constitutional continuum of justice, dignity, and safety have evolved into an epidemic throughout American infrastructures. This course will plunge into the #MeToo Era, Black Lives Matter, and Woke Movements. Significant visibility for how social constructs of gender, race, and sexuality intersect with these protesters' outcries will be examined. Further considerations will be given to exposing those accused of sexual violence on various fronts as well as existing allegations of wrongful deaths will be a part of the course curriculum. An added dimension to the curriculum will include also focusing on political strategies and an operative activism model that are being used to effectively penetrate these existing cultures of power and dominance.

**GS 390 Special Topics 3 cr**

Advanced study of selected topics with an area in gender studies. May be repeated for credit when content varies.

**GS 490 Special Topics 3 cr**

Advanced study of selected topics within an area in Gender Studies. May be repeated for credit when content varies for a total of six hours.

**GS 492 Gender Studies Seminar - 3 cr**

Advanced study of selected topics in Gender Studies. May be repeated for credit when content varies for a total of six hours.

**GS 494 Directed Studies 1-3 cr**

Directed research under the guidance of a Gender Studies faculty member. Requires permission of instructor. Student is restricted to taking a maximum of six hours of Directed Studies.

**Prerequisite:** GS 101 Minimum Grade of D

**GS 496 Internship - 3-6 cr**

Practical learning through occupational or community work with an approved agency dealing with gender-related issues. Readings and final report supervised by gender studies faculty. Special Permission required.

**Prerequisite:** GS 101 Minimum Grade of D

**Interdisciplinary Progs (IDS)****IDS 290 Special Topics 1-3 cr**

A study of selected topics of an interdisciplinary nature. May be repeated for credit when content varies. Requires permission of instructor.

**IDS 490 Special Topics 1-3 cr**

Advanced study of selected topics of an interdisciplinary nature. May be repeated for credit when content varies. Requires permission of instructor.

**IDS 590 Sp Top 1-9 cr**

Specialized topics not generally listed in the course offerings. Requires consent of Graduate Director.

**International Studies (IS)****IS 100 Global Issues 3 cr**

This course introduces students to the basic structural components of the global system, including the nation-state system and the world economy, and explores the major schools of thought in such areas as security, economic prosperity and development, international law, gender and environmental studies. The course helps students understand the complex and interlinked issues facing global society, and current problems, and view the U.S. within a broader global context.

**IS 193 Study Abroad 1-6 cr**

This course is an introductory International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**IS 200 People-Nations - 3 cr**

Variable content course focusing on particular nation or region of the world. Course offers a multi-disciplinary introduction to the people, society and politics. May be repeated for credit when content varies up to a total of 6 hours.

**IS 210 Global Engagement Orientation 1 cr**

This course introduces students to international global issues, allows students to identify opportunities for active engagement in these issues, and provides the framework for successful completion of the Global Engagement Certificate.

**IS 290 Special Topics - 3 cr**

Study of selected topics within a particular Area Studies Concentration. May be repeated for credit when content varies.

**Prerequisite:** IS 100 Minimum Grade of D

**IS 293 Study Abroad 1-6 cr**

This course is an introductory International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**IS 363 Crime and Politics in LatinAm 3 cr**

An examination of the violent crime epidemic affecting many parts of Latin America, with specific focus on the themes of democratic transition, political economy, and foreign relations with the United States. Same as PSC 363 and CJ 363.

**Prerequisite:** (PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or IS 100 Minimum Grade of C)

**Cross-Listed:** CJ 363, PSC 363

**IS 371 Studies in Russia 3-6 cr**

This course will cover specific topics in the history, politics, and culture of modern Russian civilization. May be repeated for credit when content varies.

**IS 372 Studies in E. Europe & C. Asia 3-6 cr**

This course will cover specific topics in the history, politics, and culture of modern Eastern European and Central Asian civilizations. May be repeated for credit when content varies.

**IS 390 Sp Top- 1-3 cr**

Advanced study of selected topics within a particular concentration. May be repeated for credit when content varies.

**IS 391 Study Abroad - 18 cr**

Study of selected topics within a particular Area Studies Concentration. May be repeated.

**IS 393 Study Abroad 1-6 cr**

This course is an advanced International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**IS 410 Global Engagement Capstone 1 cr**

Global Engagement Capstone is required for students completing the Global Engagement Certificate (GEC), and is a one hour course designed to help students reflect on the 16 hours of coursework and nine hours of globally engaged activities they have completed. Students will create a portfolio during the course, which will be presented to students and affiliated faculty at its conclusion.

**Prerequisite:** IS 210 Minimum Grade of P

**IS 473 International Law 3 cr**

This course covers major issues, cases and topics in public and private international law. Course coverage includes individuals and corporations, diplomatic relations, jurisdiction, human rights, economic relations, treaties, environmental law, and more.

**Prerequisite:** (IS 100 Minimum Grade of C or PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C)

**Cross-Listed:** CJ 473, PSC 473

**IS 489 Leadership and World Leaders 3 cr**

An overview of the definitions, characteristics, and typologies of leadership, with a focus on lives and legacies of global influential political leaders over the past century.

**Prerequisite:** PSC 130 Minimum Grade of D or PSC 250 Minimum Grade of D or IS 100 Minimum Grade of D

**Cross-Listed:** PSC 251, PSC 489

**IS 490 Special Topics 3 cr**

Advanced study of selected topics within a particular Area Studies Concentration. May be repeated for credit when content varies.

**Prerequisite:** IS 100 Minimum Grade of D

**IS 491 Seminar on Terrorism 3 cr**

Study of a terrorism from a sociopolitical perspective with an emphasis on causes, policy, tactics and operational characteristics and counter-terrorism operations. Cross-listed with CJ 491 and PSC 491.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or PSC 130 Minimum Grade of C or IS 100 Minimum Grade of C

**Cross-Listed:** CJ 491, PSC 491

**IS 492 Seminar - 3 cr**

Advanced study of selected topics in international studies from a comparative perspective. May be repeated for credit when content varies.

**Prerequisite:** IS 100 Minimum Grade of D

**IS 493 Study Abroad 1-6 cr**

This course is an advanced International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**IS 494 Directed Studies 1-3 cr**

Directed research in the field of international studies. May be repeated or credit up to a total of 9 hours. Prerequisite: permission of IS Director

**IS 495 Senior Seminar - W 3 cr**

The course seeks to provide an interdisciplinary and cross-regional overview of the fields and research opportunities within international studies.

**Prerequisite:** EH 102 Minimum Grade of C

**IS 496 Prof St Internship - 3-9 cr**

Practical learning experiences through occupational or professional work with an approved international organization, governmental agency, or international business Prerequisite: Permission of IS Director

**IS 499 Senior Honors Thesis 3 cr**

The course covers major theoretical perspectives in organizational psychology based on empirical research and case studies. Students will explore learning theory, group dynamics, and change in different types of learning organizations.

**Prerequisite:** (EH 102 Minimum Grade of D or EH 105 Minimum Grade of D)

**IS 591 Study Abroad 12 cr**

Graduate level international exchange programs for University of South Alabama students.

**Museum Studies (MUM)****MUM 201 Intro to Museum Studies 3 cr**

This course is designed to provide a general introduction to museum history, practice, and the role of museums in contemporary society. The class will explore a range of museum positions, curatorial practices, collection management, museum administration, and the academic and public roles museums play in society.

**Prerequisite:** EH 102 Minimum Grade of C

**MUM 290 Special Topics - 3 cr**

Different subjects or themes in museum studies as announced. This course may be repeated twice when content varies, for a maximum of nine credit hours. Prerequisite: To be announced.

**MUM 390 Special Topics - 3 cr**

Different subjects or themes in museum studies as announced. This course may be repeated twice when content varies. for a maximum of nine credit hours. Prerequisite: To be announced.

## Gender Studies Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Minor in Gender Studies

#### Core Requirements

1. Students minoring in Gender Studies must complete a total of 18 semester hours in approved courses.
2. Students are required to complete two courses in any discipline in Group 1 and two courses in any discipline in Group 2. Group 1 disciplines are: African-American Studies, Art History, Communication, English, Foreign Languages, and History. Group 2 disciplines are: Anthropology, Criminal Justice, International Studies, Political Science, Psychology, and Sociology.
3. Minor courses must also represent four different disciplines.
4. Approved Variable and Special Topics Courses that focus on gender studies can also be taken to complete the 18 semester hour requirement. For information on upcoming variable and special topics courses, consult the Director.
5. GS 101
6. One 400 level course with a focus on gender studies. This can be a GS course (i.e. GS 490) or an approved 400 level course in another discipline.

Code	Title	Hours
<b>Core Courses</b>		
GS 101	Intro to Gender Studies	
<b>Group 1</b>		
Complete two Gender Studies courses from any of the following disciplines: African-American Studies, Art History, Communication, English, Foreign Languages, and History. These courses include but are not limited to the following:		
AFR 101	Intro to African Amer Studies	
ARH 480	Women in Art-W	
CA 315	Gender and Communication	
EH 207	Literature and Gender	
EH 468	Contemporary Black Fiction	
EH 475	19th Century Lit	
EH 480	Gender and Lit	
HY 377	African American Experiences	
HY 456	Body, Medicine, Society Europe	
HY 458	Sex,Celibacy Christian West	
LG 305	Studies in Gender and Writing	
<b>Group 2</b>		
Complete two Gender Studies courses from any of the following disciplines: Anthropology, Criminal Justice, International Studies, Political Science, Psychology, and Sociology. These courses include but are not limited to the following:		
AN 355	Gender and Anthropology	
CJ 372	Gender and Criminal Justice	
CJ 403	Sexual Violence	
PSC 340	Race, Gender, & Politics	
PSC 345	Women and Politics	

PSY 270	Psy of Black Experience
PSY 485	Psychology of Gender
SY 200	Sex, Power, & Politics
SY 220	Marriage and the Family
SY 315	African American Families
SY 418	Adv Family Studies
SY 428	Gender and Society
<b>Electives</b>	
GS 290	Sp Tp-#MeToo, Black Lives Matter & Beyond
GS 301	Moving Beyond Diversity
GS 302	Black Women and Activism
GS 304	#Me Too, Black Lives Matter &
GS 390	Special Topics
GS 490	Special Topics
GS 492	Gender Studies Seminar -
GS 494	Directed Studies
GS 496	Internship -
EDF 300	Gender & International Devel-W
EDF 310	International Develop & Educ-W
EDF 315	Living, Working, and Educating in a Diverse and Global Society
EDF 320	Compar & Intl. Gender & Fam
EDF 325	Global Gender Perpec in Ed
GRN 272	Gender and Aging
HS 463	Human Sexuality: Health Ed Per
IST 315	Women's Issues in Wrkpl-Comm
IST 320	Cultural Competency

Please note that there are frequent offerings in approved special topics. Check course schedule on the Gender Studies website.

## Gerontology

### Department Information

Department of Gerontology website  
<https://www.southalabama.edu/colleges/artsandsci/syansw/gerontologyprogram/>

(251) 460-6020

Title	Name
Program Director and Academic Advisor	Dr. Roma Stovall Hanks
Associate Director and Academic Advisor	Dr. Nancy Kelley

The University of South Alabama offers Certificates in Gerontology at the Graduate and Undergraduate levels and an Interdisciplinary Minor in Gerontology.

Gerontology is the interdisciplinary study of:

1. The human life cycle
2. Issues related to aging
3. Intergenerational Relationships

The Gerontology program is designed to establish an expertise that will enhance and compliment the analytical skills that the student acquires as part of the major area of study. This expertise may be used as preparation to specialize within the career area related to the student's major area of study or to pursue further academic training in graduate or medical school. Special topics courses and on-line instruction are available.

Depending on their specific needs and interests, students may be able to complete requirements for the Undergraduate or Graduate Certificate in Gerontology through distance learning options. Students who are interested in pursuing a Gerontology Certificate on-line should speak with their academic advisor and the Gerontology program director. Students in professional programs may be able to use field placements in lieu of the Gerontology Internship.

The Degree Works audit tool lists the Gerontology Certificates as programs. Students should alert their advisors to check that they are enrolled in a Gerontology Certificate program (Graduate or Undergraduate). In order to receive the printed Gerontology Certificate, the student must submit a completed Data Sheet and Application available at the program website: [https:// www.southalabama.edu/colleges/artsandsci/syansw/gerontologyprogram/](https://www.southalabama.edu/colleges/artsandsci/syansw/gerontologyprogram/). ([https:// www.southalabama.edu/colleges/artsandsci/syansw/gerontologyprogram/.html](https://www.southalabama.edu/colleges/artsandsci/syansw/gerontologyprogram/.html)) The certificate is not automatically issued without an application. Students and alumni of the program may be asked to participate in exit interviews or surveys.

## Degrees, Programs, or Concentrations

- Gerontology Graduate Certificate (p. 216)
- Gerontology Minor (p. 217)
- Gerontology Undergraduate Certificate (p. 217)

## Courses

### African-American Studies (AFR)

#### AFR 101 Intro to African Amer Studies 3 cr

An interdisciplinary investigation of the origins, experiences, conditions, accomplishments and contributions of people of African ancestry in the United States.

### College of Arts/Sciences (CAS)

#### CAS 100 First Yr Exp - 2 cr

A course for first-year students majoring in the College of Arts & Sciences that assists with maximizing the student's potential to achieve academic success and to adjust responsibly to the individual and interpersonal challenges presented by college life. Taught in small groups, the course provides an introduction to the nature of higher education and a general orientation to the functions and resources of the University.

#### CAS 190 Special Topics - 1-3 cr

This variable content course deals with selected topics from any of the disciplines in the College of Arts and Sciences. Topics will focus on current and relevant issues and may contain a service-learning component. The course may be repeated for credit when the topic varies for a maximum of six credit hours.

## Gerontology (GRN)

### GRN 272 Gender and Aging 3 cr

This course examines the dynamics of gender and aging within society from an interdisciplinary perspective. Students will be introduced to controversies in gender over the life course. These include, but are not limited to, definitions and cultural boundaries, gender in childhood, gender and relationships, gender in education and the workplace, gender and sexuality, as well as gender in late life.

### GRN 290 Special Topics - 3 cr

This designation is used for interdisciplinary courses on aging on a variety of subjects. This course does not replace any course in a single discipline. May be repeated as long as the topic changes, to maximum of six semester hours.

### GRN 435 Health Disparities Life Span 3 cr

This course examines differences in health status across the life span. The course will focus heavily on racial/ethnic and socioeconomic disparities in health applying a social determinants' of health framework. Issues that will be considered include how income, education, neighborhood conditions, access to health care, and other community factors shape opportunities to be healthy. The course is cross-listed as SY 435 and GRN 435 and has been approved as an elective for the Undergraduate Certificate in Gerontology and the interdisciplinary minor in Gerontology.

**Prerequisite:** SY 109 Minimum Grade of D

**Cross-Listed:** SY 435

### GRN 490 Special Topics 3 cr

This course is designated for upper division students and graduate students, particularly those pursuing studies for the Certificate of Gerontology. The course content focuses on interdisciplinary treatments on various topics on aging. This course does not replace any course in a single discipline. (Examples of special topics: Trends and Issues in Gerontology; Leadership and Advocacy in Gerontology; Housing and Lifestyle Changes over the Life Course). May be repeated as long as the topic changes, to maximum of six semester hours.

**Prerequisite:** SY 372 Minimum Grade of D

### GRN 494 Directed Studies 1-3 cr

Under the guidance of a faculty member, the student will pursue directed research on readings of an approved topic in Gerontology. May be repeated as long as the topic changes, to a maximum of six semester hours. Requires permission of Director of Gerontology.

**Prerequisite:** SY 372 Minimum Grade of D

### GRN 496 Internship - Gerontology 3,6 cr

This course is to provide a practicum experience in gerontology in a setting selected by the student and approved by the Program Director. The course emphasis is on the experiential learning process and outcomes. The undergraduate student will apply theoretical concepts in specific areas of interest related to aging and intergenerational relations. Interns will meet as a group three times during the semester for orientation, professional development, and evaluation activities. The 3-hour internship requires 100 contact hours; the 6-hour internship requires 200 hours. Permission of Director of Gerontology is required.

**Prerequisite:** SY 372 Minimum Grade of C

### GRN 535 Health Disparities Life Span 3 cr

The main purpose of this seminar is to provide students with an understanding of how social factors contribute to racial/ethnic, socioeconomic and gender disparities in health and health care. We will examine how dyadic relationships such as interpersonal forms of discrimination, marriage, and social ties may contribute to health disparities. We will also examine the ways in which neighborhood and community context, as well as inequalities in socioeconomic status materially shape health and access to health care services. The course is cross-listed as GRN 435/535 and SY 435/535 and has been approved as an elective for the Undergraduate/Graduate Certificate in Gerontology and the interdisciplinary minor in Gerontology.

**Cross-Listed:** SY 535

### GRN 594 Dir St in Gerontology - 1-3 cr

Under the guidance of a faculty member, the student will pursue directed research or readings of an approved topic in Gerontology. May be repeated as long as the topic changes, to maximum of six credit hours. Requires permission of the Director of Gerontology.

### GRN 596 Internship - Gerontology 3,6 cr

This course is to provide a practicum experience in gerontology in a setting selected by the student and approved by the Program Director. The course emphasis is on the experiential learning process and outcomes. The graduate student will apply theoretical concepts to leadership roles, conducting research and influencing social and health care policies related to aging and intergenerational relationships. Interns will meet as a group three times during the semester for orientation, professional development, and evaluation activities. The 3-hour internship requires 100 contact hours; the 6-hour internship requires 200 hours. Permission of Director of Gerontology is required.

**Prerequisite:** SY 523 Minimum Grade of B

### GRN 597 GRN Teaching Apprenticeship 1-3 cr

Directed Studies/Apprenticeship that focuses on teaching Gerontology. The student will work directly with a member of the Gerontology graduate faculty to learn pedagogy, innovation in teaching, and course content that will equip the student for future teaching assignments. Many PhD programs offer both Teaching Assistantships and Research Assistantships. Gerontology students need to show evidence that they have had some teaching-related experience to compete strongly for the TA position. This course is also appropriate for students who anticipate careers in teaching within the field of Gerontology (aging or intergenerational studies). Arrangements must be made prior to registration. Permission of the Program Director is required.

**Prerequisite:** SY 372 Minimum Grade of C

## Gender Studies (GS)

### GS 101 Intro to Gender Studies 3 cr

This course provides an interdisciplinary, multicultural overview of the concept of gender and gender roles in patriarchal society. This course examines the social construction of gender in our society and how that has shaped such areas as economics, politics, cultural/social values, and the impact upon women and men in historical and contemporary terms.

### GS 290 Sp Tp-#MeToo, Black Lives Matter & Beyond 3 cr

Study of selected topics with an area in gender studies. May be repeated for credit when content varies.

**GS 301 Moving Beyond Diversity 3 cr**

This course explores ways of fighting injustice and dismantling systemic oppression for those who are being disproportionately impacted generationally. The course offers a framework for activism that focuses on creating a culture that stands up for what is right by fighting against normalizing cycles of perpetuated injustices. Students will examine diverse perspectives that center on the capacity to mobilize solidarity for those efforts, strategies, and practices that negate performative allyship with systems-changing action for today's realities.

**GS 302 Black Women and Activism 3 cr**

This fully online three-hour credit course is interdisciplinary in nature and addresses the need to recognize and validate contributions made by Black women that sought and continue to uplift Black America throughout the late 19th and early 21st centuries. This cadre of activism will be contextualized through both womanist and feminist theories. Central to these works will be an examination for how multiple oppressions have shaped Black women's lives throughout their ongoing efforts to redefine self and bring empowerment to their communities through racial solidarity and advancement as a people. These women's underlying resistance strategies and intellectual discourse for offsetting the negative effects of racism and other oppressive measures will be mirrored through the use of race and gender as a socio-political construct. A postmodern response depicted through the lens of contemporary Black feminists for how both mainstream feminism and Black America have responded to these heroic forms of activism will be analyzed. These activists' contributions will unfold through the following curricula foci: 1) early roots of nationalism, 2) the emergence of both Black Feminist and Womanist Thought, and 3) political movements involving Black women activists. Additional cornerstones for learning will include participating in a posting process that involve sharing research and writing projects which in return will facilitate lively discussions on today's black women activism from their own respective domain (e.g. music, spirituality, film, arts and letters, judicial system, the intellectual and socio-political arenas).

**GS 304 #Me Too, Black Lives Matter & 3 cr**

The velocity of national protests fighting for human rights across the constitutional continuum of justice, dignity, and safety have evolved into an epidemic throughout American infrastructures. This course will plunge into the #MeToo Era, Black Lives Matter, and Woke Movements. Significant visibility for how social constructs of gender, race, and sexuality intersect with these protesters' outcries will be examined. Further considerations will be given to exposing those accused of sexual violence on various fronts as well as existing allegations of wrongful deaths will be a part of the course curriculum. An added dimension to the curriculum will include also focusing on political strategies and an operative activism model that are being used to effectively penetrate these existing cultures of power and dominance.

**GS 390 Special Topics 3 cr**

Advanced study of selected topics with an area in gender studies. May be repeated for credit when content varies.

**GS 490 Special Topics 3 cr**

Advanced study of selected topics within an area in Gender Studies. May be repeated for credit when content varies for a total of six hours.

**GS 492 Gender Studies Seminar - 3 cr**

Advanced study of selected topics in Gender Studies. May be repeated for credit when content varies for a total of six hours.

**GS 494 Directed Studies 1-3 cr**

Directed research under the guidance of a Gender Studies faculty member. Requires permission of instructor. Student is restricted to taking a maximum of six hours of Directed Studies.

**Prerequisite:** GS 101 Minimum Grade of D

**GS 496 Internship - 3-6 cr**

Practical learning through occupational or community work with an approved agency dealing with gender-related issues. Readings and final report supervised by gender studies faculty. Special Permission required.

**Prerequisite:** GS 101 Minimum Grade of D

**Interdisciplinary Progs (IDS)****IDS 290 Special Topics 1-3 cr**

A study of selected topics of an interdisciplinary nature. May be repeated for credit when content varies. Requires permission of instructor.

**IDS 490 Special Topics 1-3 cr**

Advanced study of selected topics of an interdisciplinary nature. May be repeated for credit when content varies. Requires permission of instructor.

**IDS 590 Sp Top 1-9 cr**

Specialized topics not generally listed in the course offerings. Requires consent of Graduate Director.

**International Studies (IS)****IS 100 Global Issues 3 cr**

This course introduces students to the basic structural components of the global system, including the nation-state system and the world economy, and explores the major schools of thought in such areas as security, economic prosperity and development, international law, gender and environmental studies. The course helps students understand the complex and interlinked issues facing global society, and current problems, and view the U.S. within a broader global context.

**IS 193 Study Abroad 1-6 cr**

This course is an introductory International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**IS 200 People-Nations - 3 cr**

Variable content course focusing on particular nation or region of the world. Course offers a multi-disciplinary introduction to the people, society and politics. May be repeated for credit when content varies up to a total of 6 hours.

**IS 210 Global Engagement Orientation 1 cr**

This course introduces students to international global issues, allows students to identify opportunities for active engagement in these issues, and provides the framework for successful completion of the Global Engagement Certificate.

**IS 290 Special Topics - 3 cr**

Study of selected topics within a particular Area Studies Concentration. May be repeated for credit when content varies.

**Prerequisite:** IS 100 Minimum Grade of D

**IS 293 Study Abroad 1-6 cr**

This course is an introductory International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**IS 363 Crime and Politics in LatinAm 3 cr**

An examination of the violent crime epidemic affecting many parts of Latin America, with specific focus on the themes of democratic transition, political economy, and foreign relations with the United States. Same as PSC 363 and CJ 363.

**Prerequisite:** (PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or IS 100 Minimum Grade of C)

**Cross-Listed:** CJ 363, PSC 363

**IS 371 Studies in Russia 3-6 cr**

This course will cover specific topics in the history, politics, and culture of modern Russian civilization. May be repeated for credit when content varies.

**IS 372 Studies in E. Europe & C. Asia 3-6 cr**

This course will cover specific topics in the history, politics, and culture of modern Eastern European and Central Asian civilizations. May be repeated for credit when content varies.

**IS 390 Sp Top- 1-3 cr**

Advanced study of selected topics within a particular concentration. May be repeated for credit when content varies.

**IS 391 Study Abroad - 18 cr**

Study of selected topics within a particular Area Studies Concentration. May be repeated.

**IS 393 Study Abroad 1-6 cr**

This course is an advanced International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**IS 410 Global Engagement Capstone 1 cr**

Global Engagement Capstone is required for students completing the Global Engagement Certificate (GEC), and is a one hour course designed to help students reflect on the 16 hours of coursework and nine hours of globally engaged activities they have completed. Students will create a portfolio during the course, which will be presented to students and affiliated faculty at its conclusion.

**Prerequisite:** IS 210 Minimum Grade of P

**IS 473 International Law 3 cr**

This course covers major issues, cases and topics in public and private international law. Course coverage includes individuals and corporations, diplomatic relations, jurisdiction, human rights, economic relations, treaties, environmental law, and more.

**Prerequisite:** (IS 100 Minimum Grade of C or PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C)

**Cross-Listed:** CJ 473, PSC 473

**IS 489 Leadership and World Leaders 3 cr**

An overview of the definitions, characteristics, and typologies of leadership, with a focus on lives and legacies of global influential political leaders over the past century.

**Prerequisite:** PSC 130 Minimum Grade of D or PSC 250 Minimum Grade of D or IS 100 Minimum Grade of D

**Cross-Listed:** PSC 251, PSC 489

**IS 490 Special Topics 3 cr**

Advanced study of selected topics within a particular Area Studies Concentration. May be repeated for credit when content varies.

**Prerequisite:** IS 100 Minimum Grade of D

**IS 491 Seminar on Terrorism 3 cr**

Study of a terrorism from a sociopolitical perspective with an emphasis on causes, policy, tactics and operational characteristics and counter-terrorism operations. Cross-listed with CJ 491 and PSC 491.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or PSC 130 Minimum Grade of C or IS 100 Minimum Grade of C

**Cross-Listed:** CJ 491, PSC 491

**IS 492 Seminar - 3 cr**

Advanced study of selected topics in international studies from a comparative perspective. May be repeated for credit when content varies.

**Prerequisite:** IS 100 Minimum Grade of D

**IS 493 Study Abroad 1-6 cr**

This course is an advanced International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**IS 494 Directed Studies 1-3 cr**

Directed research in the field of international studies. May be repeated or credit up to a total of 9 hours. Prerequisite: permission of IS Director

**IS 495 Senior Seminar - W 3 cr**

The course seeks to provide an interdisciplinary and cross-regional overview of the fields and research opportunities within international studies.

**Prerequisite:** EH 102 Minimum Grade of C

**IS 496 Prof St Internship - 3-9 cr**

Practical learning experiences through occupational or professional work with an approved international organization, governmental agency, or international business Prerequisite: Permission of IS Director

**IS 499 Senior Honors Thesis 3 cr**

The course covers major theoretical perspectives in organizational psychology based on empirical research and case studies. Students will explore learning theory, group dynamics, and change in different types of learning organizations.

**Prerequisite:** (EH 102 Minimum Grade of D or EH 105 Minimum Grade of D)

**IS 591 Study Abroad 12 cr**

Graduate level international exchange programs for University of South Alabama students.

**Museum Studies (MUM)****MUM 201 Intro to Museum Studies 3 cr**

This course is designed to provide a general introduction to museum history, practice, and the role of museums in contemporary society. The class will explore a range of museum positions, curatorial practices, collection management, museum administration, and the academic and public roles museums play in society.

**Prerequisite:** EH 102 Minimum Grade of C

**MUM 290 Special Topics - 3 cr**

Different subjects or themes in museum studies as announced. This course may be repeated twice when content varies, for a maximum of nine credit hours. Prerequisite: To be announced.

**MUM 390 Special Topics - 3 cr**

Different subjects or themes in museum studies as announced. This course may be repeated twice when content varies. for a maximum of nine credit hours. Prerequisite: To be announced.

# Gerontology Graduate Certificate

## Degree Requirements

The Graduate Certificate Program at USA requires a minimum of four courses (12 hours) with grades of "A" or "B", including Aging in American Society (SY 523) and an approved internship or approved equivalent experience. It is strongly recommended that students take other courses to enhance their research/practice in aging and the life course, such as a course in public policy or public health; a research methods course appropriate to the student's primary discipline and/or gerontology; and a course in professional ethics. All courses not specifically listed in this section must be approved by the Gerontology Program Director and the student's academic advisor prior to registration for the course.

The Gerontology internship (GRN 596) is required but may be waived for students who are employed in the field of aging or those who complete an approved internship or clinical/field placement within the student's discipline. The internship must allow the student to apply skills to work with older individuals and their families. Research shows that positive, supportive attitudes toward aging are best developed through personal involvement with older people. The skill of applying knowledge to the issues in aging is developed in experiential learning situations. Therefore, an internship is required unless the student demonstrates substantial previous experience with the client population. A maximum of six credit hours of internship and six credit hours of directed study may be applied toward the Graduate Certificate in Gerontology. The internship must be approved by the program director during the semester prior to placement. Students in professional programs may be able to use field placements in lieu of the Gerontology Internship. Additional course substitutions may be possible. The Gerontology Certificate is a valuable added credential for students in Nursing, Allied Health Professions, Health Education, and Public Health/Health Administration. Students are encouraged to speak with their academic advisors and the Director or Associate Director of the Gerontology Programs about adding the Gerontology Certificate to their programs of study.

All course waivers and substitutions must be approved by the Gerontology program director. The student must work closely with the director and with the advisor in the major area of specialization to develop the best program possible to meet career goals.

### Graduate Certificate in Gerontology

Following are the courses approved for the Graduate Certificate in Gerontology:

Code	Title	Hours
<b>Required Courses</b>		
SY 523	Aging in American Society	3
GRN 596	Internship - Gerontology (or equivalent)	3,6
<b>Elective Courses</b>		
Select two of the following:		6
GRN 535	Health Disparities Life Span	
GRN 594	Dir St in Gerontology -	
GRN 597	GRN Teaching Apprenticeship	
HS 510	Current Health Issues	
PSC 581	Public Policy and Aging	
KIN 563	Nutrition	
PSY 516	Cognitive Psychology	
PSY 524	Lifespan Development	

PSY 575	Comparative Psychology
SY 535	Health Disparities Life Span
SY 572	Sociology of Aging-Family
<b>Total Hours</b>	<b>12-15</b>

Graduate level Special Topics courses and Directed Studies may be taken as electives when the course topic is appropriate for gerontology. Distance learning options may be offered for some courses. Check with the program director or associate director for information about on-line courses and other distance learning opportunities.

Other electives may be taken from the student's degree discipline with approval by the student's graduate advisor, the Gerontology program director, and the Graduate School (Examples: courses in Advanced Geropsychiatric Nursing and courses in the College of Allied Health Professions where the focus is on aging and age-related health conditions). Students should meet with the Gerontology program director to discuss specific questions about elective courses.

Courses which are taken as part of a degree program may be considered for credit toward the certificate provided they are approved by the Director of the University Programs in Gerontology, the Director of Graduate Studies in the College offering the degree, and the Dean of the Graduate School. In order to receive the printed Graduate Certificate in Gerontology, you must submit a completed application form. Certificates are not issued automatically. Forms are available on the program website at: <http://www.southalabama.edu/gerontology/>. Students must schedule an exit interview with the director or associate director of the Gerontology Program six weeks prior to completion of the program. Zoom or phone interviews can be arranged. Certificate recipients are listed in the Commencement Program closest to the date the certificate completion documentation approved.

For further information about the program contact

Dr. Roma Stovall Hanks, Director or  
 Dr. Hosik Min, Associate Director  
 USA Programs in Gerontology  
 5991 USA Dr. N., HUMB 34  
 University of South Alabama  
 Mobile, Alabama 36688-0002  
 phone: (251) 460-6020; FAX (251) 460-7925  
 e-mail: [rhanks@southalabama.edu](mailto:rhanks@southalabama.edu) or [hmin@southalabama.edu](mailto:hmin@southalabama.edu).  
 website: <http://www.southalabama.edu/colleges/artsandsci/syansw/gerontologyprogram/>

### Application for the Certificate

The Degree Works audit tool lists the Gerontology Certificates (Graduate and Undergraduate) as programs. Students should alert their advisors to check that they are enrolled in the appropriate Gerontology Certificate program. Upon completion of requirements, an application must be submitted by the student.

The application is available at the Gerontology website:  
<http://www.southalabama.edu/colleges/artsandsci/syansw/gerontologyprogram/>.

# Gerontology Minor

## Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Minor in Gerontology

The Interdisciplinary Minor in Gerontology requires 18 semester hours. At least 9 hours (lower and/or upper-division) hours of courses in the minor must be completed at the University. At least 9 hours of courses must be upper division. The Interdisciplinary Minor in Gerontology is designed for those Arts and Sciences majors who are interested in obtaining jobs in agencies that provide services for older individuals and their families or in pursuing graduate degrees that involve research on aging and the life course or intergenerational relationships. Majors in other colleges may also pursue the Interdisciplinary Minor in Gerontology, but should discuss this option with an advisor from the major field. Students who complete the requirements for the Gerontology minor may be eligible to receive the Undergraduate Certificate in Gerontology as well, provided all requirements for the Certificate are met. Students should consult their advisor and the program director or assistant director to discuss this dual credential option. University policies regarding dual use of courses for both a major and a minor apply.

Code	Title	Hours
<b>Core Courses for the Minor (Undergraduate)</b>		
<i>Required (total of 9 hours, including 3-hour internship):</i>		
SY 372	Social Gerontology - W	
Select one of the following:		3
BLY 207	Biology of Aging	
SY 435	Health Disparities Life Span	
GRN 435	Health Disparities Life Span	
Select one of the following:		3
PSY 456	Adult Development and Aging-	
PSY 250	Life Span Development	
Internship (Required 3 hours) ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/gerontology/footnote1/">http://bulletin.southalabama.edu/programs-az/arts-sciences/gerontology/footnote1/</a> ) <sup>1</sup>		3
<i>Elective Courses (Select courses to bring total hours to 18)</i>		6
Any required course option that was not chosen from the list above to fulfill a requirement may be used as an elective. An additional 3 hours of internship may be accepted as an elective. Other elective choices include:		
GRN 272	Gender and Aging	
GRN 290	Special Topics - (see footnote table below (p. 217)) <sup>2</sup>	
GRN 490	Special Topics (see footnote table below (p. 217)) <sup>2</sup>	
GRN 494	Directed Studies	
HS 262	Personal Health	
IST 201	Seasons of Life	
KIN 263	Intro to Nutrition	
PSC 481	Public Policy and Aging	
PSY 416	Cognition	
PSY 428	Perception	
PSY 456	Adult Development and Aging-	

PSY 475	Comparative Evolutionary Psy
RTH 397	Recreational Therapy Interventions with Older Adults
SY 472	Sociology of Aging and Family
SY 490	Special Topics
<b>Total Hours</b>	<b>15</b>

### Footnote

- 1 Internship in Gerontology (GRN 496 or equivalent). With permission of the program director and the student's academic advisor, an internship in the student's primary discipline may be substituted if the internship provides significant contact with older people, their families, or appropriate service agencies. Three (3) semester hours required; up to six (6) semester hours may be accepted. Approval of the internship placement must be obtained at least 6 weeks prior to registration. The 3 hour internship requires 100 contact hours; the 6 hour internship requires 200 contact hours. If you plan to substitute an internship from another discipline, you must obtain written approval from the Gerontology Program Director prior to registration.
- 2 GRN 290 and GRN 490 are variable topic courses. Directed studies, seminars, and special topics courses may be taken for credit toward the minor or certificate in gerontology only when the course topic is appropriate for the study of aging or intergenerational relationships. Check the class schedule each term to determine which topic is being offered. Sample topics include: Gender and Aging; Leadership and Advocacy in Gerontology; Housing and Lifestyle Changes across the Life Course; Aging and Public Policy. Other electives may be taken from the student's degree discipline with approval by the student's advisor and the Gerontology Program Director. Content of the elective must include substantial focus on aging.

# Gerontology Undergraduate Certificate

## Degree Requirements

Students who wish to earn an Undergraduate Certificate in Gerontology must complete four courses (12 semester hours), including an approved internship that will expose the student directly to older people and their families. The internship must be approved by the program director during the semester prior to placement. The internship may be waived for students who are currently employed in the field of aging or those who can provide documentation of substantial work experience in the field. Waiver of the internship requirement must be approved by the Gerontology Program Director and the student's academic advisor. Students in professional programs may be able to substitute clinical or field placements for the internship with permission of the Gerontology Program Director and the student's academic advisor. Substitutions will be approved only if the placement provides opportunities to interact with and provide services for older individuals and their families.

Approved courses are offered in various departments as well as in Gerontology (GRN). Students are encouraged to pursue the Gerontology Certificate in conjunction with degree programs. Some approved courses may not carry the GRN designation. It is essential for students to work with their academic advisors and the Gerontology program director or associate director to develop a plan of study for the Gerontology Certificate.

Code	Title	Hours
<b>Core Courses for the Undergraduate Certificate</b>		
<i>Required</i>		
SY 372	Social Gerontology - W	
Select one of the following:		3
BLY 207	Biology of Aging	
SY 435	Health Disparities Life Span	
GRN 435	Health Disparities Life Span	
Select one of the following:		3
IST 201	Seasons of Life	
IST 401	Adults in Society	
PSY 456	Adult Development and Aging-	
PSY 250	Life Span Development	
<b>Internship (3 hrs Required)</b>		
GRN 496	Internship - Gerontology (linkurl^../footnote1/^or equivalent ) <sup>1</sup>	3
<b>Elective Courses</b>		
Select courses to bring total hours to 12		
Any required course option that is not chosen from the list above to fulfill a requirement may be used as an elective, other elective choices include:		
GRN 272	Gender and Aging	
GRN 290	Special Topics - (see footnote table below (p. 218)) <sup>2</sup>	
GRN 490	Special Topics (see footnote table below (p. 218)) <sup>2</sup>	
GRN 494	Directed Studies	
HS 262	Personal Health	
KIN 263	Intro to Nutrition	
PSC 481	Public Policy and Aging	
PSY 416	Cognition	
PSY 428	Perception	
PSY 475	Comparative Evolutionary Psy	
RTH 397	Recreational Therapy Interventions with Older Adults	
SY 472	Sociology of Aging and Family	
SY 490	Special Topics	
<b>Total Hours</b>		<b>9</b>

## Footnote

<sup>1</sup> With permission of the program director and the student's academic advisor, an internship in the student's primary discipline may be substituted if the internship provides significant contact with older people, their families, or appropriate service agencies. Three (3) semester hours required; up to six (6) semester hours may be accepted. Approval of the internship placement must be obtained at least 6 weeks prior to registration. The 3 hour internship requires 100 contact hours; the 6 hour internship requires 200 contact hours. If you plan to substitute an internship from another discipline, you must obtain written approval from the Gerontology Program Director prior to registration.

<sup>2</sup> GRN 290 and GRN 490 are variable topics courses. Check the class schedule each term to determine which topic is being offered. Sample topics include: Gender and Aging; and Aging and Public Policy. Additional courses may be used as electives, if approved by the

Gerontology program director or associate director. Students should meet with the program director to discuss specific questions about elective courses.

Directed studies courses, special topics, and seminars in gerontology or other disciplines may be accepted only when the course topic is appropriate for gerontology. Students should meet with the program director to discuss specific questions about elective courses.

## Program Enhancement

Research opportunities, service learning, and scholarships may be available for students in Gerontology. Contact the Program Director for details. Membership in Sigma Phi Omega Gerontology Honor Society and the Gerontology Club are also available to qualified students.

## Application for the Certificate

Printed certificates are not sent automatically to students. The certificate application is available at the Gerontology website: <https://www.southalabama.edu/colleges/artsandsci/syansw/gerontologyprogram/>.

An exit interview may be required. Contact the program director at least 6 weeks prior to completion of requirements for the certificate. Recipients of the Gerontology Certificates are listed in the Commencement Program closest to the date the certificate completion documentation was approved.

# Global Engagement Department Information

(251) 460-6746

Global Engagement website

<http://www.southalabama.edu//departments/academicaffairs/gec>  
(<http://www.southalabama.edu//departments/academicaffairs/gec/>)

## Global Engagement Staff

Title	Name
Coordinator	Christine Rinne, Ph.D.

The Global Engagement Certificate provides students the opportunity to engage in global issues and experiences through a combination of course work and approved activities.

## Degrees, Programs, or Concentrations

- Global Engagement Certificate Program (p. 218)

# Global Engagement Certificate Program

## Degree Requirements

The program is open to all undergraduate students. Application to the program, admission, and advising are required; the application is available on the program website.

Code	Title	Hours
IS 210	Global Engagement Orientation	1
IS 410	Global Engagement Capstone	1

Remaining Hours (<http://bulletin.southalabama.edu/programs-az/arts-sciences/global-engagement/footnote1/>)<sup>1</sup> 15

**Total Hours** 17

#### Footnote

- <sup>1</sup>
- No more than 6 hours should be general education requirements at 100-/200-level
  - 3 hours must be in foreign language for majors in the College of Arts and Sciences
  - at least 50% of course content must focus outside of the United States of America
  - Students will complete an additional nine hours of globally engaged activity, such as study abroad, service learning, and/or internships.

Contact the coordinator for a list of approved courses and activities.

## History

### Department Information

Department of History website

<http://www.southalabama.edu/history> (<http://www.southalabama.edu/history/>)

### Undergraduate Studies

Knowledge and awareness of history and society are important ingredients of a liberal education. The Department of History offers general courses for all students, a major and a minor in history, and preparation for students who plan to continue study at the graduate level, to teach history, or to enter related fields.

All first-time freshmen must successfully complete CAS 100 as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry.

### Honors in History

To be awarded Honors in History, a student must:

1. complete the standard requirements for a major in History
2. have a 3.5 overall GPA (University requirement)
3. have a 3.5 History GPA (Department requirement)
4. receive agreement of a member of the History Department to serve as mentor e.receive permission of the Department Chair to undertake this program
5. complete a Senior Honor Paper (HY 499), with a grade of "B" or "A", in addition to the standard History requirements. HY 499 (six semester hours credit) may be counted toward three hours of the 36 required for a major and toward the three hours of 400-level electives required for the major. Thus, the student receiving honors in History will be required to take a total of 39 hours in History instead of 36 (In HY 499, the student will normally take three hours in Fall Semester for research and three in Spring for writing, though occasionally this may be spread out over a longer period. A final committee of three or more faculty, which may include a representative of the University Honors College, will conduct an oral defense)

#### Note:

1. one need not be receiving University Honors to obtain Honors in History;
2. a certificate will be awarded to the student indicating that they have been awarded "Honors in History."

### Graduate Studies

The Master of Arts degree in History is designed to meet the varied needs of students. There are two study tracks or plans for completion of the degree: thesis, non-thesis.

Normally, those who wish to enter a Ph.D. program, law school, or certain positions in archives, government, and community college teaching positions pursue the thesis option. Other students pursuing positions where a thesis is not needed often study in the non-thesis track.

For further information on the M.A. program, see the Department website under Graduate Academic Programs.

### Requirements for Admission

Students are admitted each semester. In addition to Graduate School requirements, all applicants must submit a statement of purpose for undertaking graduate work in History, provide three academic letters of recommendation, and a writing sample. These documents must be submitted electronically at <http://www.southalabama.edu/colleges/artsandsci/history/gradadmit.html>. Please contact the History Department Coordinator of Graduate Studies for more information. The following criteria supplement Graduate School criteria (see Categories of Admission).

### Regular Admission

1. At least twenty-one semester hours of college work in History, or related disciplines or fieldwork, approved by the Graduate Committee of the Department of History.
2. Applicants to graduate programs in Arts and Sciences typically have a minimum GPA of at least a 3.0 (on a 4.0 scale) on all undergraduate work. In exceptional cases, applicants may be considered with at least a 2.5 GPA on all undergraduate work, or at least a 2.75 GPA on the last 60 hours of undergraduate work.

### Non-Degree Students

Students holding baccalaureate degrees from accredited institutions of higher education who are not interested in earning an MA degree, or who are not yet ready to apply for Regular Admission may enroll in a Non-Degree status. A suitable background for the courses to be taken is expected. Non-Degree students may enroll only in courses offered at specific times and places. They may not enroll in directed studies courses.

### Graduate Assistantships

A limited number of assistantships are awarded to incoming and returning graduate students on a competitive basis. Assistantships include a tuition waiver and a stipend, for which students are asked to work 20 hours a week, usually as teaching assistants, in public history, or assisting in the University Archives. Applications for each academic year are due in the department no later than March 15.

### Degrees, Programs, or Concentrations

- History (BA) (p. 225)
- History (MA) - Non-Thesis Option (p. 227)
- History (MA) - Thesis Option (p. 227)
- History Minor (p. 228)

## Courses

### History (HY)

#### **HY 101 HY of Western Civilization I 3 cr**

History of humankind, emphasizing the development of the West to c. 1600 C.E. Topics may include Mesopotamia and Egypt, Ancient Greece and Rome, the origins of monotheistic religions, and medieval Europe, Core Course.

#### **HY 102 HY of Western Civilization II 3 cr**

History of humankind, emphasizing the rise of the West, from c. 1600 C.E. Topics may include the Enlightenment, the French Revolution, WWI, WWII and the Cold War. Core course. Note: History 101 and 102 are related courses but need not be taken in order.

#### **HY 103 HY of Asian Civilization I 3 cr**

A survey of traditional cultures, values, ideas, and institutions of East, South, Southeast Asia to 1800.

#### **HY 104 HY of Asian Civilization II 3 cr**

The responses of East, South, and Southeast Asia to the impact of Western challenges and their roles in the modern world. Economic and political structure; the emergence of China and Japan as major world political and economic powers.

#### **HY 121 World Civilization I 3 cr**

This course will cover the history of World Civilization from its evolutionary beginnings in Africa to the beginning of the Protestant Reformation in Europe (c. 1550s CE).

#### **HY 122 World Civilization II 3 cr**

This course will cover the history of World Civilization from approximately 1550 through the contemporary era.

#### **HY 135 US History to 1877 3 cr**

Survey of US History to 1877. Topics may include Native American societies, colonial societies, the American Revolution, slavery, the Civil War, and Reconstruction. Core course.

#### **HY 136 US History since 1877 3 cr**

Survey of US History from 1877. Topics may include Western frontiers and Native Americans, Progressive Era, immigration, the Great Depression and Civil Rights Movements. Core Course. Note: History 135 and 136 are related courses but need not be taken in order.

#### **HY 190 Special Topics - 1-3 cr**

Special topics and their development, illustrating historical concepts. May be repeated twice for credit when content varies.

#### **HY 212 Japanese Film 3 cr**

This course will introduce students to major themes in recent Japanese history, including samurai culture and other issues pertaining to social class, Westernization, the postwar family, sixties radicalism, and recent popular culture. Students will explore these themes through Japanese film and literature, and will thus become familiar with major directors, including Akira Kurosawa, Yasujiro Ozu, and Juzo Itami, and novelists such as Junichiro Tanizaki and Yukio Mishima.

#### **HY 228 Latin America 3 cr**

An introductory survey of Latin American history from the time of European conquest to the present.

#### **HY 283 Chinese Film 3 cr**

This course will introduce students to major topics in Chinese history, covering both ancient periods such as the Three Kingdoms period, and twentieth-century events such as the war with Japan and the Cultural Revolution. Post-Tiananmen Chinese society will also be stressed. Students will explore these themes through Chinese film and literature, and will thus become familiar with major directors, including Zhang Yimou and Jia Zhangke, and writers such as Yu Hua.

#### **HY 288 History of the Mass Media 3 cr**

The role of journalism in American society from the Revolution to the present. This course is equivalent to CA 288.

**Cross-Listed:** CA 388, HY 388

#### **HY 290 Special Topics- 3 cr**

Special topics and their development, illustrating historical concepts. May be repeated twice for credit when content varies.

#### **HY 303 Warfare Society Modern World 3 cr**

Examines the mutual interrelations between warfare and society in western civilization since the 14th century.

**Prerequisite:** HY 102 Minimum Grade of C

#### **HY 305 History of Military Thought-W 3 cr**

An intellectual history of the place of armed conflict in society from the Renaissance to the Nuclear Age.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

#### **HY 310 Amer Environmental Hy-W 3 cr**

A textual and discussion-based analysis of the role of the environment in America's history from the Pre-Columbian era through the present, this course considers the interactions between human society and its surroundings across North America. In particular, this course explores the ideas, activities, technologies and institutions that have influenced our national interaction with the natural world. Conversely, we consider the degree to which the environment has shaped our national institutions and identity.

**Prerequisite:** (EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

#### **HY 312 America in the 1960s 3 cr**

This course covers American history during the 1960's. It will offer an overview of one of the most tumultuous periods in modern American history.

#### **HY 321 The Caribbean 3 cr**

Explores the history of the island Caribbean from the onset of European rule to the present.

#### **HY 332 Great Britain 1603 to 1815 3 cr**

Great Britain from the accession of James I to the defeat of Napoleon.

#### **HY 333 Great Britain Since 1815 3 cr**

The British at home and abroad; Constitution and culture, identity and empire, since Waterloo.

#### **HY 335 History of Modern France 3 cr**

France since the Revolution.

#### **HY 336 Central European History 3 cr**

Addresses Central European History, in the lands of the Holy Roman Empire and its successor states, from the middle of the 15th Century until the middle of the 19th Century. Particular emphasis on major religious and political events during events during this period, along with discussion of Jewish history during these centuries.

**HY 337 History of Eastern Europe 3 cr**

History of Eastern Europe since 1914.

**HY 338 History of Russia 3 cr**

History of Russia from Kievan Rus to Present.

**HY 346 The Second World War 3 cr**

A history of the Second World War, its background and its aftermath.

**HY 347 The Holocaust 3 cr**

The history of the systematic mass murder of Europe's Jews and other groups by Nazi Germany during World War II. Cross-listed with REL 347. Credit cannot be received for both HY 347 and REL 347.

**Cross-Listed:** REL 347

**HY 348 Hitler and Nazi Germany 3 cr**

The rise of Adolf Hitler and the Nazi Party to power in Germany and the history of National Socialist Germany from 1933 to 1945.

**HY 355 French Revolution 3 cr**

Political, cultural and social revolution of the late eighteenth and early nineteenth centuries, emphasizing the French Revolution.

**HY 356 European Civ 1815-1918-W 3 cr**

History of European Civilization from 1815-1918.

**Prerequisite:** EH 102 Minimum Grade of C or EH 105 Minimum Grade of C

**HY 357 Europe Since 1945 3 cr**

The history of Europe from the end of the Second World War to the present.

**HY 362 History of Africa since 1500 3 cr**

A survey of the last five centuries of Africa's history moving from before European contact to the slave trade, colonial experience, and independence movements. Africans cultural patterns and its peoples' distinctive historical experience will be the focus of the course.

**HY 364 Islamic Civilization to 1453 3 cr**

This course will cover the political, economic, social, and cultural history of Islamic Civilization from its beginnings in the Arabian Peninsula in the sixth century to the Ottoman conquest of Constantinople in 1453. Cross-listed with REL 364. Credit cannot be received for both HY 364 and REL 364.

**Cross-Listed:** REL 364

**HY 365 Islamic Civilization 1453 - W 3 cr**

This course will examine the political, economic, social, and cultural history of Islamic Civilization from the Ottoman conquest of Constantinople in 1453 to the present. Cross-listed with REL 365. Credit cannot be received for both HY 365 and REL 365.

**Cross-Listed:** REL 365

**HY 366 Traditional China 3 cr**

Historical development of China from prehistoric times to arrival of Western influences in the 1800s.

**HY 367 Modern China 3 cr**

A study of Modern China from the arrival of Western influence in the 1800s to the present.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**HY 368 Japan 3 cr**

Japanese history from antiquity to the present and the emergence of Japan as major world political and economic power.

**HY 369 Modern Japan 3 cr**

Japanese History from the late Tokugawa period to the present and the emergence of Japan as a major world political and economic power.

**HY 371 Soc History of Early America 3 cr**

Patterns of frontier, agrarian, and urban society to 1865.

**HY 375 Divided We Stand: Recent U.S. History 3 cr**

Americans in the second decade of the twenty-first century are divided politically, socially, culturally, and economically. This class will trace the roots of those divides by examining the very recent history of the United States. Topics include, but are not limited to, the social, cultural, political, and the foreign policy history of the United States since the 1970s.

**HY 377 African American Experiences 3 cr**

Examines the role of African Americans in United States history with an emphasis on social, political, economic, intellectual and cultural developments.

**HY 382 Jews & Modern Amer Culture-W 3 cr**

This course will look at the cultural history of Jews' contributions to United States culture during the late 19th and 20th century. From Broadway to comedy (and beyond), American Jews have used their positionality as both insiders and outsiders to create lasting artifacts of cultural brilliance that helped to define the "American century"-and continue to do so today.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**HY 384 Japanese Film 3 cr**

This course will introduce students to major themes in recent Japanese history, including samurai culture and other issues pertaining to social class, Westernization, the postwar family, sixties radicalism, and recent popular culture. Students will explore these themes through Japanese film and literature, and will thus become familiar with major directors, including Akira Kurosawa, Yasujiro Ozu and Juzo Itami, and novelists such as Junichiro Tanizaki and Yukio Mishima.

**Cross-Listed:** CA 284, HY 284, LG 284, LG 384

**HY 388 History of Mass Media 3 cr**

The role of journalism in American society from the Revolution to the present. This course is also listed as CA 388.

**HY 390 Special Topics - 1-3 cr**

Special topics and their development, illustrating historical methodology. May be repeated twice for credit when content varies for a maximum of nine hours.

**HY 401 Coll in History- 3 cr**

A course which discusses various issues in history. May be repeated when content varies for a total of six hours. Prerequisite: Junior or Senior standing.

**HY 405 War and Soc 20th Century 3 cr**

A seminar which studies major themes in the interaction of warfare and society in the 20th century.

**HY 415 Studies in Military History 3 cr**

This course will deal with different topics in Military History. May be repeated for twice for credit when content varies for a maximum of nine hours. Prerequisite: Junior or Senior standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**HY 429 Studies Latin Amer History-W 3 cr**

A seminar devoted to the exploration of a specific topic in Latin American history. May be repeated twice when content varies for a maximum of nine hours. Prerequisite: Junior or Senior standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**HY 431 Studies in U.S. History - 3 cr**

This course will deal with different topics in U.S. History. May be repeated twice for credit when content varies for a maximum of nine hours.

Prerequisite: Junior or Senior standing

**HY 432 Colonial America 3 cr**

Colonial period to the revolution.

**HY 433 The American Revolution 3 cr**

This course emphasizes changes occurring in American society ca. 1750-1800.

**Cross-Listed:** HY 533

**HY 434 The Early Republic - W 3 cr**

The early Republic from 1789 to 1840.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**HY 435 Civil War and Reconstruction 3 cr**

The United States from 1840-1877.

**HY 436 Modern US I 1877-1945 3 cr**

History of urban industrialization, war, peace, prosperity, and depression.

**Prerequisite:** (EH 102 (may be taken concurrently) Minimum Grade of C or EH 105 (may be taken concurrently) Minimum Grade of C)

**HY 437 Modern US II Since 1945 - W 3 cr**

History of US in global perspective.

**Prerequisite:** (EH 102 (may be taken concurrently) Minimum Grade of C or EH 105 (may be taken concurrently) Minimum Grade of C)

**HY 441 Research Seminar-U.S. History 3 cr**

Research in topics in U.S. History. Limited to 15 students. Prerequisites: History major, Junior or Senior standing, permission from the Department Chair.

**HY 442 Research Seminar European Hy 3 cr**

Research in topics in European History. Limited to 15 students.

Prerequisites: History major, Junior or Senior standing, permission from the Department Chair.

**HY 443 Research Seminar-World HY 3 cr**

Research topics in Asian, African or Latin American History, or in the History of Islamic Civilization. Prerequisites: History major, Junior or Senior standing, permission from the Department Chair.

**HY 444 Research Seminar-Digital Hist 3 cr**

Research in topics in Digital History.

**HY 454 The British Empire 3 cr**

This course examines the rise, fall, and legacy of the British Empire.

**HY 455 History of Travel and Tourism 3 cr**

This course examines the history of British and American travel and tourism from the eighteenth century to the present.

**HY 456 Body, Medicine, Society Europe 3 cr**

This course examines the social and cultural history of medicine, health, and the human body in Western Europe from 1500 to 1900.

**HY 457 Studies in European History - 3 cr**

This course will deal with different topics in European history. May be repeated twice for credit when content varies for a maximum of nine hours. Prerequisite: Junior or Senior standing.

**HY 458 Sex, Celibacy Christian West 3 cr**

This course examines the history of attitudes towards sexuality, marriage and celibacy in the Western World. It focuses on the question of how Christianity has shaped sexual norms and gender relations from ancient times to the present.

**HY 461 Studies in Asian History - 3 cr**

This course will deal with different topics in Asian history. May be repeated twice for credit when the content varies for a maximum of nine hours. Prerequisite: Junior or Senior standing.

**HY 465 Studies in HY of Islamic Civ - 3 cr**

This course will cover specific topics in the history of Islamic civilization. May be repeated for credit when content varies. Prerequisite: Junior or Senior status. Cross-listed with REL 465. Credit cannot be received for both HY 465 and REL 465.

**Cross-Listed:** REL 465

**HY 471 Atlantic World - W 3 cr**

Examines the interactions among Europeans, Native American, and Africans in the Americas. This course is a "W" course.

**Prerequisite:** (EH 102 (may be taken concurrently) Minimum Grade of C or EH 105 (may be taken concurrently) Minimum Grade of C)

**HY 477 The Old South 3 cr**

This course examines the settlement and evolution of the American South from settlement of Jamestown to the Civil War. Of particular concern will be the degree to which the development of economic, social and political institutions in the South, especially the institution of slavery, increasingly isolated the region from the rest of the country.

**Cross-Listed:** HY 577

**HY 478 The New South 3 cr**

History of the South from Reconstruction to the 1920's.

**HY 494 Directed Studies - 1-3 cr**

Directed Individual Study. Requires approval of department chair.

**HY 496 Public History 3 cr**

This course will introduce students to the field of public history as an academic field and a possible career. Students cannot receive credit for both this course and HY 495.

**HY 498 Internship in History 3-6 cr**

Directed individual field research at the undergraduate level. Occupational and professional experiences under faculty direction in a defined field of interest, primarily for but not limited to archival, museum, library, or other public history projects. Written reports required. Special permission of departmental chair required. Maximum hours 6.

**HY 499 Senior Honors Paper - H 1-6 cr**

The researching and writing of a major historical paper. Requires permission of department chair.

**HY 501 Colloquium of History 3 cr**

A course which discusses various issues in history. May be repeated when content varies. Students cannot receive credit for both this course and HY 401.

**Cross-Listed:** HY 401

**HY 505 Warfare and Society 20th Cent 3 cr**

A seminar which studies major themes in the interaction of warfare and society in the 20th century. Students cannot receive credit for both this course and HY 405.

**Cross-Listed:** HY 405

**HY 515 Studies in Military History - 3 cr**

This course will deal with different topics in military history. May be repeated for credit when content varies. Students cannot receive credit for both this course and HY 415.

**Cross-Listed:** HY 415

**HY 529 Studies in Latin Am. History - 3 cr**

A seminar devoted to the exploration of a specific topic in Latin American History. May be repeated for credit when content varies. Students cannot receive credit for both this course and HY 429.

**Cross-Listed:** HY 429

**HY 530 American Historiography 3 cr**

Examination of major American historians; study of techniques, styles, ideas, interpretations, and critical evaluations.

**HY 531 Studies in U.S. History - 3 cr**

A seminar devoted to different topics in U.S. History. May be repeated for credit when content varies. Students cannot receive credit for both this course and HY 431.

**Cross-Listed:** HY 431

**HY 532 Colonial America 3 cr**

Colonial period to the Revolution.

**HY 533 American Revolution 3 cr**

This course emphasizes changes occurring in American society ca. 1750-1800.

**Cross-Listed:** HY 433

**HY 534 The Early Republic 3 cr**

The early Republic from 1789-1849. Students cannot receive credit for both this course and HY 434.

**Cross-Listed:** HY 434

**HY 535 Civil War and Reconstruction 3 cr**

The United States from 1840-1877. Students cannot receive credit for both this course and HY 435.

**Cross-Listed:** HY 435

**HY 536 Modern U.S. I 1877-1945 3 cr**

History of urban industrialization, war, peace, prosperity, and depression. Students cannot receive credit for both this course and HY 436.

**Cross-Listed:** HY 436

**HY 537 Modern U.S. II Since 1945 3 cr**

History of U.S. in a global perspective. Students cannot receive credit for both this course and HY 437.

**Cross-Listed:** HY 437

**HY 538 20th Century U.S. History 3 cr**

This course emphasizes interpretations of twentieth-century United States history.

**HY 540 Modern European Historiography 3 cr**

A study of the development of European historical literature and its theoretical and methodological bases.

**HY 541 Major European Thinkers 3 cr**

Seminar devoted to the writings of leading European thinkers of the last five hundred years, including such figures as Luther, Rousseau, Darwin, Marx, Freud and de Beauvoir.

**HY 542 World Historiography 3 cr**

Study of the development of World historical literature and its theoretical and methodological bases.

**HY 544 Digital History 3 cr**

Students will learn about an historical subject while gaining experience in digital methodologies and research. The goal is to conduct original primary research that will be published collaboratively on the web. Each class meeting will be equally divided between the topic of focus, and workshops. Simultaneously, students will learn the theory, research methods, and tools associated with digital humanities. Projects meeting certain criteria will be published on-line if the students elect to do so.

**Cross-Listed:** HY 444

**HY 546 Research in Soviet Soc History 3 cr**

A study of the relationship between political and social developments in Soviet Russia from 1917 to 1941.

**HY 548 The Making of Modern France 3 cr**

This seminar examines the history of France from the eighteenth century to the present. It investigates the political, cultural, and social forces that have shaped modern French society and the state.

**HY 551 Medieval Europe 3 cr**

Seminar that explores the history of Western Europe between 950 and 1500, with emphasis on changes in government, economy, society, religion, thought, war and diplomacy.

**HY 552 Renaissance Europe 3 cr**

Seminar that explores intellectual and cultural developments in Western Europe between 1350 and 1600.

**HY 553 Religious Reform in Europe 3 cr**

Seminar that considers religious reform movements within the Catholic Church before the beginning of Protestantism, the development of the major Protestant tendencies, and the continuing development of reform within the Catholic Church after the Protestant break.

**HY 554 The British Empire 3 cr**

The history and legacy of the British Empire from the 17th century to the present.

**HY 555 History of Travel and Tourism 3 cr**

The history of Travel and Tourism: The British and American Experience from the Eighteenth Century to the present.

**HY 556 Body, Medicine, Society Europe 3 cr**

This course examines the social and cultural history of medicine, health, healing, and the human body in Western Europe from 1500 to 1900.

**HY 557 Studies in European History - 3 cr**

A seminar devoted to different topics in European History. May be repeated for credit when the content varies. Students cannot receive credit for both this course and HY 457.

**Cross-Listed:** HY 457, HY 558

**HY 558 Sex, Celibacy Christian West 3 cr**

This course examines the history of attitudes towards sexuality, marriage, and celibacy in the Western world. It focuses on the question of how Christianity has shaped sexual norms and gender relations from ancient times to the present.

**HY 559 Modern European History 3 cr**

Problems in historical interpretation and method from 1740 to present. May be repeated when topic varies.

**HY 561 Studies in Asian History - 3 cr**

A seminar devoted to different topics in Asian History. May be repeated for credit when the content varies. Students cannot receive credit for both this course and HY 461.

**Cross-Listed:** HY 461

**HY 564 Classical/Medieval Islamic His 3 cr**

Seminar that examines the Classical and Medieval history of Islamic civilization from the sixth to the thirteenth centuries, with a focus on the political and cultural changes experienced by the Muslim world in this period.

**HY 565 Studies in Islamic Civil. - 3 cr**

A seminar devoted to different topics in the history of Islamic Civilization. May be repeated for credit when the content varies. Students cannot receive credit for both this course and HY 465.

**Cross-Listed:** HY 465

**HY 570 American Biography 3 cr**

A study of American biography, autobiography, and methodology.

**HY 571 Atlantic World 3 cr**

This course examines the interactions among Europeans, Native Americans, and Africans in the Americas. Students cannot receive credit for both this course and HY 471.

**Cross-Listed:** HY 471

**HY 573 19th Century American West 3 cr**

Seminar that explores the history of the American West in the nineteenth century, focusing on Manifest Destiny, imperialism, Mormonism, the environment, and the place of Native Americans in U.S. society.

**HY 577 The Old South 3 cr**

This course examines the settlement and evolution of the American South for settlement of Jamestown to the Civil War. Of particular concern will be the degree to which the development of economic, social and political institutions in the South, especially the institution of slavery, increasingly isolated the region from the rest of the country.

**Cross-Listed:** HY 477

**HY 578 The New South 3 cr**

History of the South from Reconstruction to the 1920's.

**Cross-Listed:** HY 478

**HY 580 Research in Southern History 3 cr**

History of the southern United States, from the colonial era to the present. Students will write a research paper involving interpretation of primary documents.

**HY 581 Research in American History 3 cr**

This is a variable content seminar course. Students will write a research paper involving interpretation of primary sources.

**HY 583 Research Experience 3 cr**

The theories, research methods and analytical skills, and substantive knowledge obtained through their master's curriculum provide the basis for a thesis project, either to be completed if you are on the thesis track, or some kind of professional project, like a website or museum exhibit, if you are on the non-thesis track. This seminar will guide students towards this goal by emphasizing the multiple steps required in such a serious undertaking.

**HY 586 Research in European History 3 cr**

This is a variable content seminar course. Students will write a research paper involving interpretation of primary sources.

**HY 590 Special Topics - 3 cr**

A colloquium of selected subjects and readings to be arranged by the department. Limited to fifteen students. May be repeated seven times for credit when content varies for a total of 24 semester hours.

**HY 592 The Teaching of History 3 cr**

The class is conceived as part seminar and part practicum. It is an introduction to the problems and principles of the teaching of history in secondary and higher education settings. It will combine instructor lecture, class presentations, and class discussions of assigned readings.

**HY 593 Exam and Thesis Introduction 1 cr**

This course seeks to provide M.A. students with a practical introduction to the research techniques and bibliographic knowledge that will facilitate the timely completion of a master's level program. Required of all incoming History M.A. students.

**HY 594 Directed Studies 1-3 cr**

Directed individual study. May only be used in unusual cases to build on regular graduate course work. A maximum of nine credit hours of HY 594 may count toward degree requirements. Pre-requisites: Special permission of instructor required.

**HY 595 Archival Practice 3 cr**

Introduces graduate students to archival theory and practice.

**HY 596 Public History 3 cr**

This course will introduce students to the field of public history as an academic field and a possible career. Students cannot receive credit for both this course and HY 495 or HY 496.

**HY 597 Pro Studies-Dir Field Research 3 cr**

Directed individual field research. Occupational and professional experiences under faculty direction in a defined field of interest, including but not limited to archival, museum, library, or other public history projects. Written reports required. Special permission of departmental chair required.

**HY 598 Comp and Thesis Preparation 0 cr**

This zero credit hour course will provide continuous enrollment while engaged in comprehensive exam preparation or for thesis preparation beyond thesis hours.

**HY 599 Thesis 1-3 cr**

Six hours required of student in the thesis track. May not be taken for credit toward a degree by students in the non-thesis track. Pre-requisites: Completion of nine hours of graduate level history, including one 500-level course in the field relevant to the thesis. Special permission of the department chair.

**Jewish & Holocaust Stds (JHS)****JHS 101 Intro to Jewish Studies 3 cr**

This course is a requirement for all Jewish & Holocaust Studies minors and will introduce students to methods, questions, and concerns within these fields. Students will be provided with an overview of Jewish history as well as how Jewish history first came to be an historical field of inquiry. Students will also be given an overview of the Holocaust, other genocides, and genocidal violence. Students will then be introduced to various approaches in Jewish and Holocaust Studies. This course will help students formulate ideas for research topics related to the class and will show them how and why a Jewish & Holocaust Studies minor may be able to help them in future endeavors.

**JHS 390 Special Topics - 3-9 cr**

Special topics and their development, illustration appropriate methodologies in Jewish studies. May be repeated twice for credit when content varies for a maximum of nine hours.

**JHS 494 Directed Studies 1-3 cr**

Directed Individual Study. Requires approval of department chair.

**Faculty**

Faculty Name	Faculty Department	Faculty Position	Degrees Held
CAGE, ERIN CLAIRE (ccage@southalabama.edu)	History	Professor	AB, Dartmouth College MA, Johns Hopkins University PHD, Johns Hopkins University
FAUST, ROBERT EDWARD (rfaust@southalabama.edu)	History	Senior Instructor	BS, Manchester College MA, Ball State University PHD, University of Missouri-Columb
KOZELSKY, MARA V. (mkozelsky@southalabama.edu)	History	Professor	BA, Appalachian State University MA, West Virginia University PHD, University of Rochester
LOMBARDO, TIMOTHY J (tlombardo@southalabama.edu)	History	Associate Professor	BA, Temple University MA, Temple University PHD, Purdue University-Main Campus
MCKIVEN, HENRY (hmckiven@southalabama.edu)	History	Associate Professor	BS, Auburn University MA, Virginia Polytechnic Inst and PHD, Vanderbilt University
MEOLA, DAVID ANDREW (dameola@southalabama.edu)	History	Associate Professor	BS, University of NC- Chapel Hill MA, Univ of British Columbia PHD, Univ of British Columbia
MESSENGER, DAVID ANDREW (davidamessenger@southalabama.edu)	History	Professor	BA, McGill University Quebec MA, Univ of Toronto PHD, Univ of Toronto
MILLER, HARRISON STEWART (hsmiller@southalabama.edu)	History	Professor	BA, Wesleyan University MA, Columbia U in the City of NY MPHIL, Columbia U in the City of NY
STRONG, MICHELE M. (mstrong@southalabama.edu)	History	Associate Professor	PHD, Columbia U in the City of NY BA, Meredith College MA, University of NC- Greensboro PHD, University of NC- Chapel Hill
URBAN, KELLY LAUREN (kurban@southalabama.edu)	History	Assistant Professor	BA, Texas A & M University MA, University of Pittsburgh PHD, University of Pittsburgh XADC, University of Pittsburgh
VAUGHN-ROBERSON, CLAYTON (croberson@southalabama.edu)	History	Assistant Professor	BA, University of Oklahoma-Norman MA, University of Oklahoma-Norman
WILLIAMS, REBECCA R. (rwilliams@southalabama.edu)	History	Associate Professor	MA, Carnegie Mellon University PHD, Carnegie Mellon University BS, Northern Michigan University MA, University of West Florida PHD, McGill University Quebec

## History (BA)

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		<b>36</b>
HY 135	US History to 1877	6
& HY 136	and US History since 1877	
Choose one sequence from the following:		6
HY 101	HY of Western Civilization I	
& HY 102	and HY of Western Civilization II	

HY 121	World Civilization I	
& HY 122	and World Civilization II	
African, Latin, or Middle Eastern - Choose 3 hours from:		3
HY 103	HY of Asian Civilization I	
HY 104	HY of Asian Civilization II	
HY 228	Latin America	
HY 321	The Caribbean	
HY 362	History of Africa since 1500	
HY 364	Islamic Civilization to 1453	
HY 365	Islamic Civilization 1453 - W	
HY 366	Traditional China	
HY 367	Modern China	

HY 368	Japan	
HY 461	Studies in Asian History -	
HY 429	Studies Latin Amer History-W	
HY 465	Studies in HY of Islamic Civ -	
History 'W' Writing Course: Choose 3 hrs from:		3
HY 305	History of Military Thought-W	
HY 310	Amer Environmental Hy-W	
HY 356	European Civ 1815-1918-W	
HY 365	Islamic Civilization 1453 - W	
HY 367	Modern China	
HY 382	Jews & Modern Amer Culture-W	
HY 429	Studies Latin Amer History-W	
HY 434	The Early Republic - W	
HY 437	Modern US II Since 1945 - W	
HY 471	Atlantic World - W	

Students should avoid taking the History 'W' writing course and the Research Seminar in the same semester.

Research Seminar Course - Choose 3 hours from:		3
HY 441	Research Seminar-U.S. History	
HY 442	Research Seminar European Hy	
HY 443	Research Seminar-World HY	
HY 444	Research Seminar-Digital Hist	

History Elective 400 Level	3
History Elective 300 or 400 Level	6
History Elective any Level	6

#### Minor Requirement

A minor is required for this degree program. 18-24

**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

## Additional Information

### "W" Writing Course:

The 'W' course should be taken early on in the student's slate of upper-division history courses, but it should not be the student's first upper-division history course.

### Research Seminar:

In the spirit of understanding the Research Seminar as "doing history after learning history," it should not be the student's first 400-level course. It should be taken after the student has completed a couple of 400-level courses. Ideally, it should be taken in the first semester of the senior year. (Of it is taken during the student's last semester of the senior year, and the student fails the course, he or she will not be able to graduate on time.)

## Graduation Plan

(36 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
EH 101	English Composition I (Area I)	3
HY 101	HY of Western Civilization I	3
or HY 121	or World Civilization I	

Natural Science with Lab	Area III	4
Foreign Language I	Area V	3

**Hours 15**

#### Spring

EH 102	English Composition II (or Honors (Area I))	3
MA 110	Finite Mathematics (or higher)	3
Foreign Language II	Area V	3
Social/Behavioral Elective	Area IV	3
HY 102	HY of Western Civilization II	3
or HY 122	or World Civilization II	

**Hours 15**

#### Second Year

##### Fall

HY 135	US History to 1877	3
Fine Arts Elective	Area II	3
Natural Science with Lab	Area III	4
English Literature	Area III	3
Humanities Elective	Area II	3

**Hours 16**

##### Spring

HY 136	US History since 1877	3
Humanities Elective	Area II	3
Minor Course		3
CA 110	Public Speaking	3
Social/Behavioral Elective	Area IV	3

**Hours 15**

#### Third Year

##### Fall

History Elective	African Asian, Latin America or Middle Eastern History	3
Natural Science with Lab	Area III	3
Elective		3
Minor Course		3

**Hours 12**

##### Spring

History Elective	300 level or higher (W)	3
History Elective	300 level or higher	3
Minor Course		3
Minor Course		3
Elective		3

**Hours 15**

#### Fourth Year

##### Fall

Select one of the following:		3
HY 441	Research Seminar-U.S. History	
HY 442	Research Seminar European Hy	
HY 443	Research Seminar-World HY	
HY 444	Research Seminar-Digital Hist	3
History Elective	300 level or higher	3
Minor Course		3
Minor Course		3
Elective		3

**Hours 18**

##### Spring

History Elective	400 level	3
History Elective		3
Minor Course		3
Elective		3
Elective		3

**Hours 15**

**Total Hours 121**

**Notes**

\* Recommended Course

\*\* See General Education Requirements

## History (MA) - Non-Thesis Option

All candidates for the Master of Arts degree in History, regardless of which of the two tracks they are following, must complete the following requirements:

- # A minimum of 30 credit hours with grade of "A" or "B".
- # A minimum of 21 credit hours completed at the University of South Alabama.
- # A maximum of 18 credit hours of 500 level courses that are dual-listed at the 400 level. Graduate students will only receive graduate credit for the 500 level version of dual-listed courses.
- # Complete 2 core courses. Choose 1 core course from HY 530 (<https://bulletin.southalabama.edu/search/?P=HY%20530>), HY 540 (<https://bulletin.southalabama.edu/search/?P=HY%20540>), or HY 542 (<https://bulletin.southalabama.edu/search/?P=HY%20542>). The second core course is HY 583 Research Experience.
- # Choose a major field with 12 credits of coursework. Fields include American History, European History, World History, Public History, Historical or approved Interdisciplinary Topical Fields.
  - Non thesis students have no additional requirements

**Note:** A grade of "C" or below is not considered a passing grade by the Department of History. Students receiving such a grade in a required course must make-up the hours.

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## Degree Requirements

All candidates for the Master of Arts degree in History, regardless of which of the two tracks they are following, must complete the following requirements:

- A minimum of 30 credit hours with grade of "A" or "B".
- A minimum of 21 credit hours completed at the University of South Alabama.
- A maximum of 9 credit hours of 500 level courses that are dual-listed at the 400 level. Graduate students will only receive graduate credit for the 500 level version of dual-listed courses. These courses will require extra work beyond that expected of undergraduates in the 400 level course.
- At least 21 credit hours at the 500 level courses that are not dual-listed with the 400 level.
- Complete one of HY 530, HY 540, or HY 542 (except for students taking the Public History topical field or other topical fields).
- Choose a major field with 12 credits of coursework, and a minor field with 9 credits of coursework from among the following fields: American History, European History or World History, Topical Fields

**Note:** A grade of "C" or below is not considered a passing grade by the Department of History. Students receiving such a grade in a required course must make-up the hours.

## History (MA) - Thesis Option

All candidates for the Master of Arts degree in History, regardless of which of the two tracks they are following, must complete the following requirements:

- # A minimum of 30 credit hours with grade of "A" or "B".
- # A minimum of 21 credit hours completed at the University of South Alabama.
- # A maximum of 18 credit hours of 500 level courses that are dual-listed at the 400 level. Graduate students will only receive graduate credit for the 500 level version of dual-listed courses.
- # Complete 2 core courses. Choose 1 core course from HY 530 (<https://bulletin.southalabama.edu/search/?P=HY%20530>), HY 540 (<https://bulletin.southalabama.edu/search/?P=HY%20540>), or HY 542 (<https://bulletin.southalabama.edu/search/?P=HY%20542>). The second core course is HY 583 Research Experience.
- # Choose a major field with 12 credits of coursework. Fields include American History, European History, World History, Public History, Historical or approved Interdisciplinary Topical Fields.

### Thesis Option

- Complete six credit hours of HY 599
- Submit an approved thesis prospectus
- Formally defend their thesis in public (Students must be enrolled in at least one hour of HY 599 in the semester they defend).
- Submit an approved thesis in accordance with Graduate School regulations

## Degree Requirements

All candidates for the Master of Arts degree in History, regardless of which of the two tracks they are following, must complete the following requirements:

- A minimum of 30 credit hours with grade of "A" or "B".
- A minimum of 21 credit hours completed at the University of South Alabama.
- A maximum of 9 credit hours of 500 level courses that are dual-listed at the 400 level. Graduate students will only receive graduate credit for the 500 level version of dual-listed courses. These courses will require extra work beyond that expected of undergraduates in the 400 level course.
- At least 21 credit hours at the 500 level courses that are not dual-listed with the 400 level.
- Complete two required classes; one of HY 530, HY 540, or HY 542. The second required class is HY 583 Research Experience.
- Choose a major field with 12 credits of coursework, from among the following fields: American History, European History or World History, Topical Fields (such as gender history, military history, etc.)

**Note:** A grade of "C" or below is not considered a passing grade by the Department of History. Students receiving such a grade in a required course must make-up the hours.

Requirements for topical fields vary. Students must check with graduate coordinator for specific requirements. The remaining requirements are dictated by the track in which students choose to study.

## Thesis Option

### Thesis Option

- Complete six credit hours of HY 599.
- Submit an approved thesis prospectus.
- Formally defend their thesis in public. (Students must be enrolled in at least one hour of HY 599 when they defend.)
- Submit an approved thesis in accordance with Graduate School regulations.

## History Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Minor in History

A minimum of 21 semester hours in History.

Code	Title	Hours
<b>Choose one of the following sequences:</b>		<b>6</b>
HY 101 & HY 102	HY of Western Civilization I and HY of Western Civilization II	
HY 121 & HY 122	World Civilization I and World Civilization II	
HY 135 & HY 136	US History to 1877 and US History since 1877	
HY Upper Division (300/400) Electives		9
HY Electives, any level		6

At least nine hours of courses numbered 300 or above must be taken at this University.

## Interdisciplinary Programs

### Department Information

Interdisciplinary programs are designed to combine several disciplines in their curriculum. Several interdisciplinary programs are offered by the College.

### Degrees, Programs, or Concentrations

- African American Studies Minor (p. 102)
- Composite Science Minor (p. 231)
- Film Studies Minor (<http://bulletin.southalabama.edu/programs-az/arts-sciences/english/english-film-studies-minor/>)
- Forensic Science Minor (p. 207)
- Gender Studies Minor (p. 211)
- Gerontology Graduate Certificate (p. 216)
- Gerontology Undergraduate Certificate (p. 217)
- International Studies (BA) - Asian Studies Concentration (p. 237)
- International Studies (BA) - European Studies Concentration (p. 239)

- International Studies (BA) - Global Health Concentration (p. 241)
- International Studies (BA) - International Relations Concentration (p. 242)
- International Studies (BA) - Latin American Studies Concentration (p. 244)
- International Studies (BA) - Middle East Studies Concentration (p. 246)
- International Studies (BA) - Modern and Classical Languages and Literature/International Studies Double Major (p. 248)
- International Studies Minor (p. 248)
- Museum Studies Minor (p. 291)
- Native American Studies Minor (p. 330)
- Related Science Minor (p. 232)

## Courses

### African-American Studies (AFR)

#### AFR 101 Intro to African Amer Studies 3 cr

An interdisciplinary investigation of the origins, experiences, conditions, accomplishments and contributions of people of African ancestry in the United States.

### College of Arts/Sciences (CAS)

#### CAS 100 First Yr Exp - 2 cr

A course for first-year students majoring in the College of Arts & Sciences that assists with maximizing the student's potential to achieve academic success and to adjust responsibly to the individual and interpersonal challenges presented by college life. Taught in small groups, the course provides an introduction to the nature of higher education and a general orientation to the functions and resources of the University.

#### CAS 190 Special Topics - 1-3 cr

This variable content course deals with selected topics from any of the disciplines in the College of Arts and Sciences. Topics will focus on current and relevant issues and may contain a service-learning component. The course may be repeated for credit when the topic varies for a maximum of six credit hours.

### Gerontology (GRN)

#### GRN 272 Gender and Aging 3 cr

This course examines the dynamics of gender and aging within society from an interdisciplinary perspective. Students will be introduced to controversies in gender over the life course. These include, but are not limited to, definitions and cultural boundaries, gender in childhood, gender and relationships, gender in education and the workplace, gender and sexuality, as well as gender in late life.

#### GRN 290 Special Topics - 3 cr

This designation is used for interdisciplinary courses on aging on a variety of subjects. This course does not replace any course in a single discipline. May be repeated as long as the topic changes, to maximum of six semester hours.

**GRN 435 Health Disparities Life Span 3 cr**

This course examines differences in health status across the life span. The course will focus heavily on racial/ethnic and socioeconomic disparities in health applying a social determinants' of health framework. Issues that will be considered include how income, education, neighborhood conditions, access to health care, and other community factors shape opportunities to be healthy. The course is cross-listed as SY 435 and GRN 435 and has been approved as an elective for the Undergraduate Certificate in Gerontology and the interdisciplinary minor in Gerontology.

**Prerequisite:** SY 109 Minimum Grade of D

**Cross-Listed:** SY 435

**GRN 490 Special Topics 3 cr**

This course is designated for upper division students and graduate students, particularly those pursuing studies for the Certificate of Gerontology. The course content focuses on interdisciplinary treatments on various topics on aging. This course does not replace any course in a single discipline. (Examples of special topics: Trends and Issues in Gerontology; Leadership and Advocacy in Gerontology; Housing and Lifestyle Changes over the Life Course). May be repeated as long as the topic changes, to maximum of six semester hours.

**Prerequisite:** SY 372 Minimum Grade of D

**GRN 494 Directed Studies 1-3 cr**

Under the guidance of a faculty member, the student will pursue directed research on readings of an approved topic in Gerontology. May be repeated as long as the topic changes, to a maximum of six semester hours. Requires permission of Director of Gerontology.

**Prerequisite:** SY 372 Minimum Grade of D

**GRN 496 Internship - Gerontology 3,6 cr**

This course is to provide a practicum experience in gerontology in a setting selected by the student and approved by the Program Director. The course emphasis is on the experiential learning process and outcomes. The undergraduate student will apply theoretical concepts in specific areas of interest related to aging and intergenerational relations. Interns will meet as a group three times during the semester for orientation, professional development, and evaluation activities. The 3-hour internship requires 100 contact hours; the 6-hour internship requires 200 hours. Permission of Director of Gerontology is required.

**Prerequisite:** SY 372 Minimum Grade of C

**GRN 535 Health Disparities Life Span 3 cr**

The main purpose of this seminar is to provide students with an understanding of how social factors contribute to racial/ethnic, socioeconomic and gender disparities in health and health care. We will examine how dyadic relationships such as interpersonal forms of discrimination, marriage, and social ties may contribute to health disparities. We will also examine the ways in which neighborhood and community context, as well as inequalities in socioeconomic status materially shape health and access to health care services. The course is cross-listed as GRN 435/535 and SY 435/535 and has been approved as an elective for the Undergraduate/Graduate Certificate in Gerontology and the interdisciplinary minor in Gerontology.

**Cross-Listed:** SY 535

**GRN 594 Dir St in Gerontology - 1-3 cr**

Under the guidance of a faculty member, the student will pursue directed research or readings of an approved topic in Gerontology. May be repeated as long as the topic changes, to maximum of six credit hours. Requires permission of the Director of Gerontology.

**GRN 596 Internship - Gerontology 3,6 cr**

This course is to provide a practicum experience in gerontology in a setting selected by the student and approved by the Program Director. The course emphasis is on the experiential learning process and outcomes. The graduate student will apply theoretical concepts to leadership roles, conducting research and influencing social and health care policies related to aging and intergenerational relationships. Interns will meet as a group three times during the semester for orientation, professional development, and evaluation activities. The 3-hour internship requires 100 contact hours; the 6-hour internship requires 200 hours. Permission of Director of Gerontology is required.

**Prerequisite:** SY 523 Minimum Grade of B

**GRN 597 GRN Teaching Apprenticeship 1-3 cr**

Directed Studies/Apprenticeship that focuses on teaching Gerontology. The student will work directly with a member of the Gerontology graduate faculty to learn pedagogy, innovation in teaching, and course content that will equip the student for future teaching assignments. Many PhD programs offer both Teaching Assistantships and Research Assistantships. Gerontology students need to show evidence that they have had some teaching-related experience to compete strongly for the TA position. This course is also appropriate for students who anticipate careers in teaching within the field of Gerontology (aging or intergenerational studies). Arrangements must be made prior to registration. Permission of the Program Director is required.

**Prerequisite:** SY 372 Minimum Grade of C

**Gender Studies (GS)****GS 101 Intro to Gender Studies 3 cr**

This course provides an interdisciplinary, multicultural overview of the concept of gender and gender roles in patriarchal society. This course examines the social construction of gender in our society and how that has shaped such areas as economics, politics, cultural/social values, and the impact upon women and men in historical and contemporary terms.

**GS 290 Sp Tp-#MeToo, Black Lives Matter & Beyond 3 cr**

Study of selected topics with an area in gender studies. May be repeated for credit when content varies.

**GS 301 Moving Beyond Diversity 3 cr**

This course explores ways of fighting injustice and dismantling systemic oppression for those who are being disproportionately impacted generationally. The course offers a framework for activism that focuses on creating a culture that stands up for what is right by fighting against normalizing cycles of perpetuated injustices. Students will examine diverse perspectives that center on the capacity to mobilize solidarity for those efforts, strategies, and practices that negate performative allyship with systems-changing action for today's realities.

**GS 302 Black Women and Activism 3 cr**

This fully online three-hour credit course is interdisciplinary in nature and addresses the need to recognize and validate contributions made by Black women that sought and continue to uplift Black America throughout the late 19th and early 21st centuries. This cadre of activism will be contextualized through both womanist and feminist theories. Central to these works will be an examination for how multiple oppressions have shaped Black women's lives throughout their ongoing efforts to redefine self and bring empowerment to their communities through racial solidarity and advancement as a people. These women's underlying resistance strategies and intellectual discourse for offsetting the negative effects of racism and other oppressive measures will be mirrored through the use of race and gender as a socio-political construct. A postmodern response depicted through the lens of contemporary Black feminists for how both mainstream feminism and Black America have responded to these heroic forms of activism will be analyzed. These activists' contributions will unfold through the following curricula foci: 1) early roots of nationalism, 2) the emergence of both Black Feminist and Womanist Thought, and 3) political movements involving Black women activists. Additional cornerstones for learning will include participating in a posting process that involve sharing research and writing projects which in return will facilitate lively discussions on today's black women activism from their own respective domain (e.g. music, spirituality, film, arts and letters, judicial system, the intellectual and socio-political arenas).

**GS 304 #Me Too, Black Lives Matter & 3 cr**

The velocity of national protests fighting for human rights across the constitutional continuum of justice, dignity, and safety have evolved into an epidemic throughout American infrastructures. This course will plunge into the #MeToo Era, Black Lives Matter, and Woke Movements. Significant visibility for how social constructs of gender, race, and sexuality intersect with these protesters' outcries will be examined. Further considerations will be given to exposing those accused of sexual violence on various fronts as well as existing allegations of wrongful deaths will be a part of the course curriculum. An added dimension to the curriculum will include also focusing on political strategies and an operative activism model that are being used to effectively penetrate these existing cultures of power and dominance.

**GS 390 Special Topics 3 cr**

Advanced study of selected topics with an area in gender studies. May be repeated for credit when content varies.

**GS 490 Special Topics 3 cr**

Advanced study of selected topics within an area in Gender Studies. May be repeated for credit when content varies for a total of six hours.

**GS 492 Gender Studies Seminar - 3 cr**

Advanced study of selected topics in Gender Studies. May be repeated for credit when content varies for a total of six hours.

**GS 494 Directed Studies 1-3 cr**

Directed research under the guidance of a Gender Studies faculty member. Requires permission of instructor. Student is restricted to taking a maximum of six hours of Directed Studies.

**Prerequisite:** GS 101 Minimum Grade of D

**GS 496 Internship - 3-6 cr**

Practical learning through occupational or community work with an approved agency dealing with gender-related issues. Readings and final report supervised by gender studies faculty. Special Permission required.

**Prerequisite:** GS 101 Minimum Grade of D

**Interdisciplinary Progs (IDS)****IDS 290 Special Topics 1-3 cr**

A study of selected topics of an interdisciplinary nature. May be repeated for credit when content varies. Requires permission of instructor.

**IDS 490 Special Topics 1-3 cr**

Advanced study of selected topics of an interdisciplinary nature. May be repeated for credit when content varies. Requires permission of instructor.

**IDS 590 Sp Top 1-9 cr**

Specialized topics not generally listed in the course offerings. Requires consent of Graduate Director.

**International Studies (IS)****IS 100 Global Issues 3 cr**

This course introduces students to the basic structural components of the global system, including the nation-state system and the world economy, and explores the major schools of thought in such areas as security, economic prosperity and development, international law, gender and environmental studies. The course helps students understand the complex and interlinked issues facing global society, and current problems, and view the U.S. within a broader global context.

**IS 193 Study Abroad 1-6 cr**

This course is an introductory International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**IS 200 People-Nations - 3 cr**

Variable content course focusing on particular nation or region of the world. Course offers a multi-disciplinary introduction to the people, society and politics. May be repeated for credit when content varies up to a total of 6 hours.

**IS 210 Global Engagement Orientation 1 cr**

This course introduces students to international global issues, allows students to identify opportunities for active engagement in these issues, and provides the framework for successful completion of the Global Engagement Certificate.

**IS 290 Special Topics - 3 cr**

Study of selected topics within a particular Area Studies Concentration. May be repeated for credit when content varies.

**Prerequisite:** IS 100 Minimum Grade of D

**IS 293 Study Abroad 1-6 cr**

This course is an introductory International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**IS 363 Crime and Politics in LatinAm 3 cr**

An examination of the violent crime epidemic affecting many parts of Latin America, with specific focus on the themes of democratic transition, political economy, and foreign relations with the United States. Same as PSC 363 and CJ 363.

**Prerequisite:** (PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or IS 100 Minimum Grade of C)

**Cross-Listed:** CJ 363, PSC 363

**IS 371 Studies in Russia 3-6 cr**

This course will cover specific topics in the history, politics, and culture of modern Russian civilization. May be repeated for credit when content varies.

**IS 372 Studies in E. Europe & C. Asia 3-6 cr**

This course will cover specific topics in the history, politics, and culture of modern Eastern European and Central Asian civilizations. May be repeated for credit when content varies.

**IS 390 Sp Top- 1-3 cr**

Advanced study of selected topics within a particular concentration. May be repeated for credit when content varies.

**IS 391 Study Abroad - 18 cr**

Study of selected topics within a particular Area Studies Concentration. May be repeated.

**IS 393 Study Abroad 1-6 cr**

This course is an advanced International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**IS 410 Global Engagement Capstone 1 cr**

Global Engagement Capstone is required for students completing the Global Engagement Certificate (GEC), and is a one hour course designed to help students reflect on the 16 hours of coursework and nine hours of globally engaged activities they have completed. Students will create a portfolio during the course, which will be presented to students and affiliated faculty at its conclusion.

**Prerequisite:** IS 210 Minimum Grade of P

**IS 473 International Law 3 cr**

This course covers major issues, cases and topics in public and private international law. Course coverage includes individuals and corporations, diplomatic relations, jurisdiction, human rights, economic relations, treaties, environmental law, and more.

**Prerequisite:** (IS 100 Minimum Grade of C or PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C)

**Cross-Listed:** CJ 473, PSC 473

**IS 489 Leadership and World Leaders 3 cr**

An overview of the definitions, characteristics, and typologies of leadership, with a focus on lives and legacies of global influential political leaders over the past century.

**Prerequisite:** PSC 130 Minimum Grade of D or PSC 250 Minimum Grade of D or IS 100 Minimum Grade of D

**Cross-Listed:** PSC 251, PSC 489

**IS 490 Special Topics 3 cr**

Advanced study of selected topics within a particular Area Studies Concentration. May be repeated for credit when content varies.

**Prerequisite:** IS 100 Minimum Grade of D

**IS 491 Seminar on Terrorism 3 cr**

Study of a terrorism from a sociopolitical perspective with an emphasis on causes, policy, tactics and operational characteristics and counter-terrorism operations. Cross-listed with CJ 491 and PSC 491.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or PSC 130 Minimum Grade of C or IS 100 Minimum Grade of C

**Cross-Listed:** CJ 491, PSC 491

**IS 492 Seminar - 3 cr**

Advanced study of selected topics in international studies from a comparative perspective. May be repeated for credit when content varies.

**Prerequisite:** IS 100 Minimum Grade of D

**IS 493 Study Abroad 1-6 cr**

This course is an advanced International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**IS 494 Directed Studies 1-3 cr**

Directed research in the field of international studies. May be repeated or credit up to a total of 9 hours. Prerequisite: permission of IS Director

**IS 495 Senior Seminar - W 3 cr**

The course seeks to provide an interdisciplinary and cross-regional overview of the fields and research opportunities within international studies.

**Prerequisite:** EH 102 Minimum Grade of C

**IS 496 Prof St Internship - 3-9 cr**

Practical learning experiences through occupational or professional work with an approved international organization, governmental agency, or international business Prerequisite: Permission of IS Director

**IS 499 Senior Honors Thesis 3 cr**

The course covers major theoretical perspectives in organizational psychology based on empirical research and case studies. Students will explore learning theory, group dynamics, and change in different types of learning organizations.

**Prerequisite:** (EH 102 Minimum Grade of D or EH 105 Minimum Grade of D)

**IS 591 Study Abroad 12 cr**

Graduate level international exchange programs for University of South Alabama students.

**Museum Studies (MUM)****MUM 201 Intro to Museum Studies 3 cr**

This course is designed to provide a general introduction to museum history, practice, and the role of museums in contemporary society. The class will explore a range of museum positions, curatorial practices, collection management, museum administration, and the academic and public roles museums play in society.

**Prerequisite:** EH 102 Minimum Grade of C

**MUM 290 Special Topics - 3 cr**

Different subjects or themes in museum studies as announced. This course may be repeated twice when content varies, for a maximum of nine credit hours. Prerequisite: To be announced.

**MUM 390 Special Topics - 3 cr**

Different subjects or themes in museum studies as announced. This course may be repeated twice when content varies. for a maximum of nine credit hours. Prerequisite: To be announced.

**Composite Science Minor****Degree Requirements**

**If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.**

**Minor in Composite Sciences**

A minimum of 24 hours is required for this minor.

To declare the Composite Science minor, talk to your academic advisor or visit the Arts and Sciences Academic Service Center in Alpha Hall South, room 345.

**Select three laboratory science sequences from the following:**

*Note: Students may receive credit for only one sequence in Biology (BLY 101/102 or BLY 121/122) and one sequence in Physics (PH 114/115 or PH 201/202).*

Code	Title	Hours
<b>All sequences require lab associated with lecture course.</b>		
BLY 101 & BLY 102	Life Science I and Life Science II	
BLY 121 & BLY 122	General Biology I and General Biology II	
CH 131 & CH 132	General Chemistry I and General Chemistry II	
GEO 101 & GEO 102	Environmental Geography and Earth and the Environment	
GY 111 & GY 112	Physical Geology and Earth History	
PH 114 & PH 115	Physics with Algebra-Trig I and Physics with Algebra -Trig II	
PH 201 & PH 202	Calculus-Based Physics I and Calculus-Based Physics II	

### Additional Information

Students cannot choose a laboratory sequence in their major.

Geology majors are required to take a Physics laboratory sequence.

## Related Science Minor Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

To declare the Composite Science minor, talk to your academic advisor or visit the Arts and Sciences Student Academic Services Center in Alpha Hall South, room 345.

### Minor in Related Sciences

The Related Sciences minor offers two tracks: a Medical/Molecular Sciences track, and an Ecosystems Sciences track. Students must choose one track: consult with your Academic Advisor about the best choice for your major and career. The Medical/ Molecular Science Track is designed for students seeking to enhance their preparation in organic and biochemistry, such as pre- med students. The Ecosystems/Evolution Track emphasizes the study of terrestrial ecosystems.

#### Medical/Molecular Science Track

Code	Title	Hours
A student must take 22 semester hours as follows:		
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
CH 201 & 201L	Organic Chemistry I and Organic Chemistry I Lab	4
CH 202 & 202L	Organic Chemistry II and Organic Chemistry II Lab	4

CH/BLYALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)440	Biochemistry I	3
CH/BLYALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)441	Biochemistry II	3
<b>Total Hours</b>		<b>22</b>

#### Ecosystems Sciences Track

Code	Title	Hours
GY 111 & 111L	Physical Geology and Physical Geology Lab	4
GY 112 & 112L	Earth History and Earth History Lab	4
Select four of the following:		12-15
GEO 332	Remote Sensing I	
GEO 410	Biogeography	
GEO/METALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)443	Climatology-W	
GIT 460	Intro to GIT	
GIT 461	Environmental GIS	
GY 310	Environmental Earth Science	
GY 306	Sedimentology & Stratigraphy-W	
GY 425	Hydrology	
MET 357	Meteorological Instrumentation	
ST 340	Design-Analysis of Experiments	
ST 345	Sampling-Survey Techniques	
<b>Total Hours</b>		<b>20-23</b>

# International Studies

## Department Information

International Studies website

<http://www.southalabama.edu/departments/internationalstudies> (<http://www.southalabama.edu/departments/internationalstudies/>)

(251) 460-6746

Title	Name
Director	Dr. Christine Rinne (Europe)
Faculty Affiliates	
	Dr. Claire Cage, History (Europe, Global Health)
	Dr. S. Raj Chaudhury, Physics (Asia)
	Dr. Charlene Dadzie, Economics (International Business)
	Dr. Laureen Fregeau, Education (Latin America, Global Health)
	Dr. Philip Habel, Political Science (Europe, Latin America)
	Mr. Tyler Hanks, Modern and Classical Languages and Literature (Europe)
	Dr. Ellen Harrington, English (European Studies)
	Dr. Zoya Khan, Modern and Classical Languages and Literature (Latin America)
	Ms. Katherine Koury, Communication (International Relations)
	Dr. Mara Kozelsky, History (Asia, Europe)
	Dr. Scott Liebertz, Political Science and Criminal Justice (Latin America)
	Dr. Christina Lindeman, Visual Arts (Europe)
	Dr. Eric Loomis, Philosophy (Asia)
	Dr. Susan McCready, Modern and Classical Languages and Literature (Europe)
	Dr. Kevin Meeker, Philosophy (International Relations)
	Dr. David Meola, History (Europe)
	Dr. David Messenger, History (Europe)
	Dr. Harrison Miller, History (Asia)
	Dr. Frances Mujica, Geography (Latin America, Global Health)
	Dr. Erin Nelson, Anthropology (International Relations)
	Dr. Gabriel de Oliveira, Geography (Latin America)

Dr. Matthew Pettway, Modern and Classical Languages and Literature (Latin America)

Dr. Nancy Rice, Biomedical Sciences (Global Health)

Ms. Terri Rice, Modern and Classical Languages and Literature (Latin America)

Dr. Harry Roddy, Modern and Classical Languages and Literature (Europe)

Dr. Linda Sanchez, Anthropology (Latin America)

Dr. Alex Sharland, Marketing (International Business)

Dr. Thomas Shaw, Political Science and Criminal Justice (Global Health)

Dr. Michele Strong, History (Europe)

Dr. James Swofford, Economics (International Business)

Dr. Eleanor ter Horst, Modern and Classical Languages and Literature (Europe)

Dr. Fabian Terbeck, Geography (International Relations, Europe)

Dr. Kelly Urban, History (Latin America, Global Health)

Dr. Rebecca Williams, History (Asia, Middle East)

Dr. Charles Wu, Political Science (International Relations, Asian Studies)

The International Studies major is a rigorous interdisciplinary program designed for students who wish to build a solid foundation for a career in international affairs. The program combines language fluency, international/ area studies, and international business, and, as such, fulfills the requirements for both the major and minor. The faculty directing the major is drawn mostly from the departments of modern and classical languages and literature, geography, history, philosophy, political science, sociology and anthropology.

All first-time freshmen must successfully complete CAS 100 as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry.

### Study Abroad

Students in International Studies are strongly encouraged to incorporate international experiences as part of their academic activities. Study, research, and internships as well as service learning and community service abroad are available options. For more information contact the IS Office and/or the USA Office of International Education.

### Degrees, Programs, or Concentrations

- International Studies (BA) - Asian Studies Concentration (p. 237)
- International Studies (BA) - European Studies Concentration (p. 239)
- International Studies (BA) - Global Health Concentration (p. 241)

- International Studies (BA) - International Relations Concentration (p. 242)
- International Studies (BA) - Latin American Studies Concentration (p. 244)
- International Studies (BA) - Middle East Studies Concentration (p. 246)
- International Studies (BA) - Modern and Classical Languages and Literature/International Studies Double Major (p. 248)
- International Studies Minor (p. 248)

## Courses

### African-American Studies (AFR)

#### AFR 101 Intro to African Amer Studies 3 cr

An interdisciplinary investigation of the origins, experiences, conditions, accomplishments and contributions of people of African ancestry in the United States.

### College of Arts/Sciences (CAS)

#### CAS 100 First Yr Exp - 2 cr

A course for first-year students majoring in the College of Arts & Sciences that assists with maximizing the student's potential to achieve academic success and to adjust responsibly to the individual and interpersonal challenges presented by college life. Taught in small groups, the course provides an introduction to the nature of higher education and a general orientation to the functions and resources of the University.

#### CAS 190 Special Topics - 1-3 cr

This variable content course deals with selected topics from any of the disciplines in the College of Arts and Sciences. Topics will focus on current and relevant issues and may contain a service-learning component. The course may be repeated for credit when the topic varies for a maximum of six credit hours.

### Gerontology (GRN)

#### GRN 272 Gender and Aging 3 cr

This course examines the dynamics of gender and aging within society from an interdisciplinary perspective. Students will be introduced to controversies in gender over the life course. These include, but are not limited to, definitions and cultural boundaries, gender in childhood, gender and relationships, gender in education and the workplace, gender and sexuality, as well as gender in late life.

#### GRN 290 Special Topics - 3 cr

This designation is used for interdisciplinary courses on aging on a variety of subjects. This course does not replace any course in a single discipline. May be repeated as long as the topic changes, to maximum of six semester hours.

#### GRN 435 Health Disparities Life Span 3 cr

This course examines differences in health status across the life span. The course will focus heavily on racial/ethnic and socioeconomic disparities in health applying a social determinants' of health framework. Issues that will be considered include how income, education, neighborhood conditions, access to health care, and other community factors shape opportunities to be healthy. The course is cross-listed as SY 435 and GRN 435 and has been approved as an elective for the Undergraduate Certificate in Gerontology and the interdisciplinary minor in Gerontology.

**Prerequisite:** SY 109 Minimum Grade of D

**Cross-Listed:** SY 435

#### GRN 490 Special Topics 3 cr

This course is designated for upper division students and graduate students, particularly those pursuing studies for the Certificate of Gerontology. The course content focuses on interdisciplinary treatments on various topics on aging. This course does not replace any course in a single discipline. (Examples of special topics: Trends and Issues in Gerontology; Leadership and Advocacy in Gerontology; Housing and Lifestyle Changes over the Life Course). May be repeated as long as the topic changes, to maximum of six semester hours.

**Prerequisite:** SY 372 Minimum Grade of D

#### GRN 494 Directed Studies 1-3 cr

Under the guidance of a faculty member, the student will pursue directed research on readings of an approved topic in Gerontology. May be repeated as long as the topic changes, to a maximum of six semester hours. Requires permission of Director of Gerontology.

**Prerequisite:** SY 372 Minimum Grade of D

#### GRN 496 Internship - Gerontology 3,6 cr

This course is to provide a practicum experience in gerontology in a setting selected by the student and approved by the Program Director. The course emphasis is on the experiential learning process and outcomes. The undergraduate student will apply theoretical concepts in specific areas of interest related to aging and intergenerational relations. Interns will meet as a group three times during the semester for orientation, professional development, and evaluation activities. The 3-hour internship requires 100 contact hours; the 6-hour internship requires 200 hours. Permission of Director of Gerontology is required.

**Prerequisite:** SY 372 Minimum Grade of C

#### GRN 535 Health Disparities Life Span 3 cr

The main purpose of this seminar is to provide students with an understanding of how social factors contribute to racial/ethnic, socioeconomic and gender disparities in health and health care. We will examine how dyadic relationships such as interpersonal forms of discrimination, marriage, and social ties may contribute to health disparities. We will also examine the ways in which neighborhood and community context, as well as inequalities in socioeconomic status materially shape health and access to health care services. The course is cross-listed as GRN 435/535 and SY 435/535 and has been approved as an elective for the Undergraduate/Graduate Certificate in Gerontology and the interdisciplinary minor in Gerontology.

**Cross-Listed:** SY 535

#### GRN 594 Dir St in Gerontology - 1-3 cr

Under the guidance of a faculty member, the student will pursue directed research or readings of an approved topic in Gerontology. May be repeated as long as the topic changes, to maximum of six credit hours. Requires permission of the Director of Gerontology.

#### GRN 596 Internship - Gerontology 3,6 cr

This course is to provide a practicum experience in gerontology in a setting selected by the student and approved by the Program Director. The course emphasis is on the experiential learning process and outcomes. The graduate student will apply theoretical concepts to leadership roles, conducting research and influencing social and health care policies related to aging and intergenerational relationships. Interns will meet as a group three times during the semester for orientation, professional development, and evaluation activities. The 3-hour internship requires 100 contact hours; the 6-hour internship requires 200 hours. Permission of Director of Gerontology is required.

**Prerequisite:** SY 523 Minimum Grade of B

**GRN 597 GRN Teaching Apprenticeship 1-3 cr**

Directed Studies/Apprenticeship that focuses on teaching Gerontology. The student will work directly with a member of the Gerontology graduate faculty to learn pedagogy, innovation in teaching, and course content that will equip the student for future teaching assignments. Many PhD programs offer both Teaching Assistantships and Research Assistantships. Gerontology students need to show evidence that they have had some teaching-related experience to compete strongly for the TA position. This course is also appropriate for students who anticipate careers in teaching within the field of Gerontology (aging or intergenerational studies). Arrangements must be made prior to registration. Permission of the Program Director is required.

**Prerequisite:** SY 372 Minimum Grade of C

**Gender Studies (GS)****GS 101 Intro to Gender Studies 3 cr**

This course provides an interdisciplinary, multicultural overview of the concept of gender and gender roles in patriarchal society. This course examines the social construction of gender in our society and how that has shaped such areas as economics, politics, cultural/social values, and the impact upon women and men in historical and contemporary terms.

**GS 290 Sp Tp-#MeToo, Black Lives Matter & Beyond 3 cr**

Study of selected topics with an area in gender studies. May be repeated for credit when content varies.

**GS 301 Moving Beyond Diversity 3 cr**

This course explores ways of fighting injustice and dismantling systemic oppression for those who are being disproportionately impacted generationally. The course offers a framework for activism that focuses on creating a culture that stands up for what is right by fighting against normalizing cycles of perpetuated injustices. Students will examine diverse perspectives that center on the capacity to mobilize solidarity for those efforts, strategies, and practices that negate performative allyship with systems-changing action for today's realities.

**GS 302 Black Women and Activism 3 cr**

This fully online three-hour credit course is interdisciplinary in nature and addresses the need to recognize and validate contributions made by Black women that sought and continue to uplift Black America throughout the late 19th and early 21st centuries. This cadre of activism will be contextualized through both womanist and feminist theories. Central to these works will be an examination for how multiple oppressions have shaped Black women's lives throughout their ongoing efforts to redefine self and bring empowerment to their communities through racial solidarity and advancement as a people. These women's underlying resistance strategies and intellectual discourse for offsetting the negative effects of racism and other oppressive measures will be mirrored through the use of race and gender as a socio-political construct. A postmodern response depicted through the lens of contemporary Black feminists for how both mainstream feminism and Black America have responded to these heroic forms of activism will be analyzed. These activists' contributions will unfold through the following curricula foci: 1) early roots of nationalism, 2) the emergence of both Black Feminist and Womanist Thought, and 3) political movements involving Black women activists. Additional cornerstones for learning will include participating in a posting process that involve sharing research and writing projects which in return will facilitate lively discussions on today's black women activism from their own respective domain (e.g. music, spirituality, film, arts and letters, judicial system, the intellectual and socio-political arenas).

**GS 304 #Me Too, Black Lives Matter & 3 cr**

The velocity of national protests fighting for human rights across the constitutional continuum of justice, dignity, and safety have evolved into an epidemic throughout American infrastructures. This course will plunge into the #MeToo Era, Black Lives Matter, and Woke Movements. Significant visibility for how social constructs of gender, race, and sexuality intersect with these protesters' outcries will be examined. Further considerations will be given to exposing those accused of sexual violence on various fronts as well as existing allegations of wrongful deaths will be a part of the course curriculum. An added dimension to the curriculum will include also focusing on political strategies and an operative activism model that are being used to effectively penetrate these existing cultures of power and dominance.

**GS 390 Special Topics 3 cr**

Advanced study of selected topics with an area in gender studies. May be repeated for credit when content varies.

**GS 490 Special Topics 3 cr**

Advanced study of selected topics within an area in Gender Studies. May be repeated for credit when content varies for a total of six hours.

**GS 492 Gender Studies Seminar - 3 cr**

Advanced study of selected topics in Gender Studies. May be repeated for credit when content varies for a total of six hours.

**GS 494 Directed Studies 1-3 cr**

Directed research under the guidance of a Gender Studies faculty member. Requires permission of instructor. Student is restricted to taking a maximum of six hours of Directed Studies.

**Prerequisite:** GS 101 Minimum Grade of D

**GS 496 Internship - 3-6 cr**

Practical learning through occupational or community work with an approved agency dealing with gender-related issues. Readings and final report supervised by gender studies faculty. Special Permission required.

**Prerequisite:** GS 101 Minimum Grade of D

**Interdisciplinary Progs (IDS)****IDS 290 Special Topics 1-3 cr**

A study of selected topics of an interdisciplinary nature. May be repeated for credit when content varies. Requires permission of instructor.

**IDS 490 Special Topics 1-3 cr**

Advanced study of selected topics of an interdisciplinary nature. May be repeated for credit when content varies. Requires permission of instructor.

**IDS 590 Sp Top 1-9 cr**

Specialized topics not generally listed in the course offerings. Requires consent of Graduate Director.

**International Studies (IS)****IS 100 Global Issues 3 cr**

This course introduces students to the basic structural components of the global system, including the nation-state system and the world economy, and explores the major schools of thought in such areas as security, economic prosperity and development, international law, gender and environmental studies. The course helps students understand the complex and interlinked issues facing global society, and current problems, and view the U.S. within a broader global context.

**IS 193 Study Abroad 1-6 cr**

This course is an introductory International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**IS 200 People-Nations - 3 cr**

Variable content course focusing on particular nation or region of the world. Course offers a multi-disciplinary introduction to the people, society and politics. May be repeated for credit when content varies up to a total of 6 hours.

**IS 210 Global Engagement Orientation 1 cr**

This course introduces students to international global issues, allows students to identify opportunities for active engagement in these issues, and provides the framework for successful completion of the Global Engagement Certificate.

**IS 290 Special Topics - 3 cr**

Study of selected topics within a particular Area Studies Concentration. May be repeated for credit when content varies.

**Prerequisite:** IS 100 Minimum Grade of D

**IS 293 Study Abroad 1-6 cr**

This course is an introductory International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**IS 363 Crime and Politics in LatinAm 3 cr**

An examination of the violent crime epidemic affecting many parts of Latin America, with specific focus on the themes of democratic transition, political economy, and foreign relations with the United States. Same as PSC 363 and CJ 363.

**Prerequisite:** (PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or IS 100 Minimum Grade of C)

**Cross-Listed:** CJ 363, PSC 363

**IS 371 Studies in Russia 3-6 cr**

This course will cover specific topics in the history, politics, and culture of modern Russian civilization. May be repeated for credit when content varies.

**IS 372 Studies in E. Europe & C. Asia 3-6 cr**

This course will cover specific topics in the history, politics, and culture of modern Eastern European and Central Asian civilizations. May be repeated for credit when content varies.

**IS 390 Sp Top- 1-3 cr**

Advanced study of selected topics within a particular concentration. May be repeated for credit when content varies.

**IS 391 Study Abroad - 18 cr**

Study of selected topics within a particular Area Studies Concentration. May be repeated.

**IS 393 Study Abroad 1-6 cr**

This course is an advanced International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**IS 410 Global Engagement Capstone 1 cr**

Global Engagement Capstone is required for students completing the Global Engagement Certificate (GEC), and is a one hour course designed to help students reflect on the 16 hours of coursework and nine hours of globally engaged activities they have completed. Students will create a portfolio during the course, which will be presented to students and affiliated faculty at its conclusion.

**Prerequisite:** IS 210 Minimum Grade of P

**IS 473 International Law 3 cr**

This course covers major issues, cases and topics in public and private international law. Course coverage includes individuals and corporations, diplomatic relations, jurisdiction, human rights, economic relations, treaties, environmental law, and more.

**Prerequisite:** (IS 100 Minimum Grade of C or PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C)

**Cross-Listed:** CJ 473, PSC 473

**IS 489 Leadership and World Leaders 3 cr**

An overview of the definitions, characteristics, and typologies of leadership, with a focus on lives and legacies of global influential political leaders over the past century.

**Prerequisite:** PSC 130 Minimum Grade of D or PSC 250 Minimum Grade of D or IS 100 Minimum Grade of D

**Cross-Listed:** PSC 251, PSC 489

**IS 490 Special Topics 3 cr**

Advanced study of selected topics within a particular Area Studies Concentration. May be repeated for credit when content varies.

**Prerequisite:** IS 100 Minimum Grade of D

**IS 491 Seminar on Terrorism 3 cr**

Study of a terrorism from a sociopolitical perspective with an emphasis on causes, policy, tactics and operational characteristics and counter-terrorism operations. Cross-listed with CJ 491 and PSC 491.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or PSC 130 Minimum Grade of C or IS 100 Minimum Grade of C

**Cross-Listed:** CJ 491, PSC 491

**IS 492 Seminar - 3 cr**

Advanced study of selected topics in international studies from a comparative perspective. May be repeated for credit when content varies.

**Prerequisite:** IS 100 Minimum Grade of D

**IS 493 Study Abroad 1-6 cr**

This course is an advanced International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**IS 494 Directed Studies 1-3 cr**

Directed research in the field of international studies. May be repeated or credit up to a total of 9 hours. Prerequisite: permission of IS Director

**IS 495 Senior Seminar - W 3 cr**

The course seeks to provide an interdisciplinary and cross-regional overview of the fields and research opportunities within international studies.

**Prerequisite:** EH 102 Minimum Grade of C

**IS 496 Prof St Internship - 3-9 cr**

Practical learning experiences through occupational or professional work with an approved international organization, governmental agency, or international business Prerequisite: Permission of IS Director

**IS 499 Senior Honors Thesis 3 cr**

The course covers major theoretical perspectives in organizational psychology based on empirical research and case studies. Students will explore learning theory, group dynamics, and change in different types of learning organizations.

**Prerequisite:** (EH 102 Minimum Grade of D or EH 105 Minimum Grade of D)

**IS 591 Study Abroad 12 cr**

Graduate level international exchange programs for University of South Alabama students.

## Museum Studies (MUM)

### MUM 201 Intro to Museum Studies 3 cr

This course is designed to provide a general introduction to museum history, practice, and the role of museums in contemporary society. The class will explore a range of museum positions, curatorial practices, collection management, museum administration, and the academic and public roles museums play in society.

**Prerequisite:** EH 102 Minimum Grade of C

### MUM 290 Special Topics - 3 cr

Different subjects or themes in museum studies as announced. This course may be repeated twice when content varies, for a maximum of nine credit hours. Prerequisite: To be announced.

### MUM 390 Special Topics - 3 cr

Different subjects or themes in museum studies as announced. This course may be repeated twice when content varies. for a maximum of nine credit hours. Prerequisite: To be announced.

## International Studies (BA) - Asian Studies Concentration

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		<b>42</b>
<i>International Studies Core</i>		<i>18</i>
A. Complete the following:		
IS 100	Global Issues	3
PSC 250	Comparative Politics	3
PSC 270	International Relations	3
GEO 312	World Economic Geog	3
PHL/RELALL	World Religions	3
REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)352		
IS 495	Senior Seminar - W	3
<i>Asian Studies Concentration</i>		<i>24</i>
A. Asian Language at 200 level - Select six hours from the following: 6		
LG 221 & LG 222	Intermediate Chinese I and Intermediate Chinese II	
LGS 201 & LGS 202	Intermediate Japanese I and Intermediate Japanese II	
LGS 206 & LGS 207	Intermediate Arabic I and Intermediate Arabic II	
LGS 271 & LGS 272	Intermediate Korean I and Intermediate Korean II	
B. Complete the following:		
HY 104	HY of Asian Civilization II	3

C. 300-400 level courses - Select one of the following:		3
HY 367	Modern China	
HY 368	Japan	
HY 461	Studies in Asian History -	
D. Complete the following:		
PHL 354	Philosophies of India	3
or PHL 355	Chinese Philosophy	
E. Complete the following:		
PSC 368	Politics of South Asia	3
F. Select six hours of electives from the following: 6		
ARH 203	Survey of Non-Western Art	
HY 367	Modern China	
HY 368	Japan	
HY 461	Studies in Asian History - (not taken above)	
PHL 354	Philosophies of India	
PHL 355	Chinese Philosophy (not taken above)	
PSC 365	Politics of the Middle East	
IS 489	Leadership and World Leaders	
IS 491	Seminar on Terrorism	
IS 492	Seminar -	
IS 496	Prof St Internship -	
Any approved Special Topics course or Directed Studies focusing on contemporary Asia or Asian country		

### Minor Requirements

A minor is required for this degree program 18-24

**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

### Additional Information

Students majoring in International Studies should complete 18 credit hours of core courses, one of six concentrations (24 credit hours), and a pre-professional program or traditional minor in a complementary subject.

### Pre-Professional Program

(21 Hours)

Students should complete either one of the three pre-professional programs outlined below (international business, a language specialization, or a personalized pre-professional program) or have a traditional minor. Students with a double major are not required to have a pre-professional program or a minor.

### International Business

(21 Hrs)

The International Business option provides students with a basic foundation in business and best equips the student to enter the field of international business or related areas upon graduation.

Code	Title	Hours
ECO 330	Current Global Economic Issues	3
or ECO 363	International Economics	
MKT 320	Principles of Marketing	3
MKT 374	Consumer Behavior	3
MKT 380	Integrated Mkt Communications	3

Select nine hours of electives from the following:	9
FIN 332	Multinational Finance
MGT 334	International Mgt
MGT 465	New Venture Creation
MKT 336	International Marketing
MKT 384	Market Research
MKT 310	Intro International Business
MKT 477	Export-Import Management
MKT 492	Applications in International Business
IS 496	Prof St Internship -
<b>Total Hours</b>	<b>21</b>

### Language Specialization (21 Hrs)

The Language Concentration option allows students to acquire a professional level of fluency in a foreign language as a complement to their international studies training. The requirements are 21 hours of study in a selected foreign language. Students wishing to concentrate in language should consider the FL/IS double major described below. Note: This option may not be available for all languages.

### Personalized Pre-professional Program (21 Hrs)

The Personalized Pre-professional Program is designed primarily for students who wish to pursue graduate study and need a special program tailored to the needs of their expected graduate area. A pre-professional program consisting of a minimum of 21 semester hours including at least one upper-level seminar, directed studies, or internship. Proposals for a personalized program, drawn up by the student in consultation with his or her advisor, must be submitted for approval to the Program Director and the Dean of Arts and Sciences before the first semester of the student's junior year.

## Graduation Plan (122 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
EH 101	English Composition I	3
Select one of the following:		3
LGS 101	Introductory Japanese I	
LGS 106	Introductory Arabic I	
LGS 171	Introductory Korean I	
LG 121	Introductory Chinese I	
IS 100	Global Issues	3
Natural Science with Lab		4
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EH 102	English Composition II (or Honors)	3
Select one of the following:		3
LGS 102	Introductory Japanese II	
LGS 107	Introductory Arabic II	
LGS 172	Introductory Korean II	
LG 122	Introductory Chinese II	
HY 102	HY of Western Civilization II	3
GEO 114	People, Places, Environment	3

Natural Science with Lab		4
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
EH 235 or EH 236	World Lit before 1650 or World Lit after 1650	3
HY 104	HY of Asian Civilization II	3
HY 101	HY of Western Civilization I	3
Select one of the following:		3
LGS 201	Intermediate Japanese I	
LGS 206	Intermediate Arabic I	
LGS 271	Intermediate Korean I	
LG 221	Intermediate Chinese I	
PSC 250	Comparative Politics	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
MA 110	Finite Mathematics (or higher)	3
PSC 270	International Relations	3
AN 100	Intro to Cultural Anthropology	3
Select one of the following:		3
LGS 202	Intermediate Japanese II	
LGS 207	Intermediate Arabic II	
LGS 272	Intermediate Korean II	
LG 222	Intermediate Chinese II	
CA 110	Public Speaking	3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
Select one of the following:		3
HY 367	Modern China	
HY 368	Japan	
HY 461	Studies in Asian History -	
PSC 368	Politics of South Asia	3
GEO 312	World Economic Geog	3
Natural Science with Lab		4
Elective		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Fine Arts elective		3
International Studies elective, 300 or 400 level		3
PHL/RELALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)352	World Religions	3
PHL 354 or PHL 355	Philosophies of India or Chinese Philosophy	3
Minor course		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
IS 495	Senior Seminar - W	3
International Studies elective, 300 or 400 level		3
Minor course		3
Minor course		3
Minor course	300 or 400 level	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Minor course	300 level or higher	3
International Studies elective, 300 or 400 level		3

Elective		3
Minor course	300 level or higher	3
Minor course	300 level or higher	3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>122</b>

## International Studies (BA) - European Studies Concentration

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		<b>42</b>
<i>International Studies Major Core</i>		<i>18</i>
A. Complete the following:		
IS 100	Global Issues	3
PSC 250	Comparative Politics	3
PSC 270	International Relations	3
GEO 312	World Economic Geog	3
PHL/RELALL	World Religions	3
REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)352		
IS 495	Senior Seminar - W	3
<i>European Studies Concentration</i>		<i>24</i>
A. European language at the 200 level - Select six hours from the following:		
LG 211 & LG 212	Intermediate French I and Intermediate French II	
LG 231 & LG 232	Intermediate Spanish I and Intermediate Spanish II	
LG 241 & LG 242	Interm Classical Greek I and Interm Classical Greek II	
LG 251 & LG 252	Intermediate German I and Intermediate German II	
LG 271 & LG 272	Intermediate Russian I and Intermediate Russian II	
B. Complete the following:		
GEO 314	Geography of Europe	3
C. Complete the following:		
HY 357	Europe Since 1945	3
D. Complete the following:		
PSC 360	Politics of Europe	3
E. Select nine hours of electives from the following:		
Any 300-400 level course in European language or literature (if not in language pre-professional or double major program)		

ARH 312	Medieval Art and Architecture
ARH 322	Northern Renaissance Art
ARH 324	Italian Early Renaissance
ARH 326	16th Century Italian Art
ARH 330	Baroque Art of Southern Europe
ARH 332	Baroque Art and Architecture
ARH 335	18th Century Art and Arch
EH 216	Brit Lit after 1785
HY 333	Great Britain Since 1815
HY 335	History of Modern France
HY 336	Central European History
HY 337	History of Eastern Europe
HY 338	History of Russia
HY 346	The Second World War
HY 347	The Holocaust
HY 348	Hitler and Nazi Germany
HY 355	French Revolution
HY 356	European Civ 1815-1918-W
HY 357	Europe Since 1945
HY 454	The British Empire
HY 457	Studies in European History -
PSC 313	Modern Political Thought-W
IS 489	Leadership and World Leaders
IS 491	Seminar on Terrorism
IS 492	Seminar -
IS 496	Prof St Internship -
PHL 245	Renaissance-Enlightnmt - W
Any approved Special Topics course or Directed Studies focusing on contemporary Europe or European country	

#### Minor Requirements

A minor is required for this degree program 18-24

**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

### Additional Information

Students majoring in International Studies should complete 18 credit hours of core courses, one of six concentrations (24 credit hours), and a pre-professional program or traditional minor in a complementary subject.

#### Pre-Professional Program

Students should complete either one of the three pre-professional programs outlined below (international business, a language specialization, or a personalized pre-professional program) or have a traditional minor. Students with a double major are not required to have a pre-professional program or a minor.

#### International Business

(21 Hrs)

The International Business option provides students with a basic foundation in business and best equips the student to enter the field of international business or related areas upon graduation.

Code	Title	Hours
ECO 330 or ECO 363	Current Global Economic Issues International Economics	3
MKT 320	Principles of Marketing	3
MKT 374	Consumer Behavior	3
MKT 380	Integrated Mkt Communications	3
Select nine hours of electives from the following:		9
FIN 332	Multinational Finance	
MGT 334	International Mgt	
MGT 465	New Venture Creation	
MKT 336	International Marketing	
MKT 384	Market Research	
MKT 310	Intro International Business	
MKT 477	Export-Import Management	
MKT 492	Applications in International Business	
IS 496	Prof St Internship -	
<b>Total Hours</b>		<b>21</b>

## Language Specialization

(21 Hrs)

The Language Concentration option allows students to acquire a professional level of fluency in a foreign language as a complement to their international studies training. The requirements are 21 hours of study in a selected foreign language. Students wishing to concentrate in language should consider the FL/IS double major described below. Note: This option may not be available for all languages.

## Personalized Pre-Professional Program

(21 Hrs)

The Personalized Pre-professional Program is designed primarily for students who wish to pursue graduate study and need a special program tailored to the needs of their expected graduate area. A pre-professional program consisting of a minimum of 21 semester hours including at least one upper-level seminar, directed studies, or internship. Proposals for a personalized program, drawn up by the student in consultation with his or her advisor, must be submitted for approval to the Program Director and the Dean of Arts and Sciences before the first semester of the student's junior year.

## Graduation Plan

(122 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
EH 101	English Composition I	3
Select one of the following:		3
LG 111	Introductory French I	
LG 131	Introductory Spanish I	
LG 151	Introductory German I	
LG 171	Introductory Russian I	
IS 100	Global Issues	3
Natural Science with Lab		4
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EH 102	English Composition II (or Honors)	3

Select one of the following:		3
LG 112	Introductory French II	
LG 132	Introductory Spanish II	
LG 152	Introductory German II	
LG 172	Introductory Russian II	
MA 110	Finite Mathematics (or higher)	3
AN 100	Intro to Cultural Anthropology	3
Fine Arts elective		3
<b>Hours</b>		<b>15</b>

### Second Year

#### Fall

PSC 250	Comparative Politics	3
HY 101	HY of Western Civilization I	3
GEO 114	People, Places, Environment	3
CA 110	Public Speaking	3
Select one of the following:		3
LG 211	Intermediate French I	
LG 231	Intermediate Spanish I	
LG 251	Intermediate German I	
LG 271	Intermediate Russian I	
<b>Hours</b>		<b>15</b>

#### Spring

HY 102	HY of Western Civilization II	3
PSC 270	International Relations	3
Select one of the following:		3
LG 212	Intermediate French II	
LG 232	Intermediate Spanish II	
LG 252	Intermediate German II	
LG 272	Intermediate Russian II	
EH 235 or EH 236	World Lit before 1650 or World Lit after 1650	3
Natural Science with Lab		4
<b>Hours</b>		<b>16</b>

### Third Year

#### Fall

PHL/RELALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)352	World Religions	3
GEO 312	World Economic Geog	3
PSC 360	Politics of Europe	3
Natural Science with Lab		4
International Studies elective, 300 or 400 level		3
<b>Hours</b>		<b>16</b>

#### Spring

HY 357	Europe Since 1945	3
International Studies elective, 300 or 400 level		3
Elective		3
Minor course		3
Minor course		3
<b>Hours</b>		<b>15</b>

### Fourth Year

#### Fall

IS 495	Senior Seminar - W	3
GEO 314	Geography of Europe	3
Minor course		3
Minor course		3
Minor course	300 or 400 level	3
<b>Hours</b>		<b>15</b>

<b>Spring</b>		
International Studies elective, 300 or 400 level		3
Elective		3
Elective		3
Minor course	300 level or higher	3
Minor course	300 level or higher	3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>122</b>

# International Studies (BA) - Global Health Concentration

## Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		
<i>International Studies Major Core</i>		<i>18</i>
A. Complete the following:		
IS 100	Global Issues	3
PSC 250	Comparative Politics	3
PSC 270	International Relations	3
GEO 312	World Economic Geog	3
PHL/RELALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)352	World Religions	3
IS 495	Senior Seminar - W	3
<i>Global Health Concentration</i>		<i>24</i>
A. Foreign language at the 200 level - Select six hours from the following:		
LG 211 & LG 212	Intermediate French I and Intermediate French II	
LG 221 & LG 222	Intermediate Chinese I and Intermediate Chinese II	
LG 231 & LG 232	Intermediate Spanish I and Intermediate Spanish II	
LG 251 & LG 252	Intermediate German I and Intermediate German II	
LG 271 & LG 272	Intermediate Russian I and Intermediate Russian II	
LGS 206 & LGS 207	Intermediate Arabic I and Intermediate Arabic II	
LGS 271 & LGS 272	Intermediate Korean I and Intermediate Korean II	
LGS 201 & LGS 202	Intermediate Japanese I and Intermediate Japanese II	
B. Complete the following:		

GEO 417	Health and Place	3
C. Complete the following:		
PHL 333	Biomedical Ethics - W	3
D. Complete the following:		
EDF 310	International Develop & Educ-W	3
E. Select nine hours of electives from the following:		
EDF 300	Gender & International Devel-W	
EDF 320	Compar & Intl. Gender & Fam	
EDF 325	Global Gender Perpec in Ed	
GEO 370	International Tourism	
IS 492	Seminar -	
IS 496	Prof St Internship -	
LG 337	Spanish for Medical Prof	
PHL 327	Philosophy of Science	
PSC 481	Public Policy and Aging	
PSY 340	Abnormal Psychology	
PSY 480	Health Psychology - W	
SY 459	Medicine and Society	
Any approved Special Topics course or Directed Studies focusing on global health		
<b>Minor Requirements</b>		
A minor is required for this degree program		18-24
<b>A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE</b>		<b>120</b>

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

### Additional Information

Students majoring in International Studies should complete 18 credit hours of core courses, one of six concentrations (24 credit hours), and a pre-professional program or traditional minor in a complementary subject.

### Pre-Professional Program

Students should complete either one of the three pre-professional programs outlined below (international business, a language specialization, or a personalized pre-professional program) or have a traditional minor. Students with a double major are not required to have a pre-professional program or a minor.

### International Business

(21 Hrs)

The International Business option provides students with a basic foundation in business and best equips the student to enter the field of international business or related areas upon graduation.

Code	Title	Hours
ECO 330	Current Global Economic Issues	3
or ECO 363	International Economics	
MKT 320	Principles of Marketing	3
MKT 374	Consumer Behavior	3
MKT 380	Integrated Mkt Communications	3
Select nine hours of elective from the following:		
FIN 332	Multinational Finance	
MGT 334	International Mgt	
MGT 465	New Venture Creation	

MKT 336	International Marketing	
MKT 384	Market Research	
MKT 310	Intro International Business	
MKT 477	Export-Import Management	
MKT 492	Applications in International Business	
IS 496	Prof St Internship -	
<b>Total Hours</b>		<b>21</b>

**Language Specialization**  
(21 Hrs)

The Language Concentration option allows students to acquire a professional level of fluency in a foreign language as a complement to their international studies training. The requirements are 21 hours of study in a selected foreign language. Students wishing to concentrate in language should consider the FL/IS double major described below. Note: This option may not be available for all languages.

**Personalized Pre-Professional Program**  
(21 Hrs)

The Personalized Pre-professional Program is designed primarily for students who wish to pursue graduate study and need a special program tailored to the needs of their expected graduate area. A pre-professional program consisting of a minimum of 21 semester hours including at least one upper-level seminar, directed studies, or internship. Proposals for a personalized program, drawn up by the student in consultation with his or her advisor, must be submitted for approval to the Program Director and the Dean of Arts and Sciences before the first semester of the student's junior year.

**Graduation Plan**

(122 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
EH 101	English Composition I	3
LG/LGS	First semester of foreign language	3
IS 100	Global Issues	3
Natural Science with Lab		4
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EH 102	English Composition II (or Honors)	3
LG/LGS	Second semester of foreign language	3
MA 110	Finite Mathematics (or higher)	3
AN 100	Intro to Cultural Anthropology	3
Fine Arts elective		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
PSC 250	Comparative Politics	3
HY 101	HY of Western Civilization I	3
GEO 114	People, Places, Environment	3
CA 110	Public Speaking	3
LG/LGS	Third semester of foreign language	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
HY 102	HY of Western Civilization II	3
PSC 270	International Relations	3

LG/LGS	Fourth semester of foreign language	3
EH 235 or EH 236	World Lit before 1650 or World Lit after 1650	3
Natural Science with Lab		4
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
EDF 310	International Develop & Educ-W	3
GEO 312	World Economic Geog	3
Minor course		3
Natural Science with Lab		4
International Studies elective, 300 or 400 level		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
PHL/RELALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)352	World Religions	3
GEO 417	Health and Place	3
PHL 333	Biomedical Ethics - W	3
Minor course		3
Minor course		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
IS 495	Senior Seminar - W	3
International Studies elective, 300-400 level		3
Elective		3
Minor course		3
Minor course		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
International Studies elective, 300 or 400 level		3
Elective		3
Elective		3
Minor course	300 level or higher	3
Minor course	300 level or higher	3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>122</b>

**International Studies (BA) -  
International Relations Concentration  
Degree Requirements**

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		<b>42</b>
<i>International Studies Core</i>		<i>18</i>
A. Complete the following:		
IS 100	Global Issues	3
PSC 250	Comparative Politics	3
PSC 270	International Relations	3
GEO 312	World Economic Geog	3

PHL/RELALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)352	World Religions	3
IS 495	Senior Seminar - W	3
<i>International Relations Concentration</i>		24
A. Foreign language at the 200 level - Select six hours from the following:		6
LG 211 & LG 212	Intermediate French I and Intermediate French II	
LG 221 & LG 222	Intermediate Chinese I and Intermediate Chinese II	
LG 231 & LG 232	Intermediate Spanish I and Intermediate Spanish II	
LG 251 & LG 252	Intermediate German I and Intermediate German II	
LG 271 & LG 272	Intermediate Russian I and Intermediate Russian II	
LGS 206 & LGS 207	Intermediate Arabic I and Intermediate Arabic II	
LGS 271 & LGS 272	Intermediate Korean I and Intermediate Korean II	
LGS 201 & LGS 202	Intermediate Japanese I and Intermediate Japanese II	
B. Complete the following:		
PSC 372	American Foreign Policy	3
C. Complete the following:		
AN 358		3
D. Complete the following:		
CA 330	Intercultural Communication-W	3
E. Select nine hours of electives from the following:		9
ECO 330	Current Global Economic Issues	
ECO 363	International Economics (if not taken as part of a pre-professional program)	
ECO 371	Economic Development	
HY 303	Warfare Society Modern World	
HY 305	History of Military Thought-W	
HY 405	War and Soc 20th Century	
PSC 313	Modern Political Thought-W	
PSC 365	Politics of the Middle East	
PSC 470	Adv Study Intl Relations	
IS 491	Seminar on Terrorism	
IS 492	Seminar -	
IS 496	Prof St Internship -	
Any approved Special Topics course or Directed Studies focusing on International Relations		

**Minor Requirements**

A minor is required for this degree program 18-24

**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

<sup>1</sup> AN 100 required as a prerequisite.

**Additional Information**

Students majoring in International Studies should complete 18 credit hours of core courses, one of six concentrations (24 credit hours), and a pre-professional program or traditional minor in a complementary subject.

**Pre-Professional Program**

Students should complete either one of the three pre-professional programs outlined below (international business, a language specialization, or a personalized pre-professional program) or have a traditional minor. Students with a double major are not required to have a pre-professional program or a minor.

**International Business**

(21 Hrs)

The International Business option provides students with a basic foundation in business and best equips the student to enter the field of international business or related areas upon graduation.

Code	Title	Hours
ECO 330	Current Global Economic Issues	3
or ECO 363	International Economics	
MKT 320	Principles of Marketing	3
MKT 374	Consumer Behavior	3
MKT 380	Integrated Mkt Communications	3
Select nine hours of elective from the following:		9
FIN 332	Multinational Finance	
MGT 334	International Mgt	
MGT 465	New Venture Creation	
MKT 336	International Marketing	
MKT 384	Market Research	
MKT 310	Intro International Business	
MKT 477	Export-Import Management	
MKT 492	Applications in International Business	
IS 496	Prof St Internship -	

**Total Hours 21**

**Language Specialization**

(21 Hrs)

The Language Concentration option allows students to acquire a professional level of fluency in a foreign language as a complement to their international studies training. The requirements are 21 hours of study in a selected foreign language. Students wishing to concentrate in language should consider the FL/IS double major described below. Note: This option may not be available for all languages.

**Personalized Pre-Professional Program**

(21 Hrs)

The Personalized Pre-professional Program is designed primarily for students who wish to pursue graduate study and need a special program tailored to the needs of their expected graduate area. A pre-professional program consisting of a minimum of 21 semester hours including at least one upper-level seminar, directed studies, or internship. Proposals for a personalized program, drawn up by the student in consultation with his or her advisor, must be submitted for approval to the Program Director and the Dean of Arts and Sciences before the first semester of the student's junior year.

## Graduation Plan

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
EH 101	English Composition I	3
LG/LGS	First semester of foreign language	3
IS 100	Global Issues	3
Natural Science with Lab		4
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EH 102	English Composition II (or Honors)	3
LG/LGS	Second semester of foreign language	3
MA 110	Finite Mathematics (or higher)	3
AN 100	Intro to Cultural Anthropology	3
Fine Arts elective		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
PSC 250	Comparative Politics	3
HY 101	HY of Western Civilization I	3
GEO 114	People, Places, Environment	3
CA 110	Public Speaking	3
LG/LGS	Third semester of foreign language	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
HY 102	HY of Western Civilization II	3
PSC 270	International Relations	3
LG/LGS	Fourth semester of foreign language	3
EH 235 or EH 236	World Lit before 1650 or World Lit after 1650	3
Natural Science with Lab		4
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
PHL/RELALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)352	World Religions	3
GEO 312	World Economic Geog	3
CA 330	Intercultural Communication-W	3
Natural Science with Lab		4
International Studies elective, 300 or 400 level		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
AN 358		3
PSC 372	American Foreign Policy	3

Minor course		3
Minor course		3
Minor course		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
IS 495	Senior Seminar - W	3
International Studies elective, 300-400 level		3
Elective		3
Minor course		3
Minor course		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
International Studies elective, 300 or 400 level		3
Elective		3
Elective		3
Minor course, 300 level or higher		3
Minor course, 300 level or higher		3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>122</b>

## International Studies (BA) - Latin American Studies Concentration Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		<b>42</b>
<i>International Studies Core</i>		<i>18</i>
A. Complete the following:		
IS 100	Global Issues	3
PSC 250	Comparative Politics	3
PSC 270	International Relations	3
GEO 312	World Economic Geog	3
PHL/RELALL	World Religions	3
REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)352		
IS 495	Senior Seminar - W	3
<i>Latin America Studies Concentration</i>		<i>24</i>
A. Spanish or Portuguese language at the 200 level - Select one of the following:		
LG 231 & LG 232	Intermediate Spanish I and Intermediate Spanish II	
B. Complete the following:		
AN 347	Latin Amer Cultures-Societies (see footnote table below (p. 245)) <sup>1</sup>	3
C. Complete the following:		

GEO 315	Geography of Latin America	3
D. Complete the following:		
HY 228	Latin America	3
E. Complete the following:		
PSC 363	Crime and Politics in LatinAm	3
F. Select six hours of electives from the following:		
Any 300-400 level course in Spanish language or literature (if not in language pre-professional or double major program)		
HY 321	The Caribbean	
HY 429	Studies Latin Amer History-W	
PSC 450	Adv Study Comparative Pol (appropriate content)	
PSC 470	Adv Study Intl Relations (appropriate content)	
Any approved Special Topics course or Directed Studies focusing on contemporary Latin America or Latin American country		
<b>Minor Requirements</b>		
A minor is required for this degree program		18-24
<b>A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE</b>		<b>120</b>

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

## Footnote

<sup>1</sup> AN 100 required as a prerequisite

## Additional Information

Students majoring in International Studies should complete 18 credit hours of core courses, one of six concentrations (24 credit hours), and a pre-professional program or traditional minor in a complementary subject.

## Pre-Professional Program

Students should complete either one of the three pre-professional programs outlined below (international business, a language specialization, or a personalized pre-professional program) or have a traditional minor. Students with a double major are not required to have a pre-professional program or a minor.

## International Business

(21 Hrs)

The International Business option provides students with a basic foundation in business and best equips the student to enter the field of international business or related areas upon graduation.

Code	Title	Hours
ECO 330	Current Global Economic Issues	3
or ECO 363	International Economics	
MKT 320	Principles of Marketing	3
MKT 374	Consumer Behavior	3
MKT 380	Integrated Mkt Communications	3
Select nine hours of electives from the following:		9
FIN 332	Multinational Finance	
MGT 334	International Mgt	
MGT 465	New Venture Creation	
MKT 336	International Marketing	
MKT 384	Market Research	
MKT 310	Intro International Business	

MKT 477	Export-Import Management
MKT 492	Applications in International Business
IS 496	Prof St Internship -
<b>Total Hours</b>	<b>21</b>

## Language Specialization

(21 Hrs)

The Language Concentration option allows students to acquire a professional level of fluency in a foreign language as a complement to their international studies training. The requirements are 21 hours of study in a selected foreign language. Students wishing to concentrate in language should consider the FL/IS double major described below. Note: This option may not be available for all languages.

## Personalized Pre-Professional Program

(21 Hrs)

The Personalized Pre-professional Program is designed primarily for students who wish to pursue graduate study and need a special program tailored to the needs of their expected graduate area. A pre-professional program consisting of a minimum of 21 semester hours including at least one upper-level seminar, directed studies, or internship. Proposals for a personalized program, drawn up by the student in consultation with his or her advisor, must be submitted for approval to the Program Director and the Dean of Arts and Sciences before the first semester of the student's junior year.

## Graduation Plan

(122 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
EH 101	English Composition I	3
LG 131	Introductory Spanish I	3
IS 100	Global Issues	3
Natural Science with Lab		4
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EH 102	English Composition II (or Honors)	3
LG 132	Introductory Spanish II	3
MA 110	Finite Mathematics (or higher)	3
AN 100	Intro to Cultural Anthropology	3
Fine Arts elective		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
PSC 250	Comparative Politics	3
HY 101	HY of Western Civilization I	3
GEO 114	People, Places, Environment	3
CA 110	Public Speaking	3
LG 231	Intermediate Spanish I	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
HY 102	HY of Western Civilization II	3
PSC 270	International Relations	3
LG 232	Intermediate Spanish II	3
EH 235	World Lit before 1650	3
or EH 236	or World Lit after 1650	

Natural Science with Lab		4
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
GEO 312	World Economic Geog	3
AN 347	Latin Amer Cultures-Societies	3
HY 228	Latin America	3
Natural Science with Lab		4
Minor course		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
GEO 315	Geography of Latin America	3
PSC 363	Crime and Politics in LatinAm	3
PHL 352	World Religions	3
or REL 352	or World Religions	
International Studies elective, 300-400 level		3
Minor course		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
IS 495	Senior Seminar - W	3
International Studies elective, 300-400 level		3
Elective		3
Minor course		3
Minor course		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Minor course		3
Elective		3
Elective		3
Minor course	300 level or higher	3
Minor course	300 level or higher	3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>122</b>

**Notes**

\*\*See General Education Requirements

# International Studies (BA) - Middle East Studies Concentration

## Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
	General Education (p. 96)	53-57
<b>Major Requirements</b>		<b>42</b>
<i>International Studies Core</i>		<i>18</i>
A. Complete the following:		
IS 100	Global Issues	3
PSC 250	Comparative Politics	3
PSC 270	International Relations	3
GEO 312	World Economic Geog	3

PHL/RELALL	World Religions	3
REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)352		

IS 495	Senior Seminar - W	3
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**Middle East Studies Concentration 24**

A. Complete the following:

LGS 206 & LGS 207	Intermediate Arabic I and Intermediate Arabic II	6
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B. Complete the following:

HY 365	Islamic Civilization 1453 - W	3
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C. Complete the following:

PSC 365	Politics of the Middle East	3
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D. Select twelve hours of electives from the following: 12

HY 364	Islamic Civilization to 1453	
HY 465	Studies in HY of Islamic Civ -	
IS 491	Seminar on Terrorism	
IS 492	Seminar -	
IS 496	Prof St Internship -	

Any approved Special Topics course of Directed Studies focusing on contemporary Middle East or Middle Eastern country.

**Minor Requirements**

A minor is required for this degree program 18-24

**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

### Additional Information

Students majoring in International Studies should complete 18 credit hours of core courses, one of six concentrations (24 credit hours), and a pre-professional program or traditional minor in a complementary subject.

### Pre-Professional Program

Students should complete either one of the three pre-professional programs outlined below (international business, a language specialization, or a personalized pre-professional program) or have a traditional minor. Students with a double major are not required to have a pre-professional program or a minor.

### International Business

(21 Hours)

The International Business option provides students with a basic foundation in business and best equips the student to enter the field of international business or related areas upon graduation.

Code	Title	Hours
ECO 330	Current Global Economic Issues	3
or ECO 363	International Economics	

MKT 320	Principles of Marketing	3
MKT 374	Consumer Behavior	3
MKT 380	Integrated Mkt Communications	3
Select nine hours of elective from the following:		9
FIN 332	Multinational Finance	
MGT 334	International Mgt	
MGT 465	New Venture Creation	
MKT 336	International Marketing	
MKT 384	Market Research	
MKT 310	Intro International Business	
MKT 477	Export-Import Management	
MKT 492	Applications in International Business	
IS 496	Prof St Internship -	
<b>Total Hours</b>		<b>21</b>

**Language Specialization**  
(21 Hrs)

The Language Concentration option allows students to acquire a professional level of fluency in a foreign language as a complement to their international studies training. The requirements are 21 hours of study in a selected foreign language. Students wishing to concentrate in language should consider the FL/IS double major described below. Note: This option may not be available for all languages.

**Personalized Pre-Professional Program**  
(21 Hrs)

The Personalized Pre-professional Program is designed primarily for students who wish to pursue graduate study and need a special program tailored to the needs of their expected graduate area. A pre-professional program consisting of a minimum of 21 semester hours including at least one upper-level seminar, directed studies, or internship. Proposals for a personalized program, drawn up by the student in consultation with his or her advisor, must be submitted for approval to the Program Director and the Dean of Arts and Sciences before the first semester of the student's junior year.

**Graduation Plan**  
(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
EH 101	English Composition I	3
LGS 106	Introductory Arabic I	3
IS 100	Global Issues	3
Natural Science with Lab		4
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EH 102	English Composition II (or Honors)	3
LGS 107	Introductory Arabic II	3
MA 110	Finite Mathematics (or higher)	3
AN 100	Intro to Cultural Anthropology	3
Fine Arts elective		3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
PSC 250	Comparative Politics	3

HY 101	HY of Western Civilization I	3
GEO 114	People, Places, Environment	3
CA 110	Public Speaking	3
LGS 206	Intermediate Arabic I	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
HY 102	HY of Western Civilization II	3
PSC 270	International Relations	3
LGS 207	Intermediate Arabic II	3
EH 235 or EH 236	World Lit before 1650 or World Lit after 1650	3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
HY 365	Islamic Civilization 1453 - W	3
PSC 365	Politics of the Middle East	3
GEO 312	World Economic Geog	3
EH 235 or EH 236	World Lit before 1650 or World Lit after 1650	3
Natural Science with Lab		4
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
PHL/RELALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)352	World Religions	3
International Studies elective	300 or 400 level	3
International Studies elective	300 or 400 level	3
Minor course		3
Minor course		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
IS 495	Senior Seminar - W	3
International Studies elective	300 or 400 level	3
Elective		3
Minor course		3
Minor course		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
International Studies elective	300 or 400 level	3
Elective		3
Minor course	300 level or higher	3
Minor course	300 level or higher	3
Minor course	300 level or higher	3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>121</b>

# International Studies (BA) - Modern and Classical Languages and Literature/International Studies Double Major

## Degree Requirements

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

## Modern and Classical Languages and Literature/International Studies Double Major

This program allows students to maximize their international training and experience. In addition to completing the 42 hours requirements for the International Studies major, the student will complete the program of study set out by the Department of Modern and Classical Languages and Literature. This option allows the student to develop additional language and analytical skills. Moreover, Modern and Classical Languages and Literature majors enjoy additional and special opportunities to participate in study abroad programs.

## International Studies Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Minor in International Studies

A minimum of 21 hours, including at least 9 hours at the 300-400 level.

Code	Title	Hours
Students must complete:		
IS 100	Global Issues	3
PSC 250	Comparative Politics	3
PSC 270	International Relations	3
GEO 312	World Economic Geog	3
Select nine hours of the following:		
AN 347	Latin Amer Cultures-Societies	
ARH 203	Survey of Non-Western Art	
ARH 312	Medieval Art and Architecture	
ARH 322	Northern Renaissance Art	
ARH 324	Italian Early Renaissance	
ARH 326	16th Century Italian Art	
ARH 330	Baroque Art of Southern Europe	
ARH 332	Baroque Art and Architecture	
ARH 335	18th Century Art and Arch	
CJ 472	Comparative CJ Systems	
EH 216	Brit Lit after 1785	

GEO 314	Geography of Europe
GEO 315	Geography of Latin America
HY 104	HY of Asian Civilization II
HY 321	The Caribbean
HY 333	Great Britain Since 1815
HY 335	History of Modern France
HY 336	Central European History
HY 337	History of Eastern Europe
HY 338	History of Russia
HY 346	The Second World War
HY 347	The Holocaust
HY 348	Hitler and Nazi Germany
HY 355	French Revolution
HY 356	European Civ 1815-1918-W
HY 357	Europe Since 1945
HY 364	Islamic Civilization to 1453
HY 365	Islamic Civilization 1453 - W
HY 367	Modern China
HY 368	Japan
HY 429	Studies Latin Amer History-W
HY 454	The British Empire
HY 457	Studies in European History -
HY 461	Studies in Asian History -
HY 465	Studies in HY of Islamic Civ -
IS 490	Special Topics
IS 491	Seminar on Terrorism
IS 492	Seminar -
IS 495	Senior Seminar - W
MUO 136	World Music Ensemble
PHL 354	Philosophies of India
PHL 355	Chinese Philosophy
PSC 313	Modern Political Thought-W
PSC 360	Politics of Europe
PSC 365	Politics of the Middle East
PSC 368	Politics of South Asia
PSC 450	Adv Study Comparative Pol
PSC 470	Adv Study Intl Relations
SY 411	Population - W
Any IS-related course (upon approval of the Director)	

**Total Hours** **21**

## Jewish And Holocaust Studies

### Department Information

Program in Jewish & Holocaust Studies website  
<https://www.southalabama.edu/colleges/artsandsci/jewishandholocauststudies> (<https://www.southalabama.edu/colleges/artsandsci/jewishandholocauststudies/>)

(251) 460-6867

Title	Name
Director	David A. Meola

The minor in Jewish and Holocaust Studies is an interdisciplinary program offering students the opportunity to gain exposure to the various fields within Jewish and Holocaust Studies. Students will acquire knowledge about Jewish religion and Jewish history, including that of the Holocaust. They will also be introduced to different methodologies and how the study of Jewish life is impacted within different disciplines. This minor will help prepare students for graduate programs in different fields related to Jewish and Holocaust Studies, and also for work in public and private sectors.

Jewish & Holocaust Studies deepens students' understanding of areas of study such as historical/cultural constructions of the "Other" and the relationship of minority groups to their host societies. It will also explore constructs of "Jewishness"—in both positive and negative ways—and that of anti-minority sentiment, including historical and present-day Antisemitism. Moreover, students will also learn about the demonization of "Others" and the all-too-frequent prevalent of ethnic violence and genocide, including the Holocaust. The Jewish & Holocaust Studies Program encourages students to become actively engaged in research about the Jewish people and other minority groups, how one can have a career in this field, and provides numerous opportunities for students to interact with faculty members to discuss their current research.

## Degrees, Programs, or Concentrations

- Jewish and Holocaust Studies Minor (p. 252)

## Courses

### African-American Studies (AFR)

#### AFR 101 Intro to African Amer Studies 3 cr

An interdisciplinary investigation of the origins, experiences, conditions, accomplishments and contributions of people of African ancestry in the United States.

### College of Arts/Sciences (CAS)

#### CAS 100 First Yr Exp - 2 cr

A course for first-year students majoring in the College of Arts & Sciences that assists with maximizing the student's potential to achieve academic success and to adjust responsibly to the individual and interpersonal challenges presented by college life. Taught in small groups, the course provides an introduction to the nature of higher education and a general orientation to the functions and resources of the University.

#### CAS 190 Special Topics - 1-3 cr

This variable content course deals with selected topics from any of the disciplines in the College of Arts and Sciences. Topics will focus on current and relevant issues and may contain a service-learning component. The course may be repeated for credit when the topic varies for a maximum of six credit hours.

### Gerontology (GRN)

#### GRN 272 Gender and Aging 3 cr

This course examines the dynamics of gender and aging within society from an interdisciplinary perspective. Students will be introduced to controversies in gender over the life course. These include, but are not limited to, definitions and cultural boundaries, gender in childhood, gender and relationships, gender in education and the workplace, gender and sexuality, as well as gender in late life.

#### GRN 290 Special Topics - 3 cr

This designation is used for interdisciplinary courses on aging on a variety of subjects. This course does not replace any course in a single discipline. May be repeated as long as the topic changes, to maximum of six semester hours.

#### GRN 435 Health Disparities Life Span 3 cr

This course examines differences in health status across the life span. The course will focus heavily on racial/ethnic and socioeconomic disparities in health applying a social determinants' of health framework. Issues that will be considered include how income, education, neighborhood conditions, access to health care, and other community factors shape opportunities to be healthy. The course is cross-listed as SY 435 and GRN 435 and has been approved as an elective for the Undergraduate Certificate in Gerontology and the interdisciplinary minor in Gerontology.

**Prerequisite:** SY 109 Minimum Grade of D

**Cross-Listed:** SY 435

#### GRN 490 Special Topics 3 cr

This course is designated for upper division students and graduate students, particularly those pursuing studies for the Certificate of Gerontology. The course content focuses on interdisciplinary treatments on various topics on aging. This course does not replace any course in a single discipline. (Examples of special topics: Trends and Issues in Gerontology; Leadership and Advocacy in Gerontology; Housing and Lifestyle Changes over the Life Course). May be repeated as long as the topic changes, to maximum of six semester hours.

**Prerequisite:** SY 372 Minimum Grade of D

#### GRN 494 Directed Studies 1-3 cr

Under the guidance of a faculty member, the student will pursue directed research on readings of an approved topic in Gerontology. May be repeated as long as the topic changes, to a maximum of six semester hours. Requires permission of Director of Gerontology.

**Prerequisite:** SY 372 Minimum Grade of D

#### GRN 496 Internship - Gerontology 3,6 cr

This course is to provide a practicum experience in gerontology in a setting selected by the student and approved by the Program Director. The course emphasis is on the experiential learning process and outcomes. The undergraduate student will apply theoretical concepts in specific areas of interest related to aging and intergenerational relations. Interns will meet as a group three times during the semester for orientation, professional development, and evaluation activities. The 3-hour internship requires 100 contact hours; the 6-hour internship requires 200 hours. Permission of Director of Gerontology is required.

**Prerequisite:** SY 372 Minimum Grade of C

#### GRN 535 Health Disparities Life Span 3 cr

The main purpose of this seminar is to provide students with an understanding of how social factors contribute to racial/ethnic, socioeconomic and gender disparities in health and health care. We will examine how dyadic relationships such as interpersonal forms of discrimination, marriage, and social ties may contribute to health disparities. We will also examine the ways in which neighborhood and community context, as well as inequalities in socioeconomic status materially shape health and access to health care services. The course is cross-listed as GRN 435/535 and SY 435/535 and has been approved as an elective for the Undergraduate/Graduate Certificate in Gerontology and the interdisciplinary minor in Gerontology.

**Cross-Listed:** SY 535

**GRN 594 Dir St in Gerontology - 1-3 cr**

Under the guidance of a faculty member, the student will pursue directed research or readings of an approved topic in Gerontology. May be repeated as long as the topic changes, to maximum of six credit hours. Requires permission of the Director of Gerontology.

**GRN 596 Internship - Gerontology 3,6 cr**

This course is to provide a practicum experience in gerontology in a setting selected by the student and approved by the Program Director. The course emphasis is on the experiential learning process and outcomes. The graduate student will apply theoretical concepts to leadership roles, conducting research and influencing social and health care policies related to aging and intergenerational relationships. Interns will meet as a group three times during the semester for orientation, professional development, and evaluation activities. The 3-hour internship requires 100 contact hours; the 6-hour internship requires 200 hours. Permission of Director of Gerontology is required.

**Prerequisite:** SY 523 Minimum Grade of B

**GRN 597 GRN Teaching Apprenticeship 1-3 cr**

Directed Studies/Apprenticeship that focuses on teaching Gerontology. The student will work directly with a member of the Gerontology graduate faculty to learn pedagogy, innovation in teaching, and course content that will equip the student for future teaching assignments. Many PhD programs offer both Teaching Assistantships and Research Assistantships. Gerontology students need to show evidence that they have had some teaching-related experience to compete strongly for the TA position. This course is also appropriate for students who anticipate careers in teaching within the field of Gerontology (aging or intergenerational studies). Arrangements must be made prior to registration. Permission of the Program Director is required.

**Prerequisite:** SY 372 Minimum Grade of C

**Gender Studies (GS)****GS 101 Intro to Gender Studies 3 cr**

This course provides an interdisciplinary, multicultural overview of the concept of gender and gender roles in patriarchal society. This course examines the social construction of gender in our society and how that has shaped such areas as economics, politics, cultural/social values, and the impact upon women and men in historical and contemporary terms.

**GS 290 Sp Tp-#MeToo, Black Lives Matter & Beyond 3 cr**

Study of selected topics with an area in gender studies. May be repeated for credit when content varies.

**GS 301 Moving Beyond Diversity 3 cr**

This course explores ways of fighting injustice and dismantling systemic oppression for those who are being disproportionately impacted generationally. The course offers a framework for activism that focuses on creating a culture that stands up for what is right by fighting against normalizing cycles of perpetuated injustices. Students will examine diverse perspectives that center on the capacity to mobilize solidarity for those efforts, strategies, and practices that negate performative allyship with systems-changing action for today's realities.

**GS 302 Black Women and Activism 3 cr**

This fully online three-hour credit course is interdisciplinary in nature and addresses the need to recognize and validate contributions made by Black women that sought and continue to uplift Black America throughout the late 19th and early 21st centuries. This cadre of activism will be contextualized through both womanist and feminist theories. Central to these works will be an examination for how multiple oppressions have shaped Black women's lives throughout their ongoing efforts to redefine self and bring empowerment to their communities through racial solidarity and advancement as a people. These women's underlying resistance strategies and intellectual discourse for offsetting the negative effects of racism and other oppressive measures will be mirrored through the use of race and gender as a socio-political construct. A postmodern response depicted through the lens of contemporary Black feminists for how both mainstream feminism and Black America have responded to these heroic forms of activism will be analyzed. These activists' contributions will unfold through the following curricula foci: 1) early roots of nationalism, 2) the emergence of both Black Feminist and Womanist Thought, and 3) political movements involving Black women activists. Additional cornerstones for learning will include participating in a posting process that involve sharing research and writing projects which in return will facilitate lively discussions on today's black women activism from their own respective domain (e.g. music, spirituality, film, arts and letters, judicial system, the intellectual and socio-political arenas).

**GS 304 #Me Too, Black Lives Matter & 3 cr**

The velocity of national protests fighting for human rights across the constitutional continuum of justice, dignity, and safety have evolved into an epidemic throughout American infrastructures. This course will plunge into the #MeToo Era, Black Lives Matter, and Woke Movements. Significant visibility for how social constructs of gender, race, and sexuality intersect with these protesters' outcries will be examined. Further considerations will be given to exposing those accused of sexual violence on various fronts as well as existing allegations of wrongful deaths will be a part of the course curriculum. An added dimension to the curriculum will include also focusing on political strategies and an operative activism model that are being used to effectively penetrate these existing cultures of power and dominance.

**GS 390 Special Topics 3 cr**

Advanced study of selected topics with an area in gender studies. May be repeated for credit when content varies.

**GS 490 Special Topics 3 cr**

Advanced study of selected topics within an area in Gender Studies. May be repeated for credit when content varies for a total of six hours.

**GS 492 Gender Studies Seminar - 3 cr**

Advanced study of selected topics in Gender Studies. May be repeated for credit when content varies for a total of six hours.

**GS 494 Directed Studies 1-3 cr**

Directed research under the guidance of a Gender Studies faculty member. Requires permission of instructor. Student is restricted to taking a maximum of six hours of Directed Studies.

**Prerequisite:** GS 101 Minimum Grade of D

**GS 496 Internship - 3-6 cr**

Practical learning through occupational or community work with an approved agency dealing with gender-related issues. Readings and final report supervised by gender studies faculty. Special Permission required.

**Prerequisite:** GS 101 Minimum Grade of D

## Interdisciplinary Progs (IDS)

### IDS 290 Special Topics 1-3 cr

A study of selected topics of an interdisciplinary nature. May be repeated for credit when content varies. Requires permission of instructor.

### IDS 490 Special Topics 1-3 cr

Advanced study of selected topics of an interdisciplinary nature. May be repeated for credit when content varies. Requires permission of instructor.

### IDS 590 Sp Top 1-9 cr

Specialized topics not generally listed in the course offerings. Requires consent of Graduate Director.

## International Studies (IS)

### IS 100 Global Issues 3 cr

This course introduces students to the basic structural components of the global system, including the nation-state system and the world economy, and explores the major schools of thought in such areas as security, economic prosperity and development, international law, gender and environmental studies. The course helps students understand the complex and interlinked issues facing global society, and current problems, and view the U.S. within a broader global context.

### IS 193 Study Abroad 1-6 cr

This course is an introductory International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

### IS 200 People-Nations - 3 cr

Variable content course focusing on particular nation or region of the world. Course offers a multi-disciplinary introduction to the people, society and politics. May be repeated for credit when content varies up to a total of 6 hours.

### IS 210 Global Engagement Orientation 1 cr

This course introduces students to international global issues, allows students to identify opportunities for active engagement in these issues, and provides the framework for successful completion of the Global Engagement Certificate.

### IS 290 Special Topics - 3 cr

Study of selected topics within a particular Area Studies Concentration. May be repeated for credit when content varies.

**Prerequisite:** IS 100 Minimum Grade of D

### IS 293 Study Abroad 1-6 cr

This course is an introductory International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

### IS 363 Crime and Politics in LatinAm 3 cr

An examination of the violent crime epidemic affecting many parts of Latin America, with specific focus on the themes of democratic transition, political economy, and foreign relations with the United States. Same as PSC 363 and CJ 363.

**Prerequisite:** (PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or IS 100 Minimum Grade of C)

**Cross-Listed:** CJ 363, PSC 363

### IS 371 Studies in Russia 3-6 cr

This course will cover specific topics in the history, politics, and culture of modern Russian civilization. May be repeated for credit when content varies.

### IS 372 Studies in E. Europe & C. Asia 3-6 cr

This course will cover specific topics in the history, politics, and culture of modern Eastern European and Central Asian civilizations. May be repeated for credit when content varies.

### IS 390 Sp Top- 1-3 cr

Advanced study of selected topics within a particular concentration. May be repeated for credit when content varies.

### IS 391 Study Abroad - 18 cr

Study of selected topics within a particular Area Studies Concentration. May be repeated.

### IS 393 Study Abroad 1-6 cr

This course is an advanced International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

### IS 410 Global Engagement Capstone 1 cr

Global Engagement Capstone is required for students completing the Global Engagement Certificate (GEC), and is a one hour course designed to help students reflect on the 16 hours of coursework and nine hours of globally engaged activities they have completed. Students will create a portfolio during the course, which will be presented to students and affiliated faculty at its conclusion.

**Prerequisite:** IS 210 Minimum Grade of P

### IS 473 International Law 3 cr

This course covers major issues, cases and topics in public and private international law. Course coverage includes individuals and corporations, diplomatic relations, jurisdiction, human rights, economic relations, treaties, environmental law, and more.

**Prerequisite:** (IS 100 Minimum Grade of C or PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C)

**Cross-Listed:** CJ 473, PSC 473

### IS 489 Leadership and World Leaders 3 cr

An overview of the definitions, characteristics, and typologies of leadership, with a focus on lives and legacies of global influential political leaders over the past century.

**Prerequisite:** PSC 130 Minimum Grade of D or PSC 250 Minimum Grade of D or IS 100 Minimum Grade of D

**Cross-Listed:** PSC 251, PSC 489

### IS 490 Special Topics 3 cr

Advanced study of selected topics within a particular Area Studies Concentration. May be repeated for credit when content varies.

**Prerequisite:** IS 100 Minimum Grade of D

### IS 491 Seminar on Terrorism 3 cr

Study of a terrorism from a sociopolitical perspective with an emphasis on causes, policy, tactics and operational characteristics and counter-terrorism operations. Cross-listed with CJ 491 and PSC 491.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or PSC 130 Minimum Grade of C or IS 100 Minimum Grade of C

**Cross-Listed:** CJ 491, PSC 491

### IS 492 Seminar - 3 cr

Advanced study of selected topics in international studies from a comparative perspective. May be repeated for credit when content varies.

**Prerequisite:** IS 100 Minimum Grade of D

### IS 493 Study Abroad 1-6 cr

This course is an advanced International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**IS 494 Directed Studies 1-3 cr**

Directed research in the field of international studies. May be repeated or credit up to a total of 9 hours. Prerequisite: permission of IS Director

**IS 495 Senior Seminar - W 3 cr**

The course seeks to provide an interdisciplinary and cross-regional overview of the fields and research opportunities within international studies.

**Prerequisite:** EH 102 Minimum Grade of C

**IS 496 Prof St Internship - 3-9 cr**

Practical learning experiences through occupational or professional work with an approved international organization, governmental agency, or international business Prerequisite: Permission of IS Director

**IS 499 Senior Honors Thesis 3 cr**

The course covers major theoretical perspectives in organizational psychology based on empirical research and case studies. Students will explore learning theory, group dynamics, and change in different types of learning organizations.

**Prerequisite:** (EH 102 Minimum Grade of D or EH 105 Minimum Grade of D)

**IS 591 Study Abroad 12 cr**

Graduate level international exchange programs for University of South Alabama students.

**Museum Studies (MUM)****MUM 201 Intro to Museum Studies 3 cr**

This course is designed to provide a general introduction to museum history, practice, and the role of museums in contemporary society. The class will explore a range of museum positions, curatorial practices, collection management, museum administration, and the academic and public roles museums play in society.

**Prerequisite:** EH 102 Minimum Grade of C

**MUM 290 Special Topics - 3 cr**

Different subjects or themes in museum studies as announced. This course may be repeated twice when content varies, for a maximum of nine credit hours. Prerequisite: To be announced.

**MUM 390 Special Topics - 3 cr**

Different subjects or themes in museum studies as announced. This course may be repeated twice when content varies. for a maximum of nine credit hours. Prerequisite: To be announced.

**Jewish and Holocaust Studies Minor****Degree Requirements**

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

**Minor in Jewish and Holocaust Studies****Core Requirements**

1. Students minoring in Jewish & Holocaust Studies must complete a total of 18 semester hours in approved courses.
2. Approved Variable and Special Topics Courses that focus on Jewish & Holocaust studies can also be taken to complete the 18 semester hour requirement. For information on upcoming variable and special topics courses, consult the Director.
3. Complete all three core courses (JHS 101, REL 200, & HY 347) listed below.

4. Three electives from the following list, excluding the core courses. Please note that most electives do need Director Approval before credit will be given.
5. Students must take at least one upper division course outside of their major discipline, and courses must be approved by the director, who will evaluate the course content for consideration within the Jewish and Holocaust Studies minor.
6. As part of the minor, students may count HY 101/HY 102 or HY 135/HY 136 for only one of their three electives, with director permission. Students must take at least two upper-level (300-level and higher) courses (6 credit hours) as part of their electives.

Code	Title	Hours
<b>Core Courses</b>		
JHS 101	Intro to Jewish Studies	3
HY 347	The Holocaust	3
REL 200	Old Testament/Hebrew Bible	3
<b>Electives</b>		
Select three of the following:		9
The following do not need Director Approval:		
JHS 390	Special Topics -	
HY 348	Hitler and Nazi Germany	
HY 382	Jews & Modern Amer Culture-W	
JHS 390	Special Topics -	
JHS 494	Directed Studies	
The following need Director Approval:		
HY 101	HY of Western Civilization I	
or HY 102	HY of Western Civilization II	
AN 290	Special Topics -	
EH 476	Studies in 20th Century Lit	
HY 135	US History to 1877	
or HY 136	US History since 1877	
HY 335	History of Modern France	
HY 336	Central European History	
HY 337	History of Eastern Europe	
HY 338	History of Russia	
HY 356	European Civ 1815-1918-W	
HY 365	Islamic Civilization 1453 - W	
HY 437	Modern US II Since 1945 - W	
HY 390	Special Topics -	
HY 401	Coll in History-	
HY 494	Directed Studies -	
HY 496	Public History	
IS 393	Study Abroad	
LG 390	Special Topics -	
LG 362	German Cult-Lit 19th Century	
LG 363	Modern-Contemp German Cult-Lit	
LG 390	Special Topics -	
LG 494	Directed Studies-	
MUM 390	Special Topics -	

PHL/REL/ SYALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)352	World Religions
PSC 340	Race, Gender, & Politics
PSC 365	Politics of the Middle East
REL/PHLALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)242	Western Philosophy: Medieval
REL 390	Special Topics -
REL/SYALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)420	Sociology of Religions
SY 445	Majority-Minority Relations-W

**Total Hours****18**

For a description of these courses, please refer to the appropriate departments. For further information about the program contact:

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Director of Jewish & Holocaust Studies,  
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## Mathematics and Statistics

### Department Information

Department of Mathematics and Statistics website  
<https://www.southalabama.edu/colleges/artsandsci/mathstat/>

### Developmental Studies

The courses and academic support through an on-demand tutoring center offered by the developmental studies in mathematics provide students with the opportunity to strengthen the basic mathematical skills necessary to progress to college-level mathematics courses.

Credits earned in courses with a DS prefix do not meet degree requirements within the University. The credits earned do carry institutional, non-degree credit and allow students to qualify for financial aid. Grades earned are computed into the overall GPA in most colleges and hours are counted toward classification (sophomore, etc.). Credits earned in courses with a MTH prefix count as free electives.

### Math Lab Information

#### Location

The Math Technology Lab is located in ASC 1301.

#### Resources:

- 210 computer workstations with Internet access
- Separate testing area and private tutoring rooms
- Study room for one-on-one or group tutoring
- Tutors and instructors available during all operating hours to assist students

### Undergraduate Studies

The purpose of the Department of Mathematics and Statistics is to provide a well-rounded program for students majoring in the mathematical sciences and to fulfill the mathematical science needs of students in other fields of study. To this end, the department emphasizes excellence in teaching, and encourages the professional growth of its faculty through study, research, and consulting.

The Department offers a major leading to the Bachelor of Science Degree in Mathematics and Statistics. We also offer a minor in mathematics and a minor in applied statistics. Students pursuing a degree in Mathematics and Statistics also must have a minor in another discipline.

All first-time freshmen must successfully complete CAS 100 as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry.

### Where to Begin in the Mathematics Courses?

Students must begin at the proper level and in the proper track in mathematics. Students who lack college level credit in mathematics should take the placement exam at least 48 hours prior to registering for a mathematics course. Students must register online to take the test. Times and days of the test as well as registration information are available at the department website.

### Graduate Studies

A Master of Science degree in Mathematics is offered by the Department of Mathematics and Statistics. The program has been designed to meet the varied needs and goals of most students seeking advanced degrees in mathematics. The course of study accommodates students interested

in traditional and modern mathematics, applied mathematics, statistics, and computer science.

## Requirements for Admission

Students are admitted each semester. The following criteria supplement the Graduate School requirements.

### Regular Admission

1. A bachelor's degree in mathematics or in a mathematics-related field from an accredited institution of higher education with a concentration of upper-level mathematics courses including a sequence in advanced calculus, or real analysis, or coursework which clearly demonstrates readiness for a graduate program in mathematics.
2. A minimum GPA of at least a 3.0 on all undergraduate work. In exceptional cases, applicants may be considered with at least a 2.5 GPA on all undergraduate work, or at least a 2.75 GPA on the last 60 hours of undergraduate work.
3. Submission of scores on the General Test of the Graduate Record Examination. A minimum combined score of 297 on the verbal and quantitative sections or a minimum score of 148 on the quantitative section (without regard to the score on the verbal section). An advanced degree or other standardized test score may be considered in lieu of a GRE score.
4. English proficiency requirement for international applicants:
  - Minimum Duolingo Score of 100 **or**
  - Minimum TOEFL score of 71 **or**
  - Minimum IELTS score of 6 **or**
  - Minimum iTEP score 3.7 **or**
  - Minimum Pearsons (PTE Academic) score 48
 Applicants who hold a bachelor's degree from an accredited U.S. institution are not required to submit test scores.
5. Three original letters of recommendation written by persons familiar with the applicant's qualifications and ability to undertake the proposed course of study are required.

### Non-Degree Admission

Applicants who do not meet all the conditions for admission or who are not interested in earning a graduate degree may apply for non-degree admission. Adequate undergraduate preparation in mathematics which indicates a reasonable chance of success in graduate mathematics courses is required for non-degree admission. After admission, permission of the department graduate coordinator is required for each course taken. In cases where undergraduate preparation is inadequate for a particular graduate course, a plan of study including additional undergraduate courses can be worked out in consultation with the graduate coordinator.

## Graduate Assistantships

Graduate students holding assistantships are usually assigned duties such as tutoring or supervising recitation sections in the Department of Mathematics and Statistics. Awards are normally made for the academic year, but one semester awards are occasionally possible. An assistantship application can be obtained from the Graduate Coordinator in the department and on-line. Three letters of recommendation sent directly to the Graduate Coordinator are required. Graduate Assistants are required to enroll in MA 592 (Seminar) each semester.

## Policies and Procedures

The document "Department Policies and Procedures for the MS Degree Program in Mathematics" is posted on the departmental website. It

contains details concerning advising, the comprehensive examination, graduate assistant duties, student meetings and colloquia.

## Degrees, Programs, or Concentrations

- Applied Statistics Graduate Certificate (p. 265)
- Applied Statistics Minor (p. 265)
- Mathematics (MS) - Non-Thesis Option (p. 266)
- Mathematics (MS) - Non-Thesis Option with Computer Science Emphasis (p. 266)
- Mathematics (MS) - Thesis Option (p. 267)
- Mathematics and Statistics Major (BS) (p. 267)
- Mathematics Minor (p. 268)

## Courses

### Mathematics (MA)

#### MA 100 Mathematics in Society 3 cr

An introduction and real life applications to the mathematics of finance, probability, and descriptive statistics with particular emphasis on mathematics of finance. Specific topics include geometric progressions, compound interest, annuities, perpetuities, permutations, combinations, probability measure, and statistical measures of central location and dispersion. This course does not satisfy the mathematics requirement for General Studies.

#### MA 101 Intro to Mathematical Thought 3 cr

A course designed to give the nonscience major-especially humanities and fine arts majors-an appreciation of the method, content, and scope of mathematics. This course does not satisfy the mathematics requirement for General Studies.

#### MA 105 Algebra for Math Placement 4 cr

Introduction to equations of straight lines in various forms and transition between these forms; Manipulation and solution of linear equations and linear inequalities; graphing solution sets on the number line and expression of solution sets in both set and interval notation. Simplification, multiplication, and division of polynomials; Factoring quadratic expressions and the solution of quadratic equations by factoring; Solution of basic rational equations; Addition, subtraction, multiplication and division of rational expressions; simplification of complicated ratios of rational expressions. Working with set operations: Absolute value inequalities and equations and compound inequalities; Addition, subtraction, multiplication, division, and simplification of expressions with radicals and/or rational exponents and rationalization of numerator or denominator. Credit for both MTH 100, MTH 101 and MA 105 is not allowed.

#### MA 110 Finite Mathematics 3 cr

This course is intended to give an overview of topics in finite mathematics together with their applications. The course includes logic, sets, counting, permutations, combinations, basic probability, descriptive statistics and their applications, and financial mathematics. Students are required to have a scientific calculator. Core Course. Note: May be offered for Honors credit. NOTE: MA 110 is not a Pre-requisite for nor is it intended to be preparatory for any course except MA 201 and MA 202.

#### MA 111 Math in Society 3 cr

This course focuses on developing mathematical concepts and interpreting data used in society. Topics may include percentage, creating and analyzing different types of graphs, estimation, apportionment, linear and exponential growth, simple and compound interest, and descriptive statistics. An emphasis on technology such as Excel will be prevalent.

**MA 112 Precalculus Algebra 3 cr**

The course covers algebraic, graphical and numerical properties of functions, focusing on linear, quadratic, general polynomial, absolute value, rational, exponential, and logarithmic functions. Topics also include equations, inequalities, and complex numbers. Applications of mathematics to modeling real world situations are emphasized. Credit for both MA 112 and MA 115 not allowed. Core Course.

**Prerequisite:** A02 22 or MTH 100 (may be taken concurrently) Minimum Grade of C or MMT 070 or MTH 101 Minimum Grade of C or MA 105 Minimum Grade of C or S02 510 or S12 540

**MA 113 Precalculus Trigonometry 3 cr**

Continuation of MA 112. Topics include numerical, graphical and algebraic properties of trigonometric functions, inverse trigonometric functions, right angle trigonometry, parametric equations, polar coordinates, and conic sections. Development and application of mathematical models to real-world situations is emphasized. Credit for both MA 113 and MA 115 not allowed. Core Course.

**Prerequisite:** A02 24 or MMT 080 or MA 112 Minimum Grade of C or S02 560 or S12 580 or SS2 24

**MA 115 Precal Algebra-Trigonometry 4 cr**

This fast-paced course is designed as a review of the algebra and trigonometry needed in calculus. It covers the material of MA 112 and MA 113 in one semester. Topics include numerical, graphical and algebraic properties of polynomial, rational, exponential, logarithmic, and trigonometric functions; inverse trigonometric functions; right angle trigonometry; parametric equations; polar coordinates and conic sections. Applications of mathematics to modeling real world situations are emphasized. Credit for both MA 112 and MA 115 not allowed; credit for both MA 113 and MA 115 not allowed. Core Course.

**Prerequisite:** A02 25 or MMT 080 or S02 570 or S12 590 or SS2 25

**MA 120 Calculus and Its Applications 3 cr**

Introduction to calculus with an emphasis on problem solving and applications. Key concepts are presented graphically, numerically and algebraically, although the stress is on a clear understanding of graphs and tabular data. The course covers: algebraic, exponential and logarithmic functions, their properties and their use in modeling; the concepts of derivative and definite integral and applications. Credit for both MA 120 and MA 125 not allowed. MA 120 is not a prerequisite for subsequent calculus courses. Core Course.

**Prerequisite:** A02 24 or MMT 080 or MA 112 Minimum Grade of C or MA 113 Minimum Grade of C or MA 115 Minimum Grade of C or S02 560 or S12 580 or SS2 24

**MA 125 Calculus I 4 cr**

The course provides an introduction to calculus with emphasis on differential calculus. Topics include limits of functions, derivatives of algebraic and transcendental functions, application of the derivative to curve sketching, optimization problems, and examples in the natural sciences, engineering, and economics. The course concludes with an introduction to anti-derivatives, definite integrals, and the fundamental theorem of calculus. Credit for both MA 120 and MA 125 is not allowed. Prerequisite: Sufficient Mathematics Placement Exam score. Core Course. NOTE: MA 110, MA 112, MA 113, MA 115, MA 120, and MA 125 have strict Pre-requisites. To be able to enroll in these courses a student needs either to pass the Pre-requisite course with C or better or to have a sufficient Mathematics Placement Exam score.

**Prerequisite:** A02 27 or MMT 090 or MA 113 Minimum Grade of C or MA 115 Minimum Grade of C or S02 620 or S12 640 or SS2 27

**MA 126 Calculus II 4 cr**

This course is a continuation of MA 125 with emphasis on integral calculus. Topics include techniques of integration; applications of the definite integral to geometry, natural sciences, engineering, and economics; improper integrals; infinite sequences and series; Taylor polynomials and Taylor series; parametric equations and polar coordinates. Core Course.

**Prerequisite:** MA 125 Minimum Grade of C

**MA 150 Contemporary Math-Stat Seminar 1 cr**

This course gives an overview of modern mathematics and statistics from the point of view of the practitioners. The course is designed for majors in mathematics and statistics at all levels as well as those student who are considering mathematics or statistics as a major or minor area of study. Topics usually included are elements of geometry, algebra, analysis, methods of statistical inference, the role of the computer in the analytical sciences; these topics vary from semester to semester. This course cannot be taken for credit simultaneously with ST 150. NOTE: May be offered for Honors Credit.

**MA 201 Math for Elem Teachers I 3 cr**

An examination of some of the major ideas encountered in K-6 mathematics. Topics include introduction to problem solving, numeration systems, modeling arithmetic operations of whole numbers, elementary number theory, properties and operations for whole numbers, integers, rational numbers and real numbers. An emphasis on problem solving is prevalent in this course. NOTE: MA 201 does not fulfill graduation requirements for any curriculum other than College of Education and Professional Studies.

**Prerequisite:** MA 110 Minimum Grade of C or MA 112 Minimum Grade of C or MA 113 Minimum Grade of C or MA 115 Minimum Grade of C or MA 120 Minimum Grade of C or MA 125 Minimum Grade of C or MA 150 Minimum Grade of C

**MA 202 Math for Elem Teachers II 3 cr**

An examination of some of the major topics encountered in teaching geometry in K-6 mathematics. Topics include geometric shapes in the plane and in space, U.S. and metric systems of measurement, perimeter and area of shapes in the plane, the Pythagorean Theorem, surface area and volume of figures in space, and coordinate geometry. An emphasis on problem solving is prevalent in this course. NOTE: MA 202 does not fulfill graduation requirements for any curriculum other than College of Education and Professional Studies.

**Prerequisite:** MA 110 Minimum Grade of C or MA 112 Minimum Grade of C or MA 113 Minimum Grade of C or MA 115 Minimum Grade of C or MA 120 Minimum Grade of C or MA 125 Minimum Grade of C or MA 150 Minimum Grade of C

**MA 227 Calculus III 4 cr**

Vectors; functions of several variables; partial derivatives; local linearity; directional derivatives; the gradient; differential of a function; the chain rule; higher order partial derivatives; optimization of functions of several variables; multiple integrals and their applications; parametric curves and surfaces; vector fields; line and surface integrals; vector calculus. Core Course.

**Prerequisite:** MA 126 Minimum Grade of C

**MA 237 Linear Algebra I 3 cr**

This course provides an introduction to linear algebra. Topics include systems of linear equations, matrices, Gaussian elimination, rank, linear independence, subspaces, basis, dimension, linear transformations, determinants, eigenvalues and eigenvectors, change of basis, diagonalization, the abstract concept of a vector space, and applications. Core Course.

**Prerequisite:** MA 126 Minimum Grade of C

**MA 238 Differential Equations I 3 cr**

This course provides an introduction to ordinary differential equations. Topics include first order differential equations, higher order linear differential equations, systems of first order linear differential equations, Laplace transforms, methods for approximating solutions to first order differential equations, applications. Students should have taken or be taking MA 227. Core Course.

**Prerequisite:** MA 126 (may be taken concurrently) Minimum Grade of C

**MA 267 Discrete Math Structures 3 cr**

This course is an introduction to discrete mathematics for students majoring in computer-related areas. Students will be introduced to concepts and methods that are essential to theoretical computer science. A strong emphasis is placed on mathematical reasoning and proofs. Topics include sets, functions, induction, recursion, combinatorics and graphs. Students must have sufficient mathematics placement exam score.

**Prerequisite:** A02 24 or MMT 080 or MA 113 Minimum Grade of C or MA 115 Minimum Grade of C or SS2 24

**MA 290 Special Topics - 1-3 cr**

Selected topics in elementary undergraduate mathematics. This course may be repeated for a maximum of six credits.

**MA 303 Math for Elem Teachers III 3 cr**

An exploration of problem solving strategies. Problems exemplifying the various problem solving strategies studied. Emphasis on the development of problem solving skills by exploring interesting problems which demand for their solution that the student select from a wide variety of possible strategies and use a wide variety of conceptual tools. NOTE: MA 303 does not fulfill graduation requirements for any curriculum other than elementary education.

**Prerequisite:** MA 202 Minimum Grade of C and MA 201 Minimum Grade of C

**MA 311 Intro to Number Theory 3 cr**

An introduction to classical number theory with a balance between theory and computation. Topics include mathematical induction, divisibility properties, properties of prime numbers, the theory of congruences, number theoretic functions, continued fractions.

**Prerequisite:** MA 126 Minimum Grade of C

**MA 316 Linear Algebra II 3 cr**

A continuation of MA 237. Topics include inner product spaces, spectral theorem for symmetric operators, complex vector spaces, Jordan canonical form. Additional topics such as duality and Tensor products among others to be included at the discretion of the instructor.

**Prerequisite:** MA 237 Minimum Grade of C

**MA 318 Matrix Theory 3 cr**

A theoretical as well as computational treatment of the notions of determinant, inverse, rank and diagonalization of a matrix with real and complex entries. Eigenvalues and eigenvectors, similarity, solutions of linear systems of algebraic equations, Jordan canonical forms. Students are required to have a graphing calculator.

**Prerequisite:** (MA 126 Minimum Grade of C or MA 233 Minimum Grade of C)

**MA 320 Foundations of Math - W 3 cr**

A transition to higher mathematics with an emphasis on proof techniques. Topics include symbolic logic, elementary set theory, induction, relations, functions, and the structure of the number system. Mathematics and Statistics majors are encouraged to take MA 320 as soon as possible after completing MA 125.

**Prerequisite:** MA 125 Minimum Grade of C and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**MA 321 Elementary Geometry 3 cr**

This course covers the major topics from the secondary school curriculum of plane and solid geometry from a modern viewpoint. Emphasis will be placed on axioms, undefined terms, definitions, theorems, and proofs. Topics include straightedge and compass constructions, Euclidean geometry, Euclidean space, congruence, isometry, reflection, rotation, translation, vectors, parallel postulate, similarity, Pythagorean theorem, coordinate geometry, non-Euclidean geometry, projective geometry, projective space, perspective, homogenous coordinates.

**Prerequisite:** MA 320 Minimum Grade of C

**MA 332 Differential Equations II 3 cr**

Series solutions of second order linear equations. Numerical methods. Nonlinear differential equations and stability. Partial differential equations and Fourier series. Sturm-Liouville problems.

**Prerequisite:** MA 227 Minimum Grade of C and MA 238 Minimum Grade of C

**MA 334 Advanced Calculus I 3 cr**

This is the first of a two course sequence designed to provide students with the theoretical context of concepts encountered in MA 125 through MA 227. Topics covered include Completeness Axiom, sequences of real numbers, suprema and infima, Cauchy sequences, open sets and accumulation points in Euclidean space, completeness of Euclidean space, series of real numbers and vectors, compactness, Heine-Borel Theorem, connectedness, continuity, Extremum Theorem, Intermediate Value Theorem, differentiation of functions of one variable.

**Prerequisite:** MA 227 Minimum Grade of C and MA 237 Minimum Grade of C and MA 320 Minimum Grade of C

**Cross-Listed:** MA 486

**MA 335 Advanced Calculus II 3 cr**

This is the second of a two course sequence designed to provide students with the theoretical context of concepts encountered in MA 125 through MA 227. Topics covered include integration of functions of one variable, pointwise and uniform convergence, integration and differentiation of series, differentiable mappings of several variables, chain rule, product rule and gradients, Mean Value Theorem, Taylor's Theorem, Inverse Function Theorem, Implicit Function Theorem.

**Prerequisite:** MA 334 Minimum Grade of C

**Cross-Listed:** MA 487

**MA 354 Comp Assist Math Modeling - W 3 cr**

This course is intended to provide the basic ideas regarding formulation, development, testing and reporting of mathematical models of various real world problems. Deterministic and stochastic models, optimization and simulations will be covered. Emphasis will be on careful mathematical formulations and the use of computer software, such as Microsoft Excel, Mathematica and Matlab. A term project will be an important component of this course. The course is taught in a laboratory setting with computers as lab equipment.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and MA 227 Minimum Grade of C and MA 238 Minimum Grade of C

**MA 367 Combinatorial Enumeration 3 cr**

An introduction to the mathematical theory of counting. Topics covered are: basic counting principles, permutations, combinations, pigeonhole principle, inclusion-exclusion principle, partitions, recurrence relations, generating functions, and enumeration under group action.

**Prerequisite:** (MA 126 Minimum Grade of C and MA 267 Minimum Grade of C) or (MA 320 Minimum Grade of C)

**MA 390 Special Topics 1-3 cr**

Selected topics in advanced undergraduate mathematics. This course may be repeated for a maximum of six credits.

**MA 410 History of Mathematics - W 3 cr**

Historical survey of the general development of mathematics with a balance of historical perspective and mathematical structure. CLEP College Composition score of 50 OR EH 102 OR EH 105 is required for W component.

**Prerequisite:** ((EH 102 Minimum Grade of C or MA 320 Minimum Grade of C) and EDM 310 (may be taken concurrently) Minimum Grade of C)

**MA 413 Abstract Algebra I - W 3 cr**

An introduction to group theory and ring theory. Topics include permutations and symmetries, subgroups, quotient groups, homomorphisms, as well as examples of rings, integral domains, and fields. CLEP College Composition score of 50 OR EH 102 OR EH 105 is required for W component.

**Prerequisite:** MA 237 Minimum Grade of C and (MA 311 Minimum Grade of C or MA 320 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**MA 414 Abstract Algebra II - W 3 cr**

A continuation of MA 413 focusing on rings and fields. Topics include rings, ideals, integral domains, fields and extension fields. Geometric constructions and Galois theory are introduced.

**Prerequisite:** MA 413 Minimum Grade of C and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**MA 425 Graph Theory 3 cr**

The purpose of this course is to give a first introduction to classical and modern methods in graph theory for majors in mathematics, computer science, and engineering. The goal is to enable the students to apply the basic concepts and methods in graph theory to the design and analysis of computer algorithms, to solving problems in graph theory, and to model applications in science and engineering.

**Prerequisite:** (MA 237 Minimum Grade of C or MA 320 Minimum Grade of C or MA 367 Minimum Grade of C)

**MA 434 Topology 3 cr**

An introduction to topology with emphasis on the geometric aspects of the subject. Topics covered include surfaces, topological spaces, open and closed sets, continuity, compactness, connectedness, product spaces, and identification and quotient spaces. Credit for both MA 434 and MA 542 is not allowed.

**Prerequisite:** MA 227 Minimum Grade of C and MA 237 Minimum Grade of C and MA 320 Minimum Grade of C

**MA 436 Numerical Analysis 3 cr**

This course provides an introduction to numerical analysis. Topics include numerical solutions of nonlinear equations, numerical differentiation and integration, interpolation and splines, as well as numerical methods for differential equations. An essential part of the course is the implementation and error analysis of discussed numerical methods in Python. No prior programming skills are required. Credit for both MA 436 & MA 565 is not allowed.

**Prerequisite:** MA 227 Minimum Grade of C and MA 238 (may be taken concurrently) Minimum Grade of C

**MA 437 Complex Variables 3 cr**

Arithmetic of complex numbers; regions in the complex plane, limits, continuity and derivatives of complex functions; elementary complex functions; mapping by elementary functions; contour integration, power series, Taylor series, Laurent series, calculus of residues; conformal representation; applications. Credit for both MA 437 and MA 537 not allowed.

**Prerequisite:** MA 238 Minimum Grade of C

**MA 451 Probability 3 cr**

A comprehensive introduction to probability, the mathematical theory used to model uncertainty, covering the axioms of probability, random variables, expectation, classical discrete and continuous families of probability models, the law of large numbers and the central limit theorem. Credit for both MA 451 and MA 550 is not allowed.

**Prerequisite:** MA 227 Minimum Grade of C and MA 237 Minimum Grade of C

**MA 452 Financial Mathematics 3 cr**

Introduction to financial mathematics and a brief introduction to financial economics. Students will learn about the time value of money, annuities, loans, bonds, general cash flows and portfolios, immunization, general derivatives, options, forwards and futures, swaps and hedging from the point of view of an actuarial scientist.

**Prerequisite:** MA 126 Minimum Grade of C

**MA 458 Operations Research - W 3 cr**

An introduction to linear programming. The course will include a study of the simplex method as well as using computers to solve linear systems of equations. As time permits, topics covered will include sensitivity analysis, duality, integer programming, transportation, assignment, transshipment, and networks. Credit for both MA 458 and MA 567 is not allowed.

**Prerequisite:** MA 237 Minimum Grade of C and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**MA 467 Mathematical Logic 3 cr**

An introduction to formal first-order logic, first-order metatheory, and its extensions. Topics include axiom systems and their models, completeness, compactness, and recursive sets and functions. Identical with PHL 467. Credit cannot be received for both PHL 467 and MA 467.

**Prerequisite:** (PHL 321 Minimum Grade of C or MA 320 Minimum Grade of C)

**Cross-Listed:** PHL 467

**MA 481 Cryptography 3 cr**

This course provides an introduction to classical and modern methods of message encryption and decryption (cryptography) as well as possible attacks to cryptosystems (cryptanalysis). Topics include classical (symmetric) cryptosystems (DES, AES), public-key (asymmetric) cryptosystems (Diffie-Hellman, RSA, ElGamal), modes of operation, one-way and trapdoor functions, Hash functions, cryptographic protocols. Credit for both MA 481 and MA 581 is not allowed.

**Prerequisite:** MA 311 Minimum Grade of C or (MA 126 Minimum Grade of C and MA 267 Minimum Grade of C)

**Cross-Listed:** MA 581

**MA 486 Advanced Calculus I 3 cr**

This is the first of a two-course sequence designed to provide students with the theoretical context of concepts encountered in MA 125 through MA 227. Topics covered include Completeness Axiom, sequences of real numbers, suprema and infima, Cauchy sequences, open sets and accumulation points in Euclidean space, completeness of Euclidean space, series of real numbers and vectors, compactness, Heine-Borel Theorem, connectedness, continuity, Extremum Theorem, Intermediate Value Theorem, differentiation of functions of one variable.

**Prerequisite:** (MA 227 Minimum Grade of C and MA 237 Minimum Grade of C and MA 320 Minimum Grade of C)

**Cross-Listed:** MA 334

**MA 487 Advanced Calculus II 3 cr**

This is the second of a two course sequence designed to provide students with the theoretical context of concepts encountered in MA 125 through MA 227. Topics covered include integration of functions of one variable, pointwise and uniform convergence, integration and differentiation of series, differentiable mappings of several variables, chain rule, product rule and gradients, Mean Value Theorem, Taylor's Theorem, Inverse Function Theorem, Implicit Function Theorem.

**Prerequisite:** (MA 486 Minimum Grade of C)

**Cross-Listed:** MA 335

**MA 490 Special Topics 1-3 cr**

Selected topics in advanced undergraduate mathematics. This course may be repeated for a maximum of six credits.

**MA 494 Directed Studies 1-3 cr**

Directed individual study. Requires permission of department chair.

**MA 499 Honors Senior Project - H 3-6 cr**

With the guidance and advice of a faculty mentor, honors students will identify, and carry out a research project in Mathematics. The outcome of the research project will include a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three members of the faculty, chaired by the faculty mentor.

**MA 501 Functions and Modeling 3 cr**

This course is designed for secondary mathematics education majors. The emphasis of this course is to engage in activities that will strengthen students' knowledge of common topics covered in secondary mathematics, and how these topics correlate to college mathematics. An emphasis on using multiple representations, data analysis, technology, and problem-solving is prevalent in this course. Students will also be asked to explain their reasoning through writing assignments and provide mathematical proofs to problems.

**Prerequisite:** MA 126 Minimum Grade of C

**MA 502 Intro to Abstract Algebra 3 cr**

An introduction to the fundamental concepts of modern algebra such as groups, rings, and fields through concrete examples. This course is designed for graduate students in the College of Education and Professional Studies.

**Prerequisite:** MA 126 Minimum Grade of C

**MA 503 Introduction to Analysis 3 cr**

A careful look at the elements, procedures, and applications of differential and integral calculus. This course is designed for graduate students in the College of Education and Professional Studies.

**Prerequisite:** MA 126 Minimum Grade of C

**MA 504 Introduction to Geometry 3 cr**

An introduction to the foundations of geometry using both synthetic and metric approaches. Euclidean, finite, projective, and hyperbolic geometries are discussed. The axioms for various geometries are discussed. The course is designed for graduate students in the College of Education and Professional Studies.

**Prerequisite:** MA 126 Minimum Grade of C

**MA 505 Mathematical Problem Solving 3 cr**

An in-depth activity-based approach to the methods and strategies for mathematical problem solving for students in Mathematical Education. Problems selected from logic, algebra, analysis, geometry, combinatorics, number theory and probability. This course is designed for graduate students in the College of Education and Professional Studies.

**Prerequisite:** MA 126 Minimum Grade of C

**MA 506 Statistics for Teachers 3 cr**

Prepares in-service and pre-service teachers to teach statistics in high schools using data-based approach. Uses hands-on-activities approach and simulation of situations to teach concepts and technology to teach data analysis. This course is designed for graduate students in the College of Education and Professional Studies.

**Prerequisite:** MA 126 Minimum Grade of C

**MA 507 Adv Ordinary Differential Eqns 3 cr**

A graduate-level introduction to topics of ordinary differential equations and their applications in physics and engineering.

**Prerequisite:** MA 227 Minimum Grade of C

**MA 508 Adv Partial Differential Eqns 3 cr**

A continuation of MA 507 with more emphasis on theory of partial differential equations, as well as their applications in physics and engineering problems.

**Prerequisite:** MA 227 Minimum Grade of C

**MA 511 Algebra I 3 cr**

A graduate level introduction to group theory. Topics include quotient groups, homomorphisms, group actions, Sylow theorems, composition series, simple groups, free groups, fundamental theorem of abelian groups.

**Prerequisite:** (MA 311 Minimum Grade of C) or (MA 320 Minimum Grade of C)

**MA 512 Algebra II 3 cr**

A graduate level introduction to ring theory and fields. Topics include ring homomorphisms, quotient rings, ideals, rings of fractions, Euclidean domains, principal ideal domains, unique factorization domains, modules, finite fields, field extensions.

**Prerequisite:** MA 511 Minimum Grade of C

**MA 515 Number Theory 3 cr**

Modular arithmetic, arithmetic functions; prime numbers; algebraic number theory.

**MA 516 Topics in Number Theory 3 cr**

A second course in number theory, covering topics of interest to the students and instructor.

**Prerequisite:** MA 515 Minimum Grade of C

**MA 518 Linear Algebra I 3 cr**

Fields, vector spaces, dual spaces, quotient spaces, multilinear forms, linear transformations, algebras, adjoints, eigenvalues.

**Prerequisite:** (MA 237 Minimum Grade of C)

**MA 519 Linear Algebra II 3 cr**

Triangular form, nilpotence, Jordan form, inner products, self-adjoint transformations, positive transformations, isometries, Spectral Theorem, polar decomposition, applications to analysis.

**Prerequisite:** MA 518 Minimum Grade of C

**MA 521 Enumerative Combinatorics 3 cr**

Pigeonhole principle, basic counting techniques, binomial coefficients, inclusion-exclusion principle, recurrence relations, generating functions, systems of distinct representatives, finite fields.

**Prerequisite:** (MA 320 Minimum Grade of C) or (MA 367 Minimum Grade of C)

**MA 525 Graph Theory 3 cr**

Fundamental concepts, connectedness, graph coloring, planarity and Kuratowski's theorem, four-color theorem, chromatic polynomial, Eulerian and Hamiltonian graphs, matching theory, network flows, NP-complete graph problems, Markov chains, matroids.

**Prerequisite:** (MA 320 Minimum Grade of C) or (MA 367 Minimum Grade of C) or (MA 521 Minimum Grade of C)

**MA 535 Real Analysis I 3 cr**

An introduction to real analysis. Topics include: the metric topology of the reals, limits and continuity, differentiation, Riemann-Stieltjes integral.

**Prerequisite:** Undergraduate course in advanced calculus.

**MA 536 Real Analysis II 3 cr**

A continuation of MA 535. Topics covered include sequences and series of functions, differentiation and integration in several variables, an introduction to the Lebesgue integral and differential forms as time allows.

**Prerequisite:** MA 535 Minimum Grade of C

**MA 537 Complex Analysis 3 cr**

Arithmetic of complex numbers; regions in the complex plane; limits, continuity and derivatives of complex functions; elementary complex functions; mappings by elementary functions; contour integration; power series; Taylor series; Laurent series; calculus of residues; conformal representation; applications. Credit for both MA 537 and MA 437 is not allowed.

**Prerequisite:** MA 238 Minimum Grade of C

**MA 538 Topics in Complex Analysis 3 cr**

A second course in complex analysis, covering topics of interest to the students and instructor.

**Prerequisite:** MA 537 Minimum Grade of C

**MA 539 Measure Theory 3 cr**

Foundations of the general theory of measure and integration with particular attention to the Lebesgue integral. Function spaces, product measure and Fubini's theorem, the Radon-Nikodym theorem and applications to probability theory are discussed, and possibly additional topics such as Haar measure or the Ergodic Theorem.

**Prerequisite:** MA 536 Minimum Grade of C

**MA 540 Differential Geometry 3 cr**

Local and global theory of curves and surfaces in three-dimensional space.

**Prerequisite:** (MA 227 Minimum Grade of C) or (MA 237 Minimum Grade of C) or (MA 238 Minimum Grade of C)

**MA 542 Topology I 3 cr**

An introduction to topology with emphasis on the geometric aspects of the subject. Topics covered include surfaces, topological spaces, open and closed sets, continuity, compactness, connectedness, product spaces, and identification and quotient spaces. Credit for both MA 542 and MA 434 is not allowed.

**Prerequisite:** (MA 227 Minimum Grade of C) or (MA 237 Minimum Grade of C) or (MA 320 Minimum Grade of C)

**MA 543 Topology II 3 cr**

A continuation of MA 542. Topics covered include the fundamental group, triangulations, classification of surfaces, homology, the Euler-Poincare formula, the Borsuk-Ulam theorem, the Lefschetz fixed-point theorem, knot theory, covering spaces, and applications.

**Prerequisite:** MA 542 Minimum Grade of C or MA 434 Minimum Grade of C

**MA 550 Probability 3 cr**

A comprehensive introduction to probability, the mathematical theory used to model uncertainty, covering the axioms of probability, random variables, expectation, classical discrete and continuous families of probability models, the law of large numbers and the central limit theorem. Credit for both MA 550 and MA 451 is not allowed.

**Prerequisite:** (MA 227 Minimum Grade of C or MA 237 Minimum Grade of C)

**MA 551 Theory of Statistics 3 cr**

A comprehensive introduction to the mathematical foundations of statistics. Sufficient statistics and information, parameter estimation, maximum likelihood and moment estimation, optimality properties of estimators and confidence intervals. Hypothesis testing, likelihood ratio tests and power functions. Credit for both MA 551 and ST 470 is not allowed.

**Prerequisite:** MA 451 Minimum Grade of C or MA 550 Minimum Grade of C

**MA 555 Statistical Analysis I 3 cr**

A first course in an integrated two course sequence in applied statistical theory and methods for research workers in technical fields. Coverage includes probability and basic probability models, mathematical expectations, random sampling processes and central limit theorem, estimation, hypothesis testing and power analysis, some applications of the theory of least squares. Computer assisted data analysis is used.

**MA 560 Statistical Analysis II 3 cr**

A second course (continuation of MA 555) in an integrated two-course sequence in applied statistical theory and methods for research workers in technical fields. Coverage includes regression analysis, design and analysis of experiments, factorial experiments, analysis of covariance, nonparametric analytical techniques, analysis of count data. Computer assisted data analysis is used.

**Prerequisite:** MA 555 Minimum Grade of C

**MA 565 Numerical Analysis 3 cr**

This course provides an introduction to numerical analysis. Topics include numerical solutions of nonlinear equations, numerical differentiation and integration, interpolation and splines, as well as numerical methods for differential equations. An essential part of the course is the implementation and error analysis of discussed numerical methods in Python. No prior programming skills are required. Credit for both MA 436 & MA 565 is not allowed.

**Prerequisite:** MA 238 Minimum Grade of C

**MA 567 Operations Research 3 cr**

An introduction to linear programming. The course will include a study of the simplex method as well as using computers to solve linear systems of equations. As time permits, topics covered will include sensitivity analysis, duality, integer programming, transportation, assignment, transshipment, and networks. Credit for both MA 567 and MA 458 is not allowed.

**Prerequisite:** MA 237 Minimum Grade of C

**MA 568 Topics in Operations Research 3 cr**

A second course in operations research, covering topics of interest to the students and instructor.

**Prerequisite:** MA 567 Minimum Grade of C

**MA 571 Ordinary Diff Equations 3 cr**

An introduction to ordinary differential equations from a dynamical systems perspective. Topics include existence and uniqueness theorems, dependence on initial data, linear systems and exponential of operators, stability of equilibria, Poincare-Bendixson theorem. Additional topics such as applications to population dynamics, classical mechanics, periodic attractors among others will be included at the discretion of the instructor.

**Prerequisite:** MA 518 Minimum Grade of C

**MA 572 Partial Differential Equations 3 cr**

An introduction to partial differential equations emphasizing spectral methods. Topics include elementary Hilbert spaces, Fourier series and integrals and their applications to the study of the basic partial differential equations of mathematical physics. More advanced topics such as asymptotic properties and regularity of solutions and nonlinear equations among others will be included at the discretion of the instructor.

**Prerequisite:** MA 536 Minimum Grade of C

**MA 581 Cryptography 3 cr**

This course provides an introduction to classical and modern methods of message encryption and decryption (cryptography) as well as possible attacks to cryptosystems (cryptanalysis). Topics include classical (symmetric) cryptosystems (DES, AES), public-key (asymmetric) cryptosystems (Diffie-Hellman, RSA, ElGamal), modes of operation, one-way and trapdoor functions, Hash functions, cryptographic protocols. Credit for both MA 481 and MA 581 is not allowed.

**Prerequisite:** MA 311 Minimum Grade of C or (MA 126 Minimum Grade of C and MA 267 Minimum Grade of C)

**Cross-Listed:** MA 481

**MA 590 Special Topics - 1-3 cr**

Selected topics in elementary graduate mathematics. This course may be repeated for a maximum of six credits.

**MA 592 Seminar 1 cr**

Student Seminar. Topics covered vary. This course may be repeated indefinitely, but only two credits count towards the degree. Grading system: satisfactory/unsatisfactory.

**MA 594 Directed Study 1-3 cr**

Directed individual study. Prerequisites: Approval of the department chair.

**MA 599 Thesis 1-6 cr**

Thesis. Requires approval of research prospectus by Department Graduate Committee.

**Mathematics for College (MTH)****MTH 100 Intermediate Algebra 3 cr**

This course covers the foundations required for success in Precalculus Algebra. This course will provide an introduction to manipulating and solving algebraic expression, linear and quadratic equations and inequalities. Graphing functions, lines, piecewise functions, and quadratics will be explored. The algebraic manipulation of exponents, logarithms, rational and radical expressions, and polynomials will be discussed. Practical applications and problem solving are also included. This course is a prerequisite for MA 112. Credit for both MTH 100, MTH 101 and MTH 105 is not allowed.

**MTH 101 Essentials for Precalculus 3 cr**

This course covers the foundations required for success in Precalculus Algebra. This course will provide an introduction to manipulating and solving algebraic expression, linear and quadratic equations and inequalities. Graphing functions, lines, piecewise functions, and quadratics will be explored. The algebraic manipulation of exponents, logarithms, rational and radical expressions, and polynomials will be discussed. Practical applications and problem solving are also included. This course is a corequisite support course that must be taken with MA 112. Credit for both MTH 100, MTH 101 and MTH 105 is not allowed. **Prerequisite:** (MMT 60) or (A02 18) or (SS2 18) or (S02 460) or (S12 500) **Corequisite:** MA 112

**Statistics (ST)****ST 150 Contemporary Math-Stat Seminar 1 cr**

This course gives an overview of modern mathematics and statistics from the point of view of the practitioners. The course is designed for majors in mathematics and statistics at all levels as well as those students who are considering mathematics and statistics as a major or minor area of study. Topics usually included are elements of geometry, algebra, analysis, methods of statistical inference, the role of the computer in the analytical sciences; these topics vary from semester to semester. This course cannot be taken for credit simultaneously with MA 150, but may be repeated in different semesters. NOTE: May be offered for Honors Credit.

**Cross-Listed:** MA 150

**ST 210 Stat Reason and Application 3 cr**

An introduction to modern statistics designed to provide the student with a solid foundation in statistical concepts, reasoning and applications. Emphasis given to problem identification, methodology selection and interpretation of results. Analysis of data accomplished by extensive use of statistical computer software, thereby minimizing manual computation. Coverage includes descriptive statistics, probability models, estimation, and hypothesis testing. High School level algebra is recommended. Computer Lab fee. NOTE: ST 210 is intended for students in all disciplines except Engineering and Computer Science. Credit for both ST 210 and ST 315 not allowed. May be offered for Honors Credit.

**ST 305 Applied Stat Health Sciences 3 cr**

An introduction to statistical reasoning and data analysis for the health sciences. Coverage includes descriptive statistics, methods of data collection, estimation, hypothesis testing, non-parametric statistics, ANOVA, repeated measures, correlation and other measures of association, modeling data with linear and logistic regression. Critique of selected research articles and case studies incorporating research and evidence-based practice will be adopted to connect statistics to daily work in healthcare field. Statistical computer software (e.g. Minitab) will be extensively used for data analysis. Computer Lab fee. Note: This course is offered only as a fully online course and only for health sciences students.

**Prerequisite:** MA 110 Minimum Grade of C or MA 112 Minimum Grade of C

**ST 310 Stat Research Techniques 3 cr**

This course is a continuation of ST 210. Coverage includes analysis of experimental designs such as completely randomized design, randomized block design, and factorial design using analysis of variance (ANOVA), correlation, simple and multiple regression analysis, model building, nonparametric techniques, contingency table analysis, sampling and survey methods. Time permitting topics such as time series analysis and statistical simulations will be covered. Statistical computer software will be extensively used for data analysis. Computer Lab fee. NOTE: Credit for only ONE course from ST 310, ST 315 and ST 320 is allowed.

**Prerequisite:** ST 210 Minimum Grade of C

**ST 315 Applied Probability-Statistics 3 cr**

Concepts of probability theory, discrete and continuous probability distributions including gamma, beta, exponential and Weibull, descriptive statistics, sampling, estimation, confidence intervals, testing of hypothesis, ANOVA and multiple comparisons, linear and multiple regression, correlation, nonparametric analysis, contingency table analysis, computer-assisted data analysis using appropriate statistical software. Computer Lab fee.

**Prerequisite:** MA 125 Minimum Grade of C

**ST 320 Applied Stat Analysis 3 cr**

Descriptive statistics, probability distributions, sampling, estimation, confidence intervals and hypothesis testing, experimental designs, ANOVA and multiple comparisons, linear and multiple regression, correlation, nonparametric analysis, goodness of fit, contingency table analysis, quality control, acceptance sampling, computer-assisted data analysis using appropriate statistical software. Computer Lab fee. NOTE: ST 315 and ST 320 are intended for students in Engineering, Computer Science, and Mathematics. ST 315 covers additional probability distributions while ST 320 additionally covers concepts of quality control and acceptance sampling. Students in these disciplines should consult with their academic advisor for appropriate choice between ST 315 and ST 320. Computer Lab fee. NOTE: Credit for only ONE course from ST 310, ST 315, and ST 320 is allowed.

**Prerequisite:** MA 125 Minimum Grade of C

**ST 335 Applied Regression Analysis 3 cr**

Simple, polynomial and multiple linear regression; residual and lack-of-fit analysis; simple, multiple, partial and multiple-partial correlation analysis; model building algorithms; dummy variables; analysis of covariance; model comparisons; analysis of experimental designs including messy data; nonlinear regression models; computer-assisted data analysis using appropriate statistical software. Computer Lab fee. NOTE: Satisfies the Technology Proficiency Requirement for Math/Stat majors.

**Prerequisite:** ST 210 Minimum Grade of C or ST 315 Minimum Grade of C or ST 320 Minimum Grade of C

**ST 340 Design-Analysis of Experiments 3 cr**

Principles, constructions, and analysis of experimental designs to include completely randomized, randomized complete block, Latin square and split plot designs, factorial experiments, designs with nested and/or crossed factors, multifactor experiments with randomization restrictions, transformations, incomplete block designs, multiple comparisons including contrasts, confounding, fractional replication, computer-assisted data analysis. Computer Lab fee.

**Prerequisite:** ST 210 Minimum Grade of C or ST 310 Minimum Grade of C or ST 315 Minimum Grade of C or ST 320 Minimum Grade of C

**ST 345 Sampling-Survey Techniques 3 cr**

Sampling concepts and designs for survey investigations; sampling methodologies including applications of simple random, stratified, one-and-two stage cluster, and systematic sampling; sample size determination; ratio and regression estimation; population size estimation; random response modeling; acceptance sampling including applications of single and multiple 2-class attribute sampling plans; computer-assisted data analysis using appropriate statistical software. Computer Lab fee.

**Prerequisite:** ST 210 Minimum Grade of C or ST 310 Minimum Grade of C or ST 315 Minimum Grade of C or ST 320 Minimum Grade of C

**ST 350 Applied Time Series Analysis 3 cr**

Fundamental concepts; classical regression models as forecasting models, exponential smoothings, stationary and nonstationary models, additive and multiplicative decompositions, moving average, autoregressive, ARMA and ARIMA processes, estimation in MA, AR, ARMA, and ARIMA processes. Box-Jenkins methodology, computer aided modeling, applications. Computer Lab fee.

**Prerequisite:** ST 210 Minimum Grade of C or ST 315 Minimum Grade of C or ST 320 Minimum Grade of C

**ST 355 Nonparametric Stat Methods 3 cr**

Distribution-free analysis of location and scale measures, nonparametric treatment of fundamental statistical designs, nonparametric comparison procedures, association and contingency table analysis, nonparametric goodness-of fit procedures, and tests for randomness, nonparametric regression and other measures of association, computer intensive statistical methods. Computer Lab fee.

**Prerequisite:** ST 210 Minimum Grade of C or ST 315 Minimum Grade of C or ST 320 Minimum Grade of C

**ST 415 Stat Qual Control Reliability 3 cr**

Probability distributions in quality control, inferences about process quality, control charts for attributes and variables, process capability analysis, economic design of control charts, custom charts, acceptance sampling by attributes and variables, six sigma concepts, reliability concepts, censoring, definitions and properties of survival distributions, methods of estimating and comparing reliability distributions, Kaplan-Meier estimation, burn-in models with a major emphasis on computer-assisted data analysis. Computer Lab fee.

**ST 425 Applied Linear Models 3 cr**

Some results of matrix algebra, multivariate normal distributions, distributions of quadratic forms, general linear models, design models with one factor and two factors including interaction, component-of-variance models, and computing techniques. Computer Lab fee.

**Prerequisite:** MA 237 Minimum Grade of C and ST 335 Minimum Grade of C or ST 340 Minimum Grade of C

**ST 450 Categorical Data Analysis 3 cr**

Analysis of two-way, three-way and higher dimension contingency tables using log-linear models, measures of association for nominal and ordinal tables, multiple-factor models, multiple response models, logistic regression, and weighted least squares. Computer Lab fee.

**ST 460 Multivariate Stat Analysis 3 cr**

Multivariate normal distribution, sampling distribution, hypothesis testing, principal components and introduction to factor analysis, canonical correlation analysis, discriminant and classification analysis, and MANOVA. Computer Lab fee.

**ST 470 Theory of Statistics 3 cr**

A comprehensive introduction to the mathematical foundations of statistics. Sufficient statistics and information. Parameter estimation, maximum likelihood and moment estimation, optimality properties of estimators and confidence intervals. Hypothesis testing, likelihood ratio tests and power functions. Credit for both ST 470 and MA 551 is not allowed.

**Prerequisite:** MA 451 Minimum Grade of C

**ST 475 Stat Computing and Graphics 3 cr**

Introduction to computer-assisted data analysis with statistical computer software, including SAS, R/S-Plus. Coverage includes basics of SAS, common SAS statistical procedures, high-dimensional data visualization, some elements of statistical computing such as numerical computation, semi-numerical computation, symbolic and graphical computation, and special topics selected by instructor. (Credit for ST 475 and ST 575 is not allowed. Computer Lab fee.

**Prerequisite:** ST 210 Minimum Grade of C or ST 315 Minimum Grade of C

**Cross-Listed:** ST 575

**ST 478 Stat Learning Tech in Data Sci 3 cr**

Statistical learning refers to a set of tools for modeling and understanding complex datasets. It is a recently developed area in statistics and blends with parallel developments in computer science and, in particular, machine learning. The purpose of this course is to provide the student with a foundation in modern (non-traditional) statistical learning techniques to deal with small to large complex datasets. Analysis of data is accomplished by extensive use of statistical software thereby minimizing manual computation. Coverage includes introduction to statistical learning, classification or supervised learning methods, resampling methods, linear and non-linear model selection techniques, support vector machines and tree-based methods. Credit for both ST 478 and ST 580 not allowed.

**Prerequisite:** ST 335 (may be taken concurrently) Minimum Grade of C and CSC 121 (may be taken concurrently) Minimum Grade of C

**ST 480 Statistical Practicum - W 1 cr**

Relates to the student's classroom studies with actual statistical problems encountered in practice. Working with the departmental statistical consultant, the student will participate in providing statistical assistance to research faculty in applied fields. Computer Lab fee.

**Prerequisite:** ST 335 Minimum Grade of C and ST 340 Minimum Grade of C)

**ST 490 Special Topics 1-3 cr**

Selected topics in advanced undergraduate applied statistics This course may be repeated for a maximum of six credits.

**ST 494 Directed Studies 1-3 cr**

Directed Study. May be repeated for a maximum of six credits.

**Prerequisite:** Permission of Department Chair.

**ST 499 Honor Senior Project - H 3-6 cr**

With the guidance and advice of a faculty mentor, Honors Students will identify, and carry out a research project in Statistics. The outcome of the research project will include a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three members of the faculty, chaired by the faculty mentor.

**ST 525 Appl Stat for Clinical Trials 3 cr**

This course introduces the fundamental concepts of clinical trials and statistical methods in clinical trials with examples. Topics include clinical trial design and development, randomization, blindness, sample size and power calculation, data collection and management, missing data, survival analysis, association and reproducibility, crossover trials, Bayesian adaptive methods, and others. Most of the statistical methods will be implemented using R. Procedures or subroutines from other statistical software packages, such as SAS and SPSS, will also be introduced as needed.

**Prerequisite:** ST 210 Minimum Grade of C or ST 305 Minimum Grade of C or ST 315 Minimum Grade of C or ST 540 Minimum Grade of C

**ST 540 Stat in Research I 3 cr**

A service course for graduate students in disciplines other than mathematics and statistics. A non-calculus exposition in support of application. Coverage includes descriptive statistics, probability and probability distributions, sampling, estimation, tests of significance, analysis of variance, correlation, linear, polynomial, and multiple linear regression including residual and lack of fit analysis, nonparametric procedures, contingency table analysis, and computer-assisted data analysis using appropriate computer software. Computer Lab fee.

**ST 545 Stat in Research II 3 cr**

Continuation of ST 540. Coverage includes regression analysis through matrices, multiple, partial and multiple-partial correlation analysis, model building algorithms, non-linear regression, analysis of covariance, completely randomized, randomized complete block, and factorial experimentation for equal and unequal cell replication, logistic regression, resampling, basic multivariate techniques, and computer-assisted data analysis. Computer Lab fee.

**Prerequisite:** ST 540 Minimum Grade of C

**ST 550 Environmental Statistics 3 cr**

Sampling environmental populations; parametric and nonparametric and estimation; applications of lognormal, Weibull, gamma and beta distributions; locating hot spots; censored data; outlier detection; trend analysis, seasonality; estimation of animal abundance. Computer Lab fee.

**Prerequisite:** ST 210 Minimum Grade of C or ST 315 Minimum Grade of C or ST 540 Minimum Grade of C

**ST 555 Categorical Data 3 cr**

Introduction to categorical response data, probability distributions for categorical data, statistical inference for proportions, contingency tables and measures of association, logistic regression, log-linear models for contingency tables, multi-category response models, models for matched pairs categorical response variables. Credit for both ST 450 and ST 555 is not allowed.

**Prerequisite:** ST 540 Minimum Grade of C or ST 315 Minimum Grade of C or ST 335 Minimum Grade of C

**Cross-Listed:** ST 450

**ST 560 Appl Desgn & Analysis of Exper 3 cr**

A software aided introduction to the design and analysis of experiments for univariate and multivariate data. The coverage includes designs such as block designs, factorial designs, repeated measurement designs, hierarchical designs, response surface methods, and Taguchi methods along with various ANOVA techniques for univariate data, ANCOVA for the correlated data, and MANOVA for multivariate data. Analysis of data will be accomplished by extensive use of statistical software. Computer lab fee.

**Prerequisite:** ST 540 Minimum Grade of C

**ST 570 Applied Multivariate Stat 3 cr**

This course is designed to broaden and enrich students' knowledge and understanding of statistical methodology related to multivariate techniques. It includes applications of multivariate normal distribution, sampling distribution, hypothesis testing, principal components, MANOVA, and introduction to factor analysis, canonical correlation analysis, discriminant, and classification analysis.

**Prerequisite:** (ST 540 Minimum Grade of C)

**ST 575 Stat Computing and Graphics 3 cr**

Introduction to computer-assisted data analysis with statistical computer software, including SAS, R/S-Plus. Coverage includes basics of SAS, common SAS statistical procedures, high-dimensional data visualization, some elements of statistical computing such as numerical computation, semi-numerical computation, symbolic and graphical computation, and special topics selected by instructor. (Credit for ST 475 and ST 575 is not allowed. Computer Lab fee.

**Prerequisite:** ST 210 Minimum Grade of C or ST 315 Minimum Grade of C

**Cross-Listed:** ST 475

**ST 580 Stat Learning Tech in Data Sc 3 cr**

Statistical learning refers to a set of tools for modeling and understanding complex datasets. It is a recently developed area in statistics and blends with parallel developments in computer science and, in particular, machine learning. The purpose of this course is to provide the student with a foundation in modern (non-traditional) statistical learning techniques to deal with small to large complex datasets. Analysis of data is accomplished by extensive use of statistical software thereby minimizing manual computation. Coverage includes introduction to statistical learning, classification or supervised learning methods, resampling methods, linear and non-linear model selection techniques, support vector machines and tree-based methods.

**Prerequisite:** ST 540 Minimum Grade of C

**ST 585 Nonparametric Modeling 3 cr**

This course is designed to introduce an alternative set of methodologies to existing and non-existing statistical methods with emphasis on distribution-free and robust procedures. The coverage includes distribution-free analysis of location and scale measures. Nonparametric treatment of fundamental statistical designs, nonparametric multiple comparison procedures, association and contingency table analysis, goodness-of-fit procedures. Nonparametric regression and other measures of association and computer intensive methods. Statistical computer software is intended to enhance the facility with applications of various techniques covered in this course.

**Prerequisite:** ST 335 Minimum Grade of C and ST 540 Minimum Grade of C

**ST 590 Sp Topic: 1-3 cr**

Selected topics in advanced applied statistics. This course may be repeated for a maximum of six credits.

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
ABEYNANDA, GAYAN SHANAKA (gsabeynanda@southalabama.edu)	Mathematics and Statistics	Assistant Professor	BS, Univ of Colombo MS, Louisiana State University PHD, Louisiana State University
ADAMS, JAMES RANDOM (adams@southalabama.edu)	Mathematics and Statistics	Instructor	BS, Spring Hill College MS, University of South Alabama
ALLRED, SARAH ELIZABETH (sarahallred@southalabama.edu)	Mathematics and Statistics	Assistant Professor	BS, Auburn University MS, Louisiana State University PHD, Louisiana State University
ATUTEY, OLIVIA A. (oatutey@southalabama.edu)	Mathematics and Statistics	Assistant Professor	BS, University of Ghana MS, Youngstown State University PHD, Bowling Green St U-Main Campus
BINDELE, HUYBRECHTS FRAZI (hbindele@southalabama.edu)	Mathematics and Statistics	Associate Professor	BS, Marien Ngouabi University MS, Marien Ngouabi University MS, Internatl Centre for Theo Phys PHD, Auburn University
BYRNE, MARIA A (abyrne@southalabama.edu)	Mathematics and Statistics	Associate Professor	BS, University of Notre Dame MS, University of Notre Dame PHD, University of Notre Dame
CHILUKURI, SRIDEVI (schilukuri@southalabama.edu)	Mathematics and Statistics	Instructor	BS, Kakatiya University MS, Osmania University
CLONTZ, STEVEN CRAIG (sclontz@southalabama.edu)	Mathematics and Statistics	Associate Professor	BS, Auburn University MS, Auburn University PHD, Auburn University

COLARUSSO, MARK A (mcolarusso@southalabama.edu)	Mathematics and Statistics	Associate Professor	BS, Queens University MA, University of California-San D PHD, University of California-San D
DASINGER, JACOB ARTHUR (jdasinger@southalabama.edu)	Mathematics and Statistics	Senior Instructor	BS, University of South Alabama MS, University of South Alabama PHD, University of Southern Miss
FARMER, SONNA LEIGH (sfarmer@southalabama.edu)	Mathematics and Statistics	Senior Instructor	BS, Mississippi State University MS, Mississippi State University
FURNO, JOANNA M. (jfurno@southalabama.edu)	Mathematics and Statistics	Assistant Professor	BS, Wisconsin Lutheran College PHD, University of NC- Chapel Hill
GRACE, KEVIN MANUEL (kevingrace@southalabama.edu)	Mathematics and Statistics	Assistant Professor	BS, Pensacola Christian College MS, University of South Alabama PHD, Louisiana State University
KHAIR, HUMAIRA (humairakhair@southalabama.edu)	Mathematics and Statistics	Instructor	BS, Jahangirnagar University MS, Jahangirnagar University MS, Univ of Manitoba
LIOI, JOSHUA D (jlioi@southalabama.edu)	Mathematics and Statistics	Assistant Professor	BS, Clemson University MS, University of Notre Dame PHD, University of Notre Dame
MCDONALD, TERRI LYNN (tlmcdonald@southalabama.edu)	Mathematics and Statistics	Part-Time Instructor	BS, University of South Alabama MS, University of South Alabama
MUDROCK, JEFFREY ALLEN (mudrock@southalabama.edu)	Mathematics and Statistics	Assistant Professor	BS, University of Illinois-Urbana MS, University of Illinois-Urbana PHD, Illinois Inst of Technology
MULEKAR, MADHURI S (mmulekar@southalabama.edu)	Mathematics and Statistics	Professor	BS, University of Mumbai MS, University of Mumbai PHD, Oklahoma State University
PAVELESCU, ANDREI BOGDAN (andreipavelescu@southalabama.edu)	Mathematics and Statistics	Associate Professor	BA, University of Bucharest MA, Johns Hopkins University MPHIL, University of Pennsylvania PHD, University of Southern CA
PAVELESCU, ELENA (elenapavelescu@southalabama.edu)	Mathematics and Statistics	Associate Professor	BA, University of Bucharest PHD, University of Pennsylvania
PEREIRA DE ANDRADE, NELITA CLARA (ncpereiradeandrade@southalabama.edu)	Mathematics and Statistics	Instructor	BS, University of South Alabama MS, University of South Alabama
PERERA, JAYASINGHAGE RUCHIRA NIRMALI (ruchiraperera@southalabama.edu)	Mathematics and Statistics	Assistant Professor	BS, Univ of Colombo MS, New Mexico State U-Main Campus PHD, Louisiana State University
PILLEN, CORNELIUS (pillen@southalabama.edu)	Mathematics and Statistics	Professor	MS, University of Mass-Amherst PHD, University of Mass-Amherst
PRAMANIK, PARAMAHANSA (ppramanik@southalabama.edu)	Mathematics and Statistics	Assistant Professor	BS, University of Calcutta MA, Northern Illinois University MS, Northern Illinois University PHD, Northern Illinois University
PROKHOROV, VASILIIY ALEKSEYEVICH (prokhorov@southalabama.edu)	Mathematics and Statistics	Professor	MS, Moscow State University PHD, Steklov Mathematical Institute  DSC, Steklov Mathematical Institute
STRAUB, ARMIN (straub@southalabama.edu)	Mathematics and Statistics	Associate Professor	MS, Tulane University PHD, Tulane University
SWANEPOEL, HELENE (heleneswanepoel@southalabama.edu)	Mathematics and Statistics	Part-Time Instructor	BS, North-West University MS, University of South Alabama
WAITES, LAURELIN OLSEN (laurelinwaites@southalabama.edu)	Mathematics and Statistics	Instructor	BS, University of South Alabama MS, University of South Alabama

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WILBERT, ARIK  
(wilbert@southalabama.edu)  
Mathematics and Statistics

Instructor  
BS, University of South Alabama  
MED, University of South Alabama

Assistant Professor  
BS, University of Bonn  
MS, University of Bonn  
PHD, University of Bonn

# Applied Statistics Graduate Certificate

## Degree Requirements

The Department of Mathematics and Statistics will offer a new graduate certificate in applied statistics starting Fall 2023.

The Graduate Certificate program in Applied Statistics is a four-course program that can be completed in three to four semesters alongside a graduate degree program in another discipline or as a stand-alone program by working professionals interested in expanding their knowledge in analyzing and interpreting data. It will prepare students for the job market where data analyses skills are preferred. It is aimed to:

- Provide knowledge of designing studies for data collection in a variety of situations.
- Educate students about assumptions behind different statistical methods and how to check them.
- Prepare students to identify appropriate statistical analyses techniques for given situations.
- Prepare students to perform basic statistical data analysis needed for their research.

Pre-requisite is a bachelor's degree in any discipline. Students will be required to complete 12 hours of class work, from which two courses (ST 540 and ST 545) are mandatory and the other two are to be chosen from the courses listed below. Twelve hours of course work must be completed with no grade lower than "B". A minimum 3.0 GPA is required to obtain the certificate. Possible courses are:

Code	Title	Hours
<b>Required Courses</b>		
ST 540	Stat in Research I	3
ST 545	Stat in Research II	3
<b>Elective Courses</b>		
Select two of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/mathematics-statistics/footnote1/">http://bulletin.southalabama.edu/programs-az/arts-sciences/mathematics-statistics/footnote1/</a> ) <sup>1</sup>		6
ST 525	Appl Stat for Clinical Trials	
ST 550	Environmental Statistics	
ST 555	Categorical Data	
ST 560	Appl Desgn & Analysis of Exper	
ST 570	Applied Multivariate Stat	
ST 575	Stat Computing and Graphics	
ST 580	Stat Learning Tech in Data Sc	
ST 585	Nonparametric Modeling	

ST 590	Sp Topic:
<b>Total Hours</b>	<b>12</b>

For further information about the program contact

Dr. Huybrechts Bindele  
phone: (251) 460-7294  
email: hbindele@southalabama.edu

## Footnote

<sup>1</sup> Elective courses should be chosen based on students' professional goals.

# Applied Statistics Minor Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) semester hours of courses in the minor must be completed at the University.

## Minor in Applied Statistics

Code	Title	Hours
<b>Requirements</b>		
Select one of the following (not both):		3
ST 210	Stat Reason and Application	
ST 315	Applied Probability-Statistics	
ST 335	Applied Regression Analysis	3
ST 340	Design-Analysis of Experiments	3
Select at least three of the following:		9
ST 310	Stat Research Techniques	
ST 320	Applied Stat Analysis	
ST 345	Sampling-Survey Techniques	
ST 350	Applied Time Series Analysis	
ST 355	Nonparametric Stat Methods	
ST 415	Stat Qual Control Reliability	
ST 425	Applied Linear Models	
ST 450	Categorical Data Analysis	
MA 451	Probability	
ST 460	Multivariate Stat Analysis	
ST 470	Theory of Statistics	
ST 475	Stat Computing and Graphics	
ST 478	Stat Learning Tech in Data Sci	
ST 490	Special Topics	
ST 494	Directed Studies	
ST 499	Honor Senior Project - H	
<b>Total Hours</b>		<b>18</b>

One statistics oriented course from any other discipline may be counted toward this requirement with the approval from the department chair.

### Where to Begin in the Mathematics Courses?

Students must begin at the proper level and in the proper track in mathematics. Students who lack college level credit in mathematics should take the placement exam at least 48 hours prior to registering for a mathematics course. Students must register online to take the test. Times and days of the test as well as registration information are available at the department website.

**Note 1.** To Avoid Duplication:

1. Credit for both MA 112 and MA 115 is not allowed.
2. Credit for both MA 113 and MA 115 is not allowed.
3. Credit for both MA 120 and MA 125 is not allowed.
4. Students may receive credit for only one of the following: ST 310, ST 315 or ST 320.

**Note 2.** MA 110 is not a prerequisite course for any other course required by mathematics and statistics major.

## Mathematics (MS) - Non-Thesis Option

### Degree Requirements

- Satisfy the *Graduate School's Degree Requirements for the Master's Degree*.
- A minimum of 32 semester hours of course work.
- Two two-course sequences (12 hours), selected from MA 511 & MA 512, MA 515 & MA 516, MA 518 & MA 519, MA 521 & MA 525, MA 535 & MA 536, MA 537 & MA 538, MA 542 & MA 543, MA 550 & MA 551, MA 555 & MA 560, MA 567 & MA 568, or MA 571 & MA 572 must be completed.
- Complete a project based comprehensive examination. The project must be linked to a two-course sequence approved by the graduate coordinator. The project will be evaluated by a three-person comprehensive exam committee consisting of a member of the graduate faculty chosen by the student to serve as their project mentor, the instructor of the two-course sequence chosen for the project, and the graduate coordinator. Material for the project must be agreed upon between the student and the project mentor and written up in a project description. The project description must be approved by the comprehensive exam committee prior to the semester the student intends to graduate. At the conclusion of the project, the student must present their work in a department seminar and submit a project portfolio. Both the presentation and the portfolio will be evaluated by the comprehensive exam committee. If the comprehensive exam committee deems that the student's work on the portfolio and presentation is unsatisfactory, the project-based comprehensive exam may be repeated once.
- Complete two semesters of MA 592 (Seminar).
- MA 501, MA 502, MA 503, MA 504, MA 505, MA 506 do not satisfy degree requirements.

### Policies And Procedures

The document "Department Policies and Procedures for the MS Degree Program in Mathematics" is posted on the departmental website. It contains details concerning advising, thesis, project based

comprehensive examination, graduate assistant duties, student meetings and colloquia.

## Mathematics (MS) - Non-Thesis Option with Computer Science Emphasis

### Degree Requirements

- Satisfy the *Graduate School's Degree Requirements for the Master's Degree*.
- A minimum of 32 semester hours of course work.
- A minimum of 23 semester hours of Mathematics courses including a two-course sequences (6 hours), selected from MA 511 & MA 512, MA 515 & MA 516, MA 518 & MA 519, MA 535 & MA 536, MA 537 & MA 538, MA 542 & MA 543, MA 550 & MA 551, MA 555 & MA 560, MA 567 & MA 568, or MA 571 & MA 572 must be completed.
- MA 521 or MA 525.
- A minimum of 9 semester hours of Computer Science courses approved by the Mathematics Graduate Committee.
- At least 12 semester hours of graduate electives from the following:

MA 507, MA 508, MA 511, MA 512, MA 515, MA 516, MA 518, MA 519, MA 521, MA 525, MA 537, MA 538,

MA 539, MA 540, MA 542, MA 543, MA 550, MA 551, MA 555, MA 560, MA 565, MA 567, MA 568, MA 571,

MA 572, MA 581, MA 590, MA 594.

- Complete a project based comprehensive examination. The project must be linked to a two-course sequence approved by the graduate coordinator. The project will be evaluated by a three-person comprehensive exam committee consisting of a member of the graduate faculty chosen by the student to serve as their project mentor, the instructor of the two-course sequence chosen for the project, and the graduate coordinator. Material for the project must be agreed upon between the student and the project mentor and written up in a project description. The project description must be approved by the comprehensive exam committee prior to the semester the student intends to graduate. At the conclusion of the project, the student must present their work in a department seminar and submit a project portfolio. Both the presentation and the portfolio will be evaluated by the comprehensive exam committee. If the comprehensive exam committee deems that the student's work on the portfolio and presentation is unsatisfactory, the project-based comprehensive exam may be repeated once.
- Complete two semesters of MA 592 (Seminar).
- MA 501, MA 502, MA 503, MA 504, MA 505, MA 506 do not satisfy degree requirements.

### Policies And Procedures

The document "Department Policies and Procedures for the MS Degree Program in Mathematics" is posted on the departmental website. It contains details concerning advising, thesis, project based comprehensive examination, graduate assistant duties, student meetings and colloquia.

## Mathematics (MS) - Thesis Option

### Degree Requirements

- Satisfy the *Graduate School's Degree Requirements for the Master's Degree*.
- A minimum of 32 semester hours of course work including MA 599.
- Two two-course sequences (12 hours), selected from MA 511 & MA 512, MA 515 & MA 516, MA 518 & MA 519, MA 521 & MA 525, MA 535 & MA 536, MA 537 & MA 538, MA 542 & MA 543, MA 550 & MA 551, MA 555 & MA 560, MA 567 & MA 568, or MA 571 & MA 572 must be completed.
- Complete a thesis. A thesis committee will be appointed after the student selects a major professor to direct the thesis. A maximum of 6 semester hours of credit will be granted for the thesis. A student may not enroll in MA 599 (Thesis) until a thesis prospectus has been approved by the thesis committee, the graduate coordinator and the director of graduate studies in the College of Arts and Sciences. A thesis defense is held upon the completion of the thesis. Thesis students are referred to the document *Thesis/Dissertation Preparation*, available at the Graduate School webpage.
- Complete two semesters of MA 592 (Seminar).
- MA 501, MA 502, MA 503, MA 504, MA 505, MA 506 do not satisfy degree requirements.

### Policies And Procedures

The document "Department Policies and Procedures for the MS Degree Program in Mathematics" is posted on the departmental website. It contains details concerning advising, thesis, project based comprehensive examination, graduate assistant duties, student meetings and colloquia.

## Mathematics and Statistics Major (BS)

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		<b>45</b>
A. Complete the following:		
MA 125	Calculus I	4
MA 126	Calculus II	4
ST 210	Stat Reason and Application	3
or ST 315	Applied Probability-Statistics	
MA 227	Calculus III	4
MA 237	Linear Algebra I	3
MA 238	Differential Equations I	3
ST 335	Applied Regression Analysis	3
B. Select 21 hours from see C and D below		
C. Select nine hours from the following:		
MA 410	History of Mathematics - W	
MA 413	Abstract Algebra I - W	
MA 414	Abstract Algebra II - W	
MA 425	Graph Theory	
MA 434	Topology	

MA 436	Numerical Analysis	
MA 437	Complex Variables	
MA 451	Probability	
MA 452	Financial Mathematics	
MA 458	Operations Research - W	
MA 467	Mathematical Logic	
MA 481	Cryptography	
MA 486	Advanced Calculus I	
MA 487	Advanced Calculus II	
MA 490	Special Topics	
MA 494	Directed Studies	
MA 499	Honors Senior Project - H	
ST 415	Stat Qual Control Reliability	
ST 425	Applied Linear Models	
ST 450	Categorical Data Analysis	
ST 460	Multivariate Stat Analysis	
ST 470	Theory of Statistics	
ST 475	Stat Computing and Graphics	
ST 480	Statistical Practicum - W	
ST 490	Special Topics	
ST 494	Directed Studies	
ST 499	Honor Senior Project - H	
D. Select 12 additional hours from the following:		12
MA 311	Intro to Number Theory	
MA 316	Linear Algebra II	
MA 320	Foundations of Math - W	
MA 321	Elementary Geometry	
MA 332	Differential Equations II	
MA 354	Comp Assist Math Modeling - W	
MA 367	Combinatorial Enumeration	
MA 390	Special Topics	
MA 410	History of Mathematics - W	
MA 413	Abstract Algebra I - W	
MA 414	Abstract Algebra II - W	
MA 425	Graph Theory	
MA 434	Topology	
MA 436	Numerical Analysis	
MA 437	Complex Variables	
MA 451	Probability	
MA 452	Financial Mathematics	
MA 458	Operations Research - W	
MA 467	Mathematical Logic	
MA 481	Cryptography	
MA 486	Advanced Calculus I	
MA 487	Advanced Calculus II	
MA 490	Special Topics	
MA 494	Directed Studies	
MA 499	Honors Senior Project - H	
ST 340	Design-Analysis of Experiments	
ST 345	Sampling-Survey Techniques	
ST 350	Applied Time Series Analysis	
ST 355	Nonparametric Stat Methods	

ST 415	Stat Qual Control Reliability
ST 425	Applied Linear Models
ST 450	Categorical Data Analysis
ST 460	Multivariate Stat Analysis
ST 470	Theory of Statistics
ST 475	Stat Computing and Graphics
ST 480	Statistical Practicum - W
ST 490	Special Topics
ST 494	Directed Studies
ST 499	Honor Senior Project - H

**Minor Requirements**

A minor is required for this degree program **18-24**

**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

**Notes:**

- Collaborate with the academic advisor to choose upper division electives appropriate for your educational goals.

## Graduation Plan

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
MA 125	Calculus I	4
CAS 100	First Yr Exp -	2
EH 101	English Composition I	3
Natural Scie with Lab	Area III, B <sup>1</sup>	4
Fine Arts	Area II, C <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
MA 126	Calculus II	4
EH 102	English Composition II (or Honors)	3
CA 110	Public Speaking	3
Natural Sci with Lab	Area III, B <sup>1</sup>	4
<b>Hours</b>		<b>14</b>
<b>Second Year</b>		
<b>Fall</b>		
MA 227	Calculus III	4
ST 315	Applied Probability-Statistics	3
Foreign Language I	Area II, D <sup>1</sup>	3
Math or Stats Elective	300 level or higher <sup>1</sup>	3
Minor course		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
MA 237	Linear Algebra I	3
MA 238	Differential Equations I	3
Foreign Language II	Area II, D <sup>1</sup>	3
History	Area IV, A <sup>1</sup>	3
Minor Course		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
ST 335	Applied Regression Analysis	3
Math or Stats Elective	300 level or higher <sup>1</sup>	3
English Literature	Area II, B <sup>1</sup>	3

Social/Behavioral Elective	Area IV, B <sup>1</sup>	3
Minor Course		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Math or Stats Elective	300 level or higher <sup>1</sup>	3
Math Elective	400 level <sup>1</sup>	3
Humanities	Area II, D <sup>1</sup>	3
Social/Behavioral Elective	Area IV, B <sup>1</sup>	3
Minor Course		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
Math or Stats Elective	300 level or higher <sup>1</sup>	3
MA 486	Advanced Calculus I	3
Humanities Elective	Area II, D <sup>1</sup>	3
Social/Behavioral Elective	Area IV, B <sup>1</sup>	3
Minor Course		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
MA 487	Advanced Calculus II	3
Minor Course		3
Minor Course		3
Minor Course/Elective		3
Elective		2
<b>Hours</b>		<b>14</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> See General Education Requirements

## Mathematics Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

#### Minor in Mathematics

Code	Title	Hours
<b>Requirements</b>		
MA 125	Calculus I	4
MA 126	Calculus II	4
<b>Additional Courses</b>		
Select four of the following:		10-13
MA 227	Calculus III	
MA 237	Linear Algebra I	
MA 238	Differential Equations I	
MA 267	Discrete Math Structures	
MA 311	Intro to Number Theory	
MA 316	Linear Algebra II	
MA 320	Foundations of Math - W	
MA 321	Elementary Geometry	
MA 332	Differential Equations II	
MA 354	Comp Assist Math Modeling - W	
MA 367	Combinatorial Enumeration	
MA 390	Special Topics	
MA 410	History of Mathematics - W	

MA 413	Abstract Algebra I - W
MA 414	Abstract Algebra II - W
MA 425	Graph Theory
MA 434	Topology
MA 436	Numerical Analysis
MA 437	Complex Variables
MA 451	Probability
MA 452	Financial Mathematics
MA 458	Operations Research - W
MA 467	Mathematical Logic
MA 481	Cryptography
MA 486	Advanced Calculus I
MA 487	Advanced Calculus II
MA 490	Special Topics
MA 494	Directed Studies
MA 499	Honors Senior Project - H
ST 315	Applied Probability-Statistics
<b>Total Hours</b>	<b>18-21</b>

At least two of the courses chosen for the minor must be 300 level or higher.

## Where to Begin in the Mathematics Courses?

Students must begin at the proper level and in the proper track in mathematics. Students who lack college level credit in mathematics should take the placement exam at least 48 hours prior to registering for a mathematics course. Students must register online to take the test. Times and days of the test as well as registration information are available at the department website.

### Note 1: To Avoid Duplication:

1. Credit for both MA 112 and MA 115 is not allowed.
2. Credit for both MA 113 and MA 115 is not allowed.
3. Credit for both MA 120 and MA 125 is not allowed.
4. Students may receive credit for only one of the following: ST 310, ST 315 or ST 320.

**Note 2: MA 110 is not a pre-requisite course for any other course required by mathematics and statistics major.**

## Military Science

### Department Information

Department of Military Science website  
<https://www.southalabama.edu/colleges/artsandsci/armyrotc/> (<http://www.southalabama.edu/armyrotc/>)

Our Mission: To commission the future officer leadership of the United States Army. The Military Science Department offers a progressive program which will enhance student education regardless of academic endeavor. The program is designed to improve the leadership abilities of students, develop managerial skills, inform students concerning the roles, missions, and capabilities of the Army, and train qualified ROTC students to become commissioned officers in the National Guard, U.S. Army Reserve, or the U.S. Army. Military Science is an accredited field of minor study. National Guardsmen, reservists, veterans and former JROTC

students may receive advanced placement by requesting it through the department chair.

## Requirements for Enrollment and Continuance

The general requirements for enrollment and continuance in the Army ROTC program are as follows:

1. Basic course students must:
  - Be a citizen of the United States
  - Be physically qualified
  - Have freshman or sophomore standing. Students with higher standing require consent of PMS.
2. Basic course Cadets applying for enrollment in the advanced course who seek a commission must:
  - Have successfully completed MS 101, MS 102, MS 201, MS 202, OR placement credit for the 100 and 200 level courses for prior military service, Junior ROTC, ROTC Basic Camp and equivalent military training with approval from Professor of Military Science.
  - Have two years remaining at the university (either undergraduate, graduate or in pursuit of additional course work).
  - Have completed a minimum of 30 hours to contract.
  - Be under 31 years old during year of graduation and commissioning (waiverable to 39).
  - Be enrolled as a full-time student, either at the University of South Alabama, or affiliate College or University.
  - Meet military screening and physical requirements.
  - Maintain a minimum 2.0 G.P.A.
  - Maintain B average in military science and leadership courses.

Regularly enrolled students who meet the academic prerequisites may take individual courses as electives with the permission of the department head and academic advisor.

## Basic Course

The purpose of the Army ROTC Basic Course is to introduce students to Army ROTC, to give them general information about the Army and to introduce them to basic skills which have both military and civilian application. Courses and practical exercises in land navigation, orienteering, and leadership round out the student's academic life, provide a challenge, develop confidence, and break the classroom monotony. With this initial exposure, the students will have experience upon which to base their decisions to continue into the Advanced Course and into the Army as commissioned officers. There is no military obligation in connection with the Basic Course. Contracted cadets are required to pass an Army Fitness Assessment and meet the Army Height and Weight standards at least once a semester.

MS I (MS 101-MS 102). Meets for one hour per week. Students are required to attend a two hour leadership lab every week and are encouraged to attend physical training lab three times per week for 1 hour per session. During leadership laboratory, students will participate in land navigation training, and other military activities.

MS II (MS 201-MS 202). Meets for two hours per week. All students are required to attend a two hour leadership lab every week. In addition, students are required to attend physical training lab three times per week for 1 hour per session. During leadership laboratory, students will participate in land navigation training, and other military activities.

## Cadet Summer Training (CST) Basic Camp

CST Basic Camp produces a Cadet grounded in foundational leadership doctrine and skills by following and leading; demonstrates proficiency in

individual and collective tasks at the team and squad level; can apply in a physically demanding, complex, tactical environment; who comprehends critical thinking and problem solving using TLPs; comprehends the value of diversity and understands the officer's role in leading change; understands the fundamentals of the Army as a profession. Attendance at the Basic Camp does not necessarily obligate the student to military service; it does, however, qualify the student for continuation in the Army ROTC Courses as a contracted Cadet provided eligibility criteria are met, a student can compete for a 2-year or 3-year scholarship upon graduation. See the scholarship section that follows for more information.

### **Cadet Summer Training (CST) Advanced Course**

CST Advance Camp produces a Cadet who is physically and mentally capable of leading at the platoon level; is tactically proficient; applies fundamentally sound techniques grounded in doctrine; anticipates problems; applies the Troop Leading Procedures to plan, rehearse, and execute mission context problems; applies and analyzes military education, training, and experience to exercise initiative in problem solving during tactical problems at the platoon level; applies essential components of the Army Profession nested in the cross cultural competence; capitalizes on team members' military education, training, and experience to exercise initiative in problem solving at the platoon level; communicates complex thoughts in a logical and easily understood manner and is dedicated to excellence and accepts accountability for self and assigned unit; willingly gathers input from team members to solve problems. The ROTC Program uses and extends the intellect, education, and special abilities of college students. Its primary purpose is to produce Army officers needed for the defense of our nation in time of crisis; but, in the process, it also develops the kind of Leader or Junior Executive or manager needed in every field of civilian endeavor.

MS III (MS 301-MS 302). Meets for three hours per week. All students are required to attend a two hour leadership lab once per week. In addition, students are required to attend physical training lab three times per week for 1 hour per session. Three training activities off campus will be scheduled during the school year.

MS IV (MS 401-MS 402). Meets for three hours per week. All students are required to attend a two-hour leadership lab once per week. In addition, students are required to attend physical training lab three times per week for 1 hour per session. Three training activities off campus will be scheduled during the school year.

### **Simultaneous Membership Program**

The simultaneous membership program option combines the Army ROTC with membership in the Army Reserve or Army National Guard and allows the student to receive pay from both programs. ROTC Cadets serve as officer trainees in direct leadership/management positions. Simultaneous membership program participation with National Guard or Reserve forces is one weekend per month and two weeks each year.

### **Branch Selection**

The curriculum of the Army ROTC program is designed to qualify the Cadet for appointment as an officer. Selection for assignment to the various branches of the Army is based upon the personal interests of the Cadet, the major course of study, academic accomplishments, leadership potential, and the needs of the service through the Talent Based Management System. Under this system a Cadet may be commissioned in any branch for which he or she is qualified and in which a need for officers exists. After graduation and commissioning, the officer will

attend a service school for further specialized military training which will qualify him or her for the branch to which he or she is assigned.

### **ROTC Scholarship Program**

See information provided in the chapter on financial aid.

### **Army ROTC Scholarships**

These competitive scholarships are awarded solely on potential rather than financial need and cover the costs of tuition, fees, and a flat-rate fee for books, supplies and equipment (published annually by HQ USACC) plus a monthly stipend of \$420. Four-year scholarships are available to designated freshmen, who applied and were selected during their senior year in high school. Three and two-year scholarships are available to eligible students, enrolled in the ROTC program. Two-year undergraduate or graduate school scholarships are available to students who successfully complete Basic Camp. For members of the Army Reserves and National Guard, ROTC has Guaranteed Reserve Forces Duty Scholarships (GRFD) providing the same benefits listed above.

### **Activities**

In an effort to develop maximum leadership qualities among cadets, the following organizations and activities are sponsored by ROTC as an integral part of the Army Cadet Corps:

- Color Guard: The official color guard for the University of South Alabama. Present the colors for USA and civic organizations in Mobile.
- Ranger Challenge: Students are trained in small-unit tactics and participate in ranger-type operations and competitions.
- Running Club: Participation is open to all students. Runs from 3k to 26.2 mile marathons and triathlons.
- Scabbard and Blade: Honor Society for Cadets. Cadets must meet national requirements to be a member.

### **Academic Credit**

Academic credit is granted for the completion of Military Science course requirements as follows:

Basic Course 1st Year (MS 101-MS 102)  
1st and 2nd Semester - 1 hour each - Total 2

Basic Course 2nd Year (MS 201-MS 202)  
1st and 2nd Semester - 3 hours each - Total 6 (Basic Camp in lieu of Basic Course) (6)

Advanced Course 1st Year (MS 301-MS 302)  
1st and 2nd Semester - 3 hours each - Total 6

Advanced Course 2nd Years (MS 401-MS 402) 1st and 2nd Semester - 3 hours each - Total 6

### **Auditing**

Students who do not meet qualifications for Army contracting and commissioning may be allowed to audit a Military Science course. Students desiring to audit must receive the permission of the department chair. Auditing students may not participate in drill, marching, leadership laboratory, field training exercises, voluntary programs, or attend basic or advanced camp.

## Requirements for a Commission as a Second Lieutenant in the United States Army

Students desiring a commission must complete a minimum of 23 hours of course work to include:

1. 20 hours of Military Science, including
  - a. MS 101 and MS 102;
  - b. MS 201 and MS 202;
  - c. Students can receive placement credit for the 100- and 200-level courses for prior military service, Junior ROTC, ROTC Basic Camp, and equivalent military training with PMS approval;
  - d. MS 301 and MS 302;
  - e. MS 401 and MS 402.
2. A 3 hour Military History Course (per approval from the PMS).
3. In addition to the required courses, students must contract and attend the ROTC Advance Camp for 33 days of training between the junior and senior year.

## Degrees, Programs, or Concentrations

- Military Science Minor (p. 272)

## Courses

### MS 101 Introduction to the Army 1 cr

An introductory course on the Army and basic Soldier skills. Introduces Cadets to the Army and the Profession of Arms. Students are encouraged to attend Physical Training (PT) Lab three (3) times per week for 1 hour per session and a 2 hour leadership lab every other week.

### MS 102 Foundations of Leadership 1 cr

Introduces Cadets to the personal challenges and competencies that are critical for effective leadership. Students are encouraged to attend Physical Training (PT) Lab three (3) times per week for 1 hour per session and a 2 hour leadership lab every other week.

### MS 201 Leadership and Ethics 3 cr

Focuses on leadership and ethics. The course adds depth to the Cadets knowledge of the different leadership styles. Cadets will conduct a leadership analysis of famous leaders and self-assessment of their own leadership style. Students are required to attend Physical Training (PT) Lab three (3) times per week for 1 hour per session and a 2 hour leadership lab every other week.

**Prerequisite:** MS 101 Minimum Grade of C and MS 102 Minimum Grade of C

### MS 202 Army Doctrine 3 cr

A further development of common task and leadership skills required to prepare cadets to lead small military units. Focuses on Army doctrine and decision making. The course begins with analytical techniques, creative thinking skills and the Army problem solving process as related to situations faced by leaders when making decisions. Students are required to attend Physical Training (PT) Lab three (3) times per week for 1 hour per session and a 2 hour leadership lab every other week.

**Prerequisite:** (MS 101 (may be taken concurrently) Minimum Grade of C and MS 102 (may be taken concurrently) Minimum Grade of C)

### MS 301 Training Management 3 cr

Focuses on training management and the warfighting functions. It is an academically challenging course where you will study, practice, and apply the fundamentals of Training Management and how the Army operates through the Warfighting functions. Cadets also conduct physical fitness training three times per week focusing on development of individual flexibility, muscular strength, and cardio-respiratory endurance. Students are required to attend Physical Training (PT) Lab three (3) times per week for 1 hour per session and a 2 hour leadership lab every week. Contact Hour Distributions: 3 hours and 1 lab.

### MS 302 Applied Leadership 3 cr

Focuses on applied leadership in small unit operations. It is an academically challenging course where you will study, practice, and apply the fundamentals of direct level leadership and small unit tactics at the platoon level. They also conduct military briefings and develop proficiency in the operational orders process. Cadets also conduct physical fitness training three times per week focusing on development of individual flexibility, muscular strength, and cardio-respiratory endurance. Students are required to attend Physical Training (PT) Lab three (3) times per week for 1 hour per session and a 2 hour leadership lab every week.

**Prerequisite:** MS 301 Minimum Grade of C

### MS 401 The Army Officer 3 cr

Focuses on development of the Army Officer. It is an academically challenging course where you will develop knowledge, skills and abilities to plan, resource, and assess training at the small unit level. You will also learn about Army programs that support counseling subordinates and evaluating performance, values and ethics, career planning, and legal responsibilities. In addition, MSL IVs are rotated through a variety of leadership positions that support a variety of ROTC battalion training and recruiting events throughout the semester where the MSL IV student will receive detailed and constructive feedback on their leader attributes and core leader competencies from experienced cadre. Students are required to attend Physical Training (PT) Lab three (3) times per week for 1 hour per session and a 2 hour leadership lab every week.

**Prerequisite:** MS 301 Minimum Grade of C and MS 302 Minimum Grade of C

### MS 402 Company Grade Leadership 3 cr

This course is an academically challenging course where you will develop knowledge, skills, and abilities required of junior officers pertaining to the the Army in Unified Land Operations and Company Grade Officer roles and responsibilities. Additionally, it will discuss platoon leadership, how to take charge of your platoon and the additional duties you may have as a 2LT. Students will continue to examine the Army Profession and what it means to be a professional in the U.S. Army. The overall focus is on broadening the students knowledge of the Army.

**Prerequisite:** MS 401 Minimum Grade of B

### MS 494 Directed Studies 1-3 cr

Directed study and research. May be repeated in different subject areas. Course work will be specified by the instructor prior to the beginning of the semester. Studies may include but are not limited to research papers, special projects, and leadership seminars. One and three hour courses are available.

## Faculty

### Faculty Name

HANTS, NICOLLE LANG  
(lang@southalabama.edu)

### Faculty Department

Military Science

### Faculty Position

Senior Instructor

### Degrees Held

BA, University of South Alabama

HERNANDEZ, CHRISTOPHER (chernandez@southalabama.edu)	Military Science	Instructor	BS, Wayland Baptist University
POTOCKI, JOSEPH M (joseph.m.potocki.mil@mail.mil)	Military Science	Instructor	BS, University of Maryland-Cllg Pk
SULLIVAN, MICHAEL TODD	Military Science	Assistant Professor	BS, Campbell University
SUNSDAHL, JARED J (jsunsdahl@southalabama.edu)	Military Science	Professor	MS, University of Wisconsin-Stout

## Military Science Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

#### Minor in Military Science

Completion of the 20 semester hours of MS course work and one military history elective (3) are required for a minor in Military Science. Placement credit may be awarded for the Basic Course for prior military service, attendance at ROTC Leadership Training Course, or three or four years of JROTC. Students who are already commissioned officers are not eligible to receive a minor in military science. Non-contracted students are not eligible to receive a minor in Military Science.

Code	Title	Hours
MS 101	Introduction to the Army	1
MS 102	Foundations of Leadership	1
MS 201	Leadership and Ethics	3
MS 202	Army Doctrine	3
MS 301	Training Management	3
MS 302	Applied Leadership	3
MS 401	The Army Officer	3
MS 402	Company Grade Leadership	3
Choose one Military Science History Elective from the following:		3
HY 135	US History to 1877	
HY 303	Warfare Society Modern World	
HY 346	The Second World War	
HY 348	Hitler and Nazi Germany	
HY 357	Europe Since 1945	
HY 415	Studies in Military History	
HY 435	Civil War and Reconstruction	
HY 437	Modern US II Since 1945 - W	

## Modern Languages and Literature

### Department Information

Department of Modern Languages and Literature website  
<http://southalabama.edu/colleges/artsandsci/languages/>

The department contributes to the liberal education of all students by helping them to improve their ability to communicate with and understand other cultures in an increasingly interdependent world. Language study provides direct insight into other ways of thinking and perceiving reality, and enables a fresh perspective on students' own language and culture. The department offers a major in Modern Languages and Literature with concentrations in French, German, Russian, and Spanish. Minors in those four languages, as well as a

Minor in Chinese and a Minor in Applied Linguistics, are available. An interdisciplinary Minor in Classical Studies is offered in cooperation with the Philosophy Department. Introductory and intermediate level courses in Arabic, ASL, Classical and Modern Greek, Italian, Japanese, Korean, Latin and Portuguese are also provided.

In the first-year sequences (Introductory) the student is given a basic foundation in listening, speaking, reading, and writing. Typically, the emphasis is on listening and oral practice followed by development of reading and writing skills. The second-year courses (Intermediate) build upon the skills acquired in the first year. Upper-level courses provide students with more in-depth knowledge of the countries' language, culture, literature and history. Students with previous language training will be placed at the appropriate level.

All first-time freshmen must successfully complete CAS 100 as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry.

#### Retroactive Credit Policy

Our beginning classes are designed for true beginners of the language. Students with previous experience in a language (from high school, the military, or family) are encouraged to take the online language placement exam to determine their appropriate level. Students who place into the second semester of the introductory sequence (or higher) may qualify for retroactive credit. By earning a "C" or better in the higher-level course the student may petition the department for either 3 or 6 semester hours of introductory-level credit. No credit is given for the placement test, itself. Native speakers are not eligible for retroactive credit, however they may be exempted from any language requirements. Please contact the department for details.

#### Lesser Taught Languages Program (LTLS)

Besides its four main languages, the Department also offers four semesters of instruction for several other languages as part of its Lesser Taught Languages Program. LTLS classes meet three times a week and are conducted by native-speaker coaches. Mid-term and final student performance evaluations are administered by nationally certified external examiners. As in all language classes, success in these courses requires a high degree of motivation, self-discipline, and a long-term commitment to developing oral/aural proficiency in the target language. Students must be willing to assume responsibility for learning appropriate listening and speaking skills. Before enrolling in a LTLS course students are urged to discuss course requirements and testing procedures with the program coordinator. Call (251) 460-6291 for more information.

#### Graduate Studies

Although the Department of Modern and Classical Languages and Literature has no graduate degree program, graduate-level course work is offered in several languages under the rubrics of "Special Topics," "Seminar," and "Directed Studies" in conjunction with completing

requirements in the Alternative or Innovative Master of Education Programs.

## Degrees, Programs, or Concentrations

- Applied Linguistics Minor (p. 281)
- Chinese Minor (p. 282)
- French Minor (p. 282)
- German Minor (p. 282)
- Modern Languages and Literature (BA) - French Concentration (p. 282)
- Modern Languages and Literature (BA) - German Concentration (p. 283)
- Modern Languages and Literature (BA) - Russian Concentration (p. 285)
- Modern Languages and Literature (BA) - Spanish Concentration (p. 286)
- Russian Minor (p. 287)
- Spanish Minor (p. 287)

## Courses

### Foreign Languages and Lit (LG)

#### LG 101 Introductory Latin I 3 cr

Introductory Latin I is the first half of a two-course sequence in Classical Latin. The goal of the courses is to achieve basic proficiency in understanding and reading Latin and to acquire a basic knowledge of Roman customs, history and culture.

#### LG 102 Introductory Latin II 3 cr

Introductory Latin II is the second half of a two-course sequence in Classical Latin. The goal of the courses is to achieve basic proficiency in understanding and reading Latin and to acquire a basic knowledge of Roman customs, history and culture.

**Prerequisite:** LG 101 Minimum Grade of D

#### LG 110 World Languages 3 cr

The general aim of this introductory-level course is to ground students in a basic understanding of the social, political, economic and cultural realities of language around the globe, including the importance of mastering one or more languages other than one's native tongue. Students taking the course will profit from an understanding of language value in the global marketplace and will gain new insight into their own native language through a brief examination of the structures of several of the world's major languages. The course may feature guest presenters and will also discuss techniques of language acquisition.

#### LG 111 Introductory French I 3 cr

The first of a two-semester sequence in introductory French. The goal of the two-semester sequence is to achieve a basic proficiency in understanding, speaking, reading, and writing French, and to acquire basic knowledge of French-speaking cultures. Core Course.

#### LG 112 Introductory French II 3 cr

The second semester of the introductory course. Core Course.

**Prerequisite:** LG 111 Minimum Grade of D

#### LG 121 Introductory Chinese I 3 cr

First half of the first-year sequence in Modern Standard Mandarin Chinese. Develops speaking, listening, reading and writing equally. Builds a solid foundation in pronunciation, syntax & vocabulary. Students will be able to hold simple conversations at the end.

**Cross-Listed:** LGS 121

#### LG 122 Introductory Chinese II 3 cr

Second half of the first-year sequence in Modern Standard Mandarin Chinese. Develops speaking, listening, reading and writing equally. Builds a solid foundation in pronunciation, syntax & vocabulary. Students will be able to hold simple conversations at the end.

**Prerequisite:** LG 121 Minimum Grade of D

**Cross-Listed:** LGS 122

#### LG 131 Introductory Spanish I 3 cr

The first of a two-semester sequence in introductory Spanish. The goal of the two-semester course is to achieve a basic proficiency in communication in Spanish through the development of listening, speaking, reading, and writing skills. Core Course.

#### LG 132 Introductory Spanish II 3 cr

The second semester of the introductory course. Core course.

**Prerequisite:** LG 131 Minimum Grade of D

**Cross-Listed:** LG 134

#### LG 141 Intro Classical Greek I 3 cr

Introductory Classical Greek I is the first half of a two-course sequence in Classical Greek. The goal of the courses is to achieve basic proficiency in understanding and reading Greek and to acquire a basic knowledge of ancient Greek customs, history, and culture.

#### LG 142 Intro Classical Greek II 3 cr

Introductory Classical Greek II is the second half of a two-course sequence in Classical Greek.

**Prerequisite:** LG 141 Minimum Grade of C

#### LG 151 Introductory German I 3 cr

The first of a two-semester sequence in introductory German. The goal of the two-semester course is to achieve a basic proficiency in understanding, speaking, reading, and writing German, and to acquire basic knowledge of German-speaking cultures. Core Course.

**Cross-Listed:** LG 153

#### LG 152 Introductory German II 3 cr

The second semester of the introductory course. Core Course.

**Prerequisite:** LG 151 Minimum Grade of D

#### LG 153 Accelerated Intro German 6 cr

A one-semester intensive first-year course for highly motivated students. This course covers the material taught in LG 151 and LG 152 and satisfies the Arts and Sciences Foreign Language requirement. By permission of instructor. Core Course.

**Cross-Listed:** LG 151, LG 152

#### LG 171 Introductory Russian I 3 cr

The first of a two-semester sequence in Introductory Russian. The goal of the two-semester course is to achieve a basic proficiency in understanding, speaking, reading, and writing Russian. Core Course.

#### LG 172 Introductory Russian II 3 cr

The second semester of the introductory course. Core course.

**Prerequisite:** LG 171 Minimum Grade of D

#### LG 173 Accelerated Intro Russian 6 cr

A one-semester intensive first-year course for highly motivated students with prior instruction in a foreign language (either high school or college level) with a B average or better. This course covers material taught in LG 171 and 172 and satisfies the Arts and Sciences foreign language requirement. By permission of the instructor. Usually taught in the Spring semester. Fees.

**Cross-Listed:** LG 172

**LG 190 Sp Top - 1-3 cr**

Topics to be determined by student need and interest. Course may be repeated when content varies for a total of 12 credit hours.

**LG 193 Study Abroad 1-6 cr**

This course is an introductory language and culture course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**LG 201 Intermediate Latin I 3 cr**

The first of a two-semester sequence in intermediate Latin. The course is a continuation of the study necessary to achieve fluency in reading, understanding, and translating Classical Latin. A comprehensive review of grammar is accompanied with the presentation of material beyond the scope of Introductory Latin I and II. All texts for reading and translation are presented in the original classical texts, unabridged and complete. Emphasis on the development of the periods of classical Roman literature as well as pertinent events in Roman history and culture.

**Prerequisite:** LG 102 Minimum Grade of C

**LG 202 Intermediate Latin II 3 cr**

The second of a two-semester sequence in intermediate Latin.

**Prerequisite:** LG 201 Minimum Grade of C

**LG 205 Modern Lit in Translation 3 cr**

A varying-content course designed to introduce the student to selected major works of one language other than English. Works from English-speaking countries may occasionally be used for the purpose of cross-cultural comparison. The student may choose from a number of specific topics that will be designated prior to each semester. All readings and discussions are in English. May be repeated for credit when course content varies. Foreign Language majors wishing to have one or several of these courses count toward their major must seek prior approval from their advisor.

**Prerequisite:** (EH 102 Minimum Grade of B or EH 105 Minimum Grade of B)

**LG 211 Intermediate French I 3 cr**

The first of a two-semester sequence in intermediate French. A continuation of the training necessary to achieve fluency in understanding, speaking, reading and writing French. A comprehensive grammar review is complemented by elaboration of grammatical topics and lexical development beyond the scope of Introductory French I and II. Readings of literary and cultural texts treating French-speaking areas of the world. Emphasis on fluency in conversation and cultural fluency through class discussion of both written and recorded texts from the Francophone world. Core Course.

**Prerequisite:** (LG 112 Minimum Grade of C or LG 113 Minimum Grade of C)

**LG 212 Intermediate French II 3 cr**

The second semester of the intermediate sequence. Core Course.

**Prerequisite:** LG 211 Minimum Grade of C

**Cross-Listed:** LG 213

**LG 213 Accelerated Inter French - H 4 cr**

A one-semester intensive intermediate course for students who have successfully completed LG 113 (Accelerated Introductory French-Honors), or the equivalent. This course covers material taught in LG 211 and 212. Usually taught in the Spring semester. By permission of instructor.

**Prerequisite:** LG 112 Minimum Grade of C or LG 113 Minimum Grade of C

**Cross-Listed:** LG 212

**LG 221 Intermediate Chinese I 3 cr**

First half of the second-year sequence in Modern Standard Mandarin Chinese. Furthers communicative competence in all aspects of language learning: listening, speaking, reading and writing. Students will be able to write essays at the end.

**Prerequisite:** LG 122 Minimum Grade of D

**Cross-Listed:** LGS 221

**LG 222 Intermediate Chinese II 3 cr**

Second half of the second-year sequence in Modern Standard Mandarin Chinese. Furthers communicative competence in all aspects of language learning: listening, speaking, reading and writing. Students will be able to write essays at the end.

**Prerequisite:** LG 221 Minimum Grade of D

**Cross-Listed:** LGS 222

**LG 231 Intermediate Spanish I 3 cr**

The first of a two-semester sequence in intermediate Spanish. A continuation of the training necessary to achieve fluency. Grammar review, class discussions, extensive oral and written work, short readings in literature and culture are included. Core Course.

**Prerequisite:** (LG 132 Minimum Grade of C or LG 133 Minimum Grade of C or LG 134 Minimum Grade of C)

**LG 232 Intermediate Spanish II 3 cr**

The second semester of the intermediate sequence. Core Course.

**Prerequisite:** LG 231 Minimum Grade of C

**Cross-Listed:** LG 234

**LG 234 Inter Spanish Accel -H 6 cr**

A one-semester intensive intermediate course for students who have successfully completed LG 134 (Accelerated Introductory Spanish), or the equivalent. This course covers the material taught in LG 231 and 232. Core Course. By permission of the instructor.

**Prerequisite:** (LG 132 Minimum Grade of C or LG 133 Minimum Grade of C or LG 134 Minimum Grade of C)

**Cross-Listed:** LG 232

**LG 241 Intern Classical Greek I 3 cr**

The first of a two-semester sequence in intermediate Classical Greek. The course is a continuation of the study necessary to achieve fluency in reading, understanding and translating Classical Greek. A comprehensive review of grammar is accompanied with the presentation of material beyond the scope of Introductory Classical Greek I and II. All texts for reading and translation are presented in the original classical texts, unabridged and complete. Emphasis on the development of the periods of classical Greek literature as well as pertinent events in Greek history and culture.

**Prerequisite:** LG 142 Minimum Grade of C

**LG 242 Intern Classical Greek II 3 cr**

The second of a two-semester sequence in intermediate Classical Greek.

**Prerequisite:** LG 241 Minimum Grade of C

**LG 251 Intermediate German I 3 cr**

The first of a two-semester sequence in Intermediate German. A continuation of the training necessary to achieve fluency in understanding, speaking, reading, and writing German. Reading of literary, cultural, and historical texts. Class discussions, reports in German, both oral and written, are required. Core Course.

**Prerequisite:** (LG 152 Minimum Grade of C or LG 153 Minimum Grade of C)

**LG 252 Intermediate German II 3 cr**

The second semester of the intermediate sequence. Core Course.

**Prerequisite:** LG 152 Minimum Grade of C

**LG 253 Accelerated Intermediate German 4 cr**

Intermediate German builds on skills learned in the introductory sequence (LG 151-152). In this course, students will continue to develop their faculties in listening comprehension, oral proficiency, grammatical accuracy, written ability, and cultural knowledge. Special emphasis will be placed on adding depth to reading comprehension and improving students' oral competencies. The course will be organized around ACTFL's five standards of language learning: communication, cultures, connections, comparisons, and communities. The goal of this course is to increase students' competence in all five of these areas for the German-speaking context, and to prepare student for advanced-level work. 4 credit hours. Prerequisite: LG 152, placement exam, or approval of instructor.

**Prerequisite:** LG 152 Minimum Grade of C or LG 153 Minimum Grade of C

**LG 271 Intermediate Russian I 3 cr**

The first of a two-semester sequence in intermediate Russian. A continuation of the training necessary to achieve fluency and understanding in speaking, reading, and writing Russian. Reading of literary and cultural texts. Increased practice in Russian conversation. Core Course.

**Prerequisite:** (LG 172 Minimum Grade of C or LG 173 Minimum Grade of C)

**LG 272 Intermediate Russian II 3 cr**

The second semester of intermediate Russian. Core Course.

**Prerequisite:** LG 271 Minimum Grade of C

**LG 273 Intensive Second Year Russian 4 cr**

A one-semester intensive Second Year course for students who have successfully completed the LG 171 and 172 sequence or LG 173 (Intensive First Year Russian). This course covers material taught in LG 271 and 272. By permission of instructor.

**Prerequisite:** LG 171 Minimum Grade of C and LG 172 Minimum Grade of C or LG 173 Minimum Grade of C

**LG 283 Chinese HY in Film and Lit 3 cr**

This course will introduce students to major topics in Chinese history, covering both ancient periods such as the Three Kingdoms period, and twentieth-century events such as the war with Japan and the Cultural Revolution. Post-Tiananmen Chinese society will also be stressed. Students will explore these themes through Chinese film and literature, and will thus become familiar with major directors, including Zhang Yimou and Jia Zhangke, and writers such as Yu Hua.

**Cross-Listed:** CA 283, HY 283

**LG 290 Sp Top - 1-3 cr**

Topics to be determined by student need and interest. Course may be repeated when content varies for a total of 12 hours.

**LG 293 Study Abroad 1-6 cr**

This course is an introductory language and culture course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**LG 305 Studies in Gender and Writing 3 cr**

A varying-content course that provides an in-depth study of gender-related questions in a literary and cross-cultural context. Unless otherwise indicated, all readings and discussions are in English. May be repeated for credit for a total of nine hours when course content varies. Foreign Language majors wishing to have one or several of these courses count toward their major must seek prior approval from their advisor.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**LG 311 Introduction to Literature in French I (to 1789) 3 cr**

The first part of a two-semester introduction to literature written in French touching on the major genres, authors, and literary traditions from the Medieval period until the French Revolution. The two courses (LG 311 and LG 312 do not need to be taken in order.)

**Prerequisite:** (LG 212 Minimum Grade of C or LG 213 Minimum Grade of C)

**LG 312 Introduction to Literature in French II (from 1789 to present) 3 cr**

The first part of a two-semester introduction to literature written in French touching on the major genres, authors, and literary traditions from French Revolution to the present. The two courses (LG 311 and LG 312 do not need to be taken in order.)

**Prerequisite:** (LG 212 Minimum Grade of C or LG 213 Minimum Grade of C)

**LG 314 Advanced French Conversation 1 cr**

Intensive conversation with practice using various levels of the spoken language from slang to formal speech. Emphasis on the sounds and idioms of French. The course meets one hour per week with the instructor and one hour per week for a lab session, often with a native speaker. The content of this course will vary over four consecutive semesters. This course may be repeated for a maximum of four credits.

**Prerequisite:** LG 212 Minimum Grade of C or LG 213 Minimum Grade of C

**LG 321 Advance Chinese I 3 cr**

First half of the third-year sequence in Modern Standard Mandarin Chinese. By the end, the students will be able to hold a sustained conversation, and read and write informal essays of a substantial length.

**Prerequisite:** LG 222 Minimum Grade of D

**LG 322 Advanced Chinese II 3 cr**

Second half of the third-year sequence in Modern Standard Mandarin Chinese. By the end, the students will be able to hold a sustained conversation, and read and write informal essays of a substantial length.

**Prerequisite:** LG 321 Minimum Grade of D

**LG 324 Literary Chinese 3 cr**

Introduces advanced learners of modern Chinese Mandarin to the set expressions, vocabulary, and grammar of literary Chinese that continues to be used today. By the end students are better equipped for reading formal writing in modern Chinese.

**Prerequisite:** LG 222 Minimum Grade of D or LGS 202 Minimum Grade of D or LGS 272 Minimum Grade of D

**LG 326 Advanced Communication in French 3 cr**

Advanced language course focusing on vocabulary acquisition and mastering the more complex features of French grammar. Emphasis on both written and oral communication.

**Prerequisite:** (LG 212 Minimum Grade of C or LG 213 Minimum Grade of C)

**LG 327 Adv French Comp-Conversatn - W 3 cr**

Intensive course in writing French coupled with oral presentations and activities designed to enhance the student's command of the language.

**Prerequisite:** LG 212 Minimum Grade of C or LG 213 Minimum Grade of C

**LG 333 Spanish Conversatn-Comp 3 cr**

Extensive oral and written work through a variety of activities to review and reinforce acquired language skills, emphasizing vocabulary acquisition and fluency in the language.

**Prerequisite:** (LG 232 Minimum Grade of C or LG 234 Minimum Grade of C)

**LG 334 Adv Spanish Grammar-Comp - W 3 cr**

Extensive study of major aspects of Spanish grammar with emphasis on increasing proficiency in the four language skills. Special emphasis is placed on descriptive and narrative writing.

**Prerequisite:** LG 232 Minimum Grade of C or LG 234 Minimum Grade of C

**LG 335 Commercial-Technical Spanish 3 cr**

Advanced course in written and spoken business and technical Spanish. Emphasis on writing proficiency in various aspects of business, government, technical and general commercial writing. Development of related speaking skills for commerce. Note: This course cannot be counted toward fulfilling degree requirements for B.A. concentration in Spanish.

**Prerequisite:** LG 333 Minimum Grade of C or LG 334 Minimum Grade of C

**LG 336 Intro Textual Analys Hisp Lit 3 cr**

Introductory course to literary analysis, literary and critical terminology, and genres as they appear in short works from both Spain and Latin America.

**Prerequisite:** LG 232 Minimum Grade of D or LG 234 Minimum Grade of D

**LG 337 Spanish for Medical Prof 3 cr**

LG 337 is designed for the advanced language student interested in further developing his/her linguistic proficiency in Spanish while acquiring terminology useful to the health care professional. In addition, the course affords the student an opportunity to gain insight into the health care needs of the non-English speaking Hispanic population in the U.S., as well as to begin understanding in general terms its diverse cultural milieu. The course is highly interactive and is conducted in its entirety in the target language. Note: This course cannot be counted toward fulfilling degree requirements for B.A. concentration in Spanish.

**Prerequisite:** LG 333 Minimum Grade of B and LG 334 Minimum Grade of B

**LG 338 Spanish for Legal Professions 3 cr**

Spanish for Legal Professionals introduces students to legal Spanish language as well as topics about the nature and functioning of law in the Spanish-speaking world and, in this country, the impact of the US legal system on the US-Hispanic population.

**Prerequisite:** LG 232 Minimum Grade of B or LG 333 Minimum Grade of C or LG 334 Minimum Grade of C or LG 335 Minimum Grade of C or LG 336 Minimum Grade of C

**LG 348 19th C Cntl Phl-Lit Theory 3 cr**

An examination of selected themes and issues in 19th Century Continental Philosophy and Literary Theory. Topics may include Idealism, Romanticism, Existentialism, Marxism, Freudianism. Identical with PHL 348 and EH 348. Credit cannot be received for both LG 348 and either PHL 348 or EH 348. (For LG credit, students will be required to do some coursework in their language of concentration.)

**Cross-Listed:** EH 348, PHL 348

**LG 349 20th C Cntl Phl-Lit Theory 3 cr**

An examination of selected themes and issues in 20th Century Continental Philosophy and Literary Theory. Topics may include Phenomenology, Existentialism, Hermeneutics, Structuralism, and Post-Structuralism. Identical with PHL 349 and EH 349. Credit cannot be received for both LG 349 and either PHL 349 or EH 349. (For LG credit, students will be required to do some coursework in their language of concentration.)

**Cross-Listed:** EH 349, PHL 349

**LG 351 Mythen, Marchen and Musik 3 cr**

In this course we will critically examine some of the myths and legends that form the foundation of some of Germanic civilization's most powerful cultural artifacts. By examining artistic interpretations and reinterpretations of these myths, we will come to a deeper understanding of the foundational role they play in German culture. Among the myths, legends and fairy tales we will consider are that of the hero Siegfried, the Faust myth, and the legend of Kaspar Hauser. Further, through a dialectic examination of how these myths are presented in text and music, students in this course will come to a deeper understanding of the importance of music to the totality of German culture. Composers whose work will be considered include Mozart, Beethoven, Mendelssohn and Wagner. This course will be conducted in German.

**Prerequisite:** LG 252 Minimum Grade of C

**LG 352 Crisis, Change, Transformation 3 cr**

This course explores how literature reflects various crises in the German-speaking world-cultural, linguistic, social, and political. Various literary forms, including short stories, novellas, and poems from the Middle Ages through the 21st century, will allow us to explore the source of the crisis as well as the proposed solutions, tracing these themes over the centuries. We will look at these crucial turning points, focusing on some key questions: What defines a crisis? Who (individual, family, group, nation) experiences it? How are these parties impacted? How do cultural or social or political norm shift? What kind of change, adjustment, or transformation is suggested in our text(s)? How does the crisis and/or its resolution later evolve? This course will be conducted in German.

**Prerequisite:** LG 252

**LG 361 German Lit thru Classicism 3 cr**

Origin and development of German Civilization (literature, thought, the arts, and society in a historical context) during the period of unification and industrialization, including Romanticism, Realism, Naturalism, and early Modernism. Extensive reading, class discussion, and oral and written reports in the language are required.

**Prerequisite:** LG 252 Minimum Grade of C or LG 253 Minimum Grade of C

**LG 362 German Cult-Lit 19th Century 3 cr**

Development of German civilization (literature, thought, the arts, and society in a historical context) during the period of unification and industrialization, including Romanticism, Realism, Naturalism, and early Modernism. Extensive readings, class discussions, and oral and written reports in the language are required.

**Prerequisite:** (LG 252 Minimum Grade of C or LG 253 Minimum Grade of C)

**LG 363 Modern-Contemp German Cult-Lit 3 cr**

Development of German civilization (literature, thought, the arts, and society in a historical context) from the early twentieth century through the present. Extensive readings, class discussions, and oral and written reports in the language are required.

**Prerequisite:** (LG 252 Minimum Grade of C or LG 253 Minimum Grade of C)

**LG 364 Highlights German Cult-Lit 3 cr**

A capstone course highlighting masterpieces of German literature and culture from a particular genre (e.g., the Novelle); a particular period or movement (e.g., Romanticism); an author or group of authors (e.g., Brecht); or a particular thematic focus. Extensive readings, class discussions, and oral and written reports in the language are required.

**Prerequisite:** LG 361 Minimum Grade of C or LG 362 Minimum Grade of C or LG 363 Minimum Grade of C

**LG 366 Adv German Grammar 3 cr**

Designed for the student who wishes to teach or do advanced work. Comprehensive study of formal grammar and structured practice in oral and written expression.

**Prerequisite:** (LG 252 Minimum Grade of C or LG 253 Minimum Grade of C)

**LG 367 Advanced German Conversation 3 cr**

Intensive conversation with practice in using various levels of the spoken language from slang to formal speech. Emphasis on the sounds and idioms of German. Students will gain familiarity with German cultural history, as well as contemporary political and popular culture. This course may be repeated for a maximum of six credits.

**Prerequisite:** (LG 251 (may be taken concurrently) Minimum Grade of C or LG 252 (may be taken concurrently) Minimum Grade of C)

**LG 368 Adv German Composition - W 3 cr**

Intensive course in writing German. Emphasis is on writing as a process, the communicative purposes of writing, and the development of critical reflection. Analysis of authentic texts and extensive practice in various genres of written German, including description, narrative, report, critical review, and interpretation.

**Prerequisite:** (LG 252 Minimum Grade of C or LG 253 Minimum Grade of C)

**LG 370 Special Topics - 1-3 cr**

Topics to be determined by student need and interest. Course may be repeated when content varies. A subtitle identifying the topic will be entered on the student's record.

**Prerequisite:** LG 212 (may be taken concurrently) Minimum Grade of C or LG 232 (may be taken concurrently) Minimum Grade of C or LG 252 (may be taken concurrently) Minimum Grade of C or LG 272 (may be taken concurrently) Minimum Grade of C

**LG 372 Golden Age of Russian Lit - W 3 cr**

A survey course designed to familiarize the student with the essential works of 19th century Russian literature. Students read and discuss works by Pushkin, Lermontov, Gogol, Dostoevsky, Turgenev, Tolstoy, and Chekhov. In English. Russian majors are required to read excerpts of works in Russian and to complete a course project in Russian.

**Prerequisite:** LG 272 Minimum Grade of C

**LG 373 Intensive Third Year Russian 4 cr**

A one-semester intensive Third Year course for students who have successfully completed the LG 271 and 272 sequence or LG 273 (Intensive Second Year Russian). This course is usually taught during the spring following LG 273, abroad during the summer or in the Fall following a semester abroad and acts as a bridge course. This course is meant to fill in any gaps in knowledge of Russian grammar before continuing to Advanced Grammar and Composition courses. Special attention is paid to nuances in Russian culture. By permission of instructor.

**Prerequisite:** LG 271 Minimum Grade of C and LG 272 Minimum Grade of C or LG 273 Minimum Grade of C

**LG 374 Adv Russian Grammar 3 cr**

A course designed to give students active control of the more complex features of Russian grammar. Structured practice in oral and written expression.

**Prerequisite:** LG 272 Minimum Grade of C

**LG 375 Adv Russian Conversation 2 cr**

Intensive conversation practice in using the various levels of modern spoken Russian. The course meets two hours per week. The content of this course will vary over eight consecutive semesters. This course may be repeated for a maximum of eight credits.

**Prerequisite:** LG 272 Minimum Grade of D

**LG 376 Adv Russian Composition - W 3 cr**

This course provides extensive practice in writing Russian. Students read, discuss, and write about texts which reflect the controversial and topical issues of the day.

**Prerequisite:** LG 272 Minimum Grade of C

**LG 380 Russian Poetry 3 cr**

Designed to enhance the student's overall command of spoken Russian through the study of Russia's rich poetic tradition. Russian poems and songs provide the basic materials for this course. Lectures, materials, and discussions in Russian.

**Prerequisite:** LG 272 Minimum Grade of C

**LG 381 Russian Prose in Context 3 cr**

A course designed to enhance the student's ability to read, translate, and discuss Russian texts. Students read works from both 19th and 20th century fiction, which they analyze both thematically and stylistically. Class work and assignments are geared towards increasing the student's vocabulary and understanding of Russian stylistics. All texts, lectures, and discussions in Russian.

**Prerequisite:** LG 272 Minimum Grade of C

**LG 384 Japanese Film 3 cr**

This course will introduce students to major themes in recent Japanese history, including samurai culture and other issues pertaining to social class, Westernization, the postwar family, sixties radicalism, and recent popular culture. Students will explore these themes through Japanese film and literature, and will thus become familiar with major directors, including Akira Kurosawa, Yasujiro Ozu and Juzo Itami, and novelists such as Junichiro Tanizaki and Yukio Mishima.

**Cross-Listed:** CA 284, HY 284, HY 384, LG 284

**LG 390 Special Topics - 1-6 cr**

Topics to be determined by student need and interest. Course may be repeated for a total of 12 hours.

**Prerequisite:** (LG 212 (may be taken concurrently) Minimum Grade of C or LG 213 (may be taken concurrently) Minimum Grade of C) or (LG 232 (may be taken concurrently) Minimum Grade of C or LG 234 (may be taken concurrently) Minimum Grade of C) or (LG 252 (may be taken concurrently) Minimum Grade of C or LG 253 (may be taken concurrently) Minimum Grade of C) or LG 272 (may be taken concurrently) Minimum Grade of C

**LG 393 Study Abroad 1-6 cr**

This course is an advanced language and culture course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**LG 394 Dir St PreStudy Abroad - 1 cr**

Working under the direction of their faculty advisor, language majors will prepare for their required study abroad experience through an examination of selected country-specific readings as well as cross-cultural orientation materials. Prerequisite: completion of intermediate sequence in student's concentration or equivalent.

**Prerequisite:** (LG 212 Minimum Grade of B or LG 213 Minimum Grade of B) or (LG 252 Minimum Grade of B or LG 253 Minimum Grade of B) or (LG 232 Minimum Grade of B or LG 234 Minimum Grade of B) or LG 271 Minimum Grade of B

**LG 400 Applied Linguistics 3 cr**

LG 400 is one of the required core classes for the Applied Linguistics minor. The course introduces linguistics concepts to the students and gives them the foundation needed for the higher level classes required as part of the minor. Required core course. Pre-requisite: LG/LGS 200-level sequence with a C or better and sophomore standing.

**Prerequisite:** LG 200 (may be taken concurrently) Minimum Grade of C or LGS 200 (may be taken concurrently) Minimum Grade of C

**LG 412 Readings Francophone Lit 3 cr**

Study of the literature of the Francophone world, including West and North Africa, the Caribbean, and Quebec, in their cultural and historical context.

**Prerequisite:** (LG 311 Minimum Grade of C or LG 323 Minimum Grade of C) or (LG 312 Minimum Grade of C or LG 325 Minimum Grade of C)

**LG 415 Readings in the French Novel 3 cr**

Study of the development of the novel in French from the romantic period through the contemporary novel.

**Prerequisite:** (LG 311 Minimum Grade of C or LG 323 Minimum Grade of C) or (LG 312 Minimum Grade of C or LG 325 Minimum Grade of C)

**LG 416 Identites Francaises 3 cr**

Study of how different minority groups have been represented and have represented themselves in Nineteenth and Twentieth Century French and Francophone literature, essays, and film.

**Prerequisite:** (LG 311 Minimum Grade of C or LG 323 Minimum Grade of C) or (LG 312 Minimum Grade of C or LG 325 Minimum Grade of C)

**LG 431 Hispanic Civilizations 3 cr**

In-depth study of various aspects of Hispanic civilization and its contribution to world culture; emphasis upon on geographical, historical, social, political and artistic forces. Extensive class discussion, oral and written reports in the language are required.

**Prerequisite:** LG 333 Minimum Grade of C or LG 334 Minimum Grade of C or LG 336 Minimum Grade of C

**LG 432 Rdgs in Spanish Literature 3 cr**

Representative readings reflecting major literary movements and cultural events in Spain. Extensive class discussion, oral and written reports are required.

**Prerequisite:** LG 333 Minimum Grade of C or LG 334 Minimum Grade of C or LG 336 Minimum Grade of C

**LG 433 Rdgs in Latin Amer Literature 3 cr**

Representative readings reflecting major literary movements and cultural events in Latin America. Extensive class discussions, oral and written reports are required.

**Prerequisite:** LG 333 Minimum Grade of C or LG 334 Minimum Grade of C or LG 336 Minimum Grade of C

**LG 451 The Aesthetic Lens 3 cr**

In this course we will examine the tectonic shifts in German culture and history from the founding of the Weimar Republic to the present through the lens of lyric poetry and film. For each major period-the Weimar Republic: National Socialism and Second World War; the postwar period; the rise and fall of the Berlin Wall; Reunification-we will study the major poetic voices and two films both on their own aesthetic merits and relative to the historical contexts within which they were produced. We will also analyze the relationship between these works of art and the historical context in which they were produced. This class will be conducted in German.

**Prerequisite:** LG 366 Minimum Grade of C and LG 367 Minimum Grade of C and LG 368 Minimum Grade of C

**LG 452 Love, Friendship and Family 3 cr**

Representative readings addressing the concepts of love, friendship and family in German literature over a range of historical periods.

**Prerequisite:** LG 366 Minimum Grade of C or LG 367 Minimum Grade of C or LG 368 Minimum Grade of C

**LG 480 Senior Seminar - W 3 cr**

This course is designed to broaden and enhance the study-abroad experience and to serve as a capstone to the foreign-language major. Building on the study-abroad experience, students will (1) contextualize their experience through readings, (2) continue their experience by maintaining consistent contact with the target culture, and (3) communicate their experience and their enhanced understanding of topics such as culture shock, culture stereotypes, cultural metaphors, and cross cultural comparisons of behavior and mind-set. Classes will consist of lectures, discussions of readings, and a major research paper and public presentation of their research. Capstone Course. Prerequisite: completion of the Study Abroad requirement.

**Prerequisite:** EH 102 Minimum Grade of C and IS 391 Minimum Grade of S

**LG 490 Special Topics - 1-6 cr**

Topics to be determined by student need and interest. Course may be repeated when content varies. A subtitle identifying the topic will be entered on the student's record.

**LG 492 Seminar - 1-3 cr**

A course designed for advanced students to pursue a special topic in depth through readings, critical discussions, and delivery of a seminar paper. This course may be repeated for a maximum of 6 credits.

**Prerequisite:** Normally limited to juniors and seniors.

**LG 493 Study Abroad 1-6 cr**

This course is an advanced language and culture course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**LG 494 Directed Studies- 1-3 cr**

Directed study under the supervision of a member of the foreign language faculty. This course may be repeated for a maximum of 6 credits.

Requires permission of department chair.

**LG 496 Internship - Foreign Languages 1-9 cr**

Supervised professional work with mandatory reading list and written report. This course may be repeated for a maximum of nine credits.

**Prerequisites:** Permission of the Department Chair is required.

**LG 499 Honors Senior Project - H 3-6 cr**

Under the advice and guidance of a faculty mentor Honors Students will identify and carry out a research project, relevant to the field of foreign language study, that will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty chaired by the honors mentor.

**LG 511 Intro Span for Health Profs 3 cr**

LG 511 trains healthcare professionals to effectively serve Spanish-speaking patients. Learners will acquire a sustained novice mid/novice high level of proficiency in understanding, speaking, reading, and writing Spanish for the medical field.

**Cross-Listed:** GIS 511

**LG 512 Inter Span for Health Profs 3 cr**

LG 512 expands learners' Spanish language skills through a range of assignments related to healthcare and Spanish-speaking populations.

**Prerequisite:** LG 511 Minimum Grade of C

**Cross-Listed:** GIS 512

**LG 513 Adv Span for Health Profs 3 cr**

LG 513 will develop learners' Spanish language skills and cultural competency through readings and discussions on topics related to healthcare delivery for Hispanic populations. Students will also acquire an advanced medical terminology in Spanish.

**Prerequisite:** LG 512 Minimum Grade of C

**Cross-Listed:** GIS 513

**LG 514 Pract Span for Health Profs 3 cr**

This practicum is the capstone for the Certificate in Spanish for Healthcare Professionals. Students will complete 45 hour clinical practicum at a USA-approved healthcare facility within the US or abroad.

**Prerequisite:** LG 513 (may be taken concurrently) Minimum Grade of C

**Cross-Listed:** GIS 514

**LG 590 Sp Top - 1-3 cr**

Topics to be determined by student need and interest. Content will vary. A subtitle identifying the topic will be entered on the student's record.

**LG 592 Seminar - 1-3 cr**

A course designed for graduate students to pursue a special topic in-depth with readings, critical discussion and delivery of a seminar paper.

**LG 594 Directed Studies- 1,3 cr**

Directed study under the supervision of a member of the Foreign Languages and Literatures faculty having Graduate Faculty status.

This course may be repeated for a maximum of 15 credits. **Prerequisite:** Permission of department chair.

**Foreign Lang Less Taught (LGS)****LGS 101 Introductory Japanese I 3 cr**

The first of a two-semester sequence in Introductory Japanese. The goal of the course is to introduce students to Japanese as it is spoken today. Emphasis on developing speaking and listening skills through intensive drills, exposure to basic structural patterns, and functional vocabulary. LGS 101 is a NASILP course. Core Course.

**LGS 102 Introductory Japanese II 3 cr**

A continuation of Japanese 101. Core Course.

**Prerequisite:** LGS 101 Minimum Grade of C

**LGS 106 Introductory Arabic I 3 cr**

The first of a two-semester sequence in Introductory Arabic. Its purpose is to introduce students to Arabic as it is spoken today. Emphasis on developing speaking and listening skills through intensive drills, exposure to basic structural patterns, and functional vocabulary. Study requires extensive use of audio-tapes. LGS 106 is a NASILP course. Core Course.

**LGS 107 Introductory Arabic II 3 cr**

A continuation of Arabic I. Core Course.

**Prerequisite:** LGS 106 Minimum Grade of C

**LGS 110 Intro American Sign Language I 3 cr**

The first of a two-semester sequence in introductory American Sign Language (ASL). The goal of the two semester course is to introduce students to ASL as it is used today. Emphasis is on developing skills in signing through intensive drills, exposure to basic ASL structural patterns and functional vocabulary. LGS 110 is a LTLs course.

**LGS 111 Intro American Sign Lang II 3 cr**

The second of a two-semester sequence in introductory ASL. The goal of the two-semester course is to introduce students to ASL as it is used today. Emphasis is on developing skills in signing through intensive drills, exposure to basic ASL structural patterns and functional vocabulary. LGS 111 is a LTLs course.

**Prerequisite:** LGS 110 Minimum Grade of C

**LGS 171 Introductory Korean I 3 cr**

LGS 171 is the first of a two semester sequence of Introductory Korean. The course develops speaking and listening skills, as well as reading and writing skills through intensive drills, exposure to basic structural patterns, and functional vocabulary. Core Course.

**LGS 172 Introductory Korean II 3 cr**

The second of a two-semester sequence in introductory Korean. The goal of the two-semester course is to introduce students to Korean as it is spoken today. Emphasis is on building upon skills learned in LGS 171 and developing speaking and listening skills through intensive drills, exposure to basic structural patterns and functional vocabulary. LGS 172 is an LTLs course. Core Course.

**Prerequisite:** LGS 171 Minimum Grade of C

**LGS 201 Intermediate Japanese I 3 cr**

The first of a two-semester sequence. A continuation of the training necessary to build fluency in understanding and speaking Japanese. LGS 201 is a NASLIP course. Core Course.

**Prerequisite:** (LGS 102 Minimum Grade of C or LGS 103 Minimum Grade of D)

**LGS 202 Intermediate Japanese II 3 cr**

A continuation of LGS 201. Core Course.

**Prerequisite:** LGS 201 Minimum Grade of C

**LGS 206 Intermediate Arabic I 3 cr**

The first of two-semester sequence in Intermediate Arabic. This is a continuation of Introductory Arabic II. It continues to develop speaking and listening skills as well as reading and writing skills through intensive drills, exposure to basic structural patterns, and functional vocabulary. Study requires extensive use of audio -tapes. Core course.

**Prerequisite:** (LGS 107 Minimum Grade of C or LGS 108 Minimum Grade of D)

**LGS 207 Intermediate Arabic II 3 cr**

A continuation of Intermediate Arabic I. Core Course.

**Prerequisite:** LGS 206 Minimum Grade of C

**LGS 210 Intermediate ASL I 3 cr**

The first of a two-semester sequence in intermediate ASL. This is a continuation of Introductory ASL II. It continues to develop signing and interpreting skills through intensive drills, exposure to the basic ASL structure patterns and functional vocabulary. LGS 210 is a LTL's course. Core Course

**Prerequisite:** LGS 111 Minimum Grade of C

**LGS 211 Intermediate ASL II 3 cr**

A continuation of Intermediate ASL I. LGS 211 is a LTLs course. Core Course

**Prerequisite:** LGS 210 Minimum Grade of C

**LGS 271 Intermediate Korean I 3 cr**

The first of a two-semester sequence. A continuation of the training necessary to build proficiency in understanding and speaking Korean. Core Course.

**Prerequisite:** LGS 172 Minimum Grade of C

**LGS 272 Intermediate Korean II 3 cr**

A continuation of Intermediate Korean I. Core Course.

**Prerequisite:** LGS 271 Minimum Grade of C

## Linguistics (LNG)

### LNG 300 Intro to Linguistics 3 cr

LNG 300-Introduction to Linguistics is the introductory class for the Applied Linguistics minor. It will introduce linguistics concepts to the students and give them the foundation needed for the higher level classes required as part of the minor. Required core course. Prerequisite: Sophomore standing.

**Prerequisite:** (LG 201 (may be taken concurrently) Minimum Grade of C and LG 202 (may be taken concurrently) Minimum Grade of C) or (LG 211 (may be taken concurrently) Minimum Grade of C and LG 212 (may be taken concurrently) Minimum Grade of C) or (LG 231 (may be taken concurrently) Minimum Grade of C and LG 232 (may be taken concurrently) Minimum Grade of C) or (LG 241 (may be taken concurrently) Minimum Grade of C and LG 242 (may be taken concurrently) Minimum Grade of C) or (LG 251 (may be taken concurrently) Minimum Grade of C and LG 252 (may be taken concurrently) Minimum Grade of C) or (LG 271 (may be taken concurrently) Minimum Grade of C and LG 272 (may be taken concurrently) Minimum Grade of C) or (LGS 201 (may be taken concurrently) Minimum Grade of C and LGS 202 (may be taken concurrently) Minimum Grade of C) or (LGS 206 (may be taken concurrently) Minimum Grade of C and LGS 207 (may be taken concurrently) Minimum Grade of C) or (LGS 210 (may be taken concurrently) Minimum Grade of C and LGS 211 (may be taken concurrently) Minimum Grade of C) or (LGS 221 (may be taken concurrently) Minimum Grade of C and LGS 222 (may be taken concurrently) Minimum Grade of C) or (LGS 241 (may be taken concurrently) Minimum Grade of C and LGS 242 (may be taken concurrently) Minimum Grade of C) or (LGS 261 (may be taken concurrently) Minimum Grade of C and LGS 262 (may be taken concurrently) Minimum Grade of C) or (LGS 281 (may be taken concurrently) Minimum Grade of C and LGS 282 (may be taken concurrently) Minimum Grade of C)

### LNG 305 History of Euro Languages 3 cr

LNG 305-History of European Languages is an elective class for the Applied Linguistics minor. It will introduce students to the emergence and development of the European Languages as we know them today, tracing their historical development from the beginning to the modern era. Elective course.

**Prerequisite:** LNG 300 Minimum Grade of C

### LNG 306 Contemporary Poetry and Trans 3 cr

In this course, students will broaden their knowledge of contemporary poetry in either the Chinese, French, German, Russian or Spanish language and become conversant with translation theory. They will also begin to work towards expertise in the translation of this poetry into English.

**Prerequisite:** LG 212 Minimum Grade of C or LG 232 Minimum Grade of C or LG 252 Minimum Grade of C or LG 272 Minimum Grade of C or LG 273 Minimum Grade of C

#### Faculty Name

BRITT, KRISTY LEIGH MCKENZIE  
(kbritt@southalabama.edu)

HANKS, TYLER MARSHALL  
(tmhanks@southalabama.edu)

#### Faculty Department

Modern Language & Literature

Modern Language & Literature

### LNG 400 Applied Linguistics 3 cr

LNG 400- Applied Linguistics is the second linguistics class for the Applied Linguistics minor. It will introduce Second Language Acquisition theory and concepts to the students and give them the theoretical foundation needed for the minor. This is the last required class of the Applied Linguistics minor. Required core course.

### LNG 465 Foreign Lang Pedagogy 3 cr

LNG 465-Foreign Language Pedagogy is an elective class for the Applied Linguistics minor. It will introduce students to the theories and methodologies of the surrounding second language instruction, tracing their historical development of these methodologies from the beginning to the modern era. Elective course. Special Permission of the Instructor required to enroll in course.

**Prerequisite:** LNG 300 Minimum Grade of C and LNG 400 Minimum Grade of C

### LNG 490 Special Topics- 3 cr

LNG 490-Special Topics is an elective class for the Applied Linguistics minor. A variety of topics can be covered in this class as determined by student interest and the discretion of the Director of Applied Linguistics Program. Elective course. LNG 300 and LNG 400 with a C or better.

**Prerequisite:** LNG 300 Minimum Grade of C and LNG 400 Minimum Grade of C

### LNG 494 Directed Studies- 3 cr

LNG 494 - Directed Studies is an elective class for the Applied Linguistics minor. A variety of topics can be covered in this class as determined by student interest and the discretion of the Director of Applied Linguistics Program. Elective courses.

**Prerequisite:** LNG 300 Minimum Grade of C and LNG 400 Minimum Grade of C

### LNG 496 Intern. Applied Ling 3 cr

LNG 496 - Internship in Applied Linguistics is an elective class for the Applied Linguistic minor. Allows Applied Linguistics students the opportunity for hands-on practice of the theories and methodologies learned as part of the Applied Linguistics minor. Elective course.

**Prerequisite:** LNG 465 Minimum Grade of C

### LNG 500 Introduction to Linguistics 3 cr

Introduction to Linguistics will introduce Linguistics concepts to the students and give them the foundation needed for studies in applied linguistics.

**Cross-Listed:** LNG 300

### LNG 510 Applied Linguistics 3 cr

Applied Linguistics will introduce second language acquisition theory and concepts to the students and give them the theoretical foundation needed for studies in applied linguistics.

**Cross-Listed:** LNG 400

## Faculty

#### Faculty Position

Senior Instructor

Instructor

#### Degrees Held

BA, University of South Alabama  
MA, University of CA-Santa Bar

BA, University of South Alabama  
MA, North Carolina State U-Raleigh

KHAN, ZOYA (zkhan@southalabama.edu)	Modern Language & Literature	Associate Professor	BA, Jawaharlal Nehru University MA, Jawaharlal Nehru University MA, University of Michigan-Ann Arb PHD, University of Michigan-Ann Arb
MCCREADY, SUSAN E. (smccread@southalabama.edu)	Modern Language & Literature	Professor	BA, Swarthmore College MA, University of Pennsylvania PHD, University of Pennsylvania
PETTWAY, MATTHEW JOSEPH (mjpettway@southalabama.edu)	Modern Language & Literature	Associate Professor	BA, Eastern Michigan University MA, Michigan State University PHD, Michigan State University
RAWLINSON, CODY LANE SCHMIDT (rawlinson@southalabama.edu)	Modern Language & Literature	Instructor	BA, University of Alabama MED, University of South Alabama
RICE, TERRI WILBANKS (twrice@southalabama.edu)	Modern Language & Literature	Senior Instructor	BA, Auburn University MAHS, Auburn University
RINNE, CHRISTINE RENEE (crinne@southalabama.edu)	Modern Language & Literature	Associate Professor	BA, Valparaiso University MA, Indiana University-Bloomington PHD, Indiana University-Bloomington
RODDY, HARRY L. (hroddy@southalabama.edu)	Modern Language & Literature	Associate Professor	BS, Tulane University MA, University of Texas- Austin PHD, University of Texas- Austin
TER HORST, ELEANOR E (eterhorst@southalabama.edu)	Modern Language & Literature	Associate Professor	BA, Yale University MA, University of Michigan-Ann Arb PHD, University of Michigan-Ann Arb
TORRES WAGNER, CINTHYA EVELYN (ctorres@southalabama.edu)	Modern Language & Literature	Assistant Professor	BA, Universidad Nacional Mayor de MA, Harvard University PHD, Harvard University

## Applied Linguistics Minor Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Minor in Applied Linguistics

Applied Linguistics is an interdisciplinary field that investigates and offers solutions to language-related problems in the world. Applied linguistics relies on the theories and findings of linguistics, together with the experiences and needs of language users, to engage real-world issues at the intersections of language and society, language and education, and language and power. The Minor in Applied Linguistics exposes students to a field of study that allows them to think critically about the language learning process, and to build a deeper understanding of how languages are both learned and taught successfully.

No more than 6 hours from the student's major can be counted towards the Minor in Applied Linguistics

### Minor in Applied Linguistics

Code	Title	Hours
<b>Requirements</b>		
<i>Core Courses</i>		
LG or LGS 200-level sequence ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/modern-languages-literature/footnote1/">http://bulletin.southalabama.edu/programs-az/arts-sciences/modern-languages-literature/footnote1/</a> ) <sup>1</sup>		6
LNG 300	Intro to Linguistics	3

LNG 400	Applied Linguistics	3
<i>Electives</i>		
Select three of the following:		9
LG 110	World Languages	
AN 200	Language and Culture	
LNG 305	History of Euro Languages	
EH 370	History of English Language	
EH 371	Approaches to Eng Grammar - W	
LG 326	Advanced Communication in French	
LG 366	Adv German Grammar	
LG 374	Adv Russian Grammar	
LG 334	Adv Spanish Grammar-Comp - W	
LNG 465	Foreign Lang Pedagogy	
LNG 490	Special Topics-	
LNG 494	Directed Studies-	
LNG 496	Intern. Applied Ling	
<b>Total Hours</b>		<b>21</b>

### Footnote

<sup>1</sup> Foreign Language majors may not use the language of their first concentration to fulfill this requirement.

## Chinese Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

#### Minor In Chinese

Students must complete a minimum of nine semester hours beyond the Introductory and Intermediate sequences. The student must complete three (9 hrs) upper-division courses in Chinese. *At this time, the Chinese minor can only be completed with Study Abroad. Please see the department if you are interested in this program so that we can develop a personalized plan.*

Code	Title	Hours
LG 121	Introductory Chinese I	3
LG 122	Introductory Chinese II	3
LG 221	Intermediate Chinese I	3
LG 222	Intermediate Chinese II	3
Chinese Upper Division (300/400) Electives		9
<b>Total Hours</b>		<b>21</b>

**Note:** Language majors may not minor in a different language, instead they must declare a double concentration in their major. In such cases, the minor requirement is waived.

## French Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

#### Minor in French

Students must complete a minimum of nine semester hours beyond the Introductory and Intermediate sequences. The student must complete three (9 hrs) upper-division courses in French.

Code	Title	Hours
LG 111	Introductory French I	3
LG 112	Introductory French II	3
LG 211	Intermediate French I	3
LG 212	Intermediate French II	3
French Upper Division (300/400) Electives		9
<b>Total Hours</b>		<b>21</b>

**Note:** Language majors may not minor in a different language, instead they must declare a double concentration in their major. In such cases, the minor requirement is waived.

## German Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

#### Minor in German

Students must complete a minimum of nine semester hours beyond the Introductory and Intermediate sequences. The student must complete three (9 hrs) upper-division courses in German.

Code	Title	Hours
LG 151	Introductory German I	3
LG 152	Introductory German II	3
LG 251	Intermediate German I	3
LG 252	Intermediate German II	3
German Upper Division (300/400) Electives		9
<b>Total Hours</b>		<b>21</b>

**Note:** Language majors may not minor in a different language, instead they must declare a double concentration in their major. In such cases, the minor requirement is waived.

## Modern Languages and Literature (BA) - French Concentration

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		<b>49</b>
<i>Modern Languages And Literature Core</i>		<i>25</i>
A. Complete the following:		
IS 100	Global Issues	3
LG 110	World Languages	3
LG 205	Modern Lit in Translation	3
EH 235	World Lit before 1650	3
IST 300	Global Orientn-Ed Abroad	1
LG 290	Sp Top - (on an approved study abroad program)	3
	or LG 390 Special Topics -	
LG 490	Special Topics - (on an approved study abroad program)	6
LG 480	Senior Seminar - W	3
Majors must complete 9 hours of an approved study abroad program.		
<i>French Concentration</i>		<i>24</i>
A. Complete the following sequences:		
Introductory sequence:		
LG 111	Introductory French I	3
LG 112	Introductory French II	3
Intermediate sequence:		
LG 211	Intermediate French I	6
& LG 212	and Intermediate French II	

or LG 213	Accelerated Inter French - H	
<b>B. Select six hours from the following:</b>		<b>6</b>
LG 311	Introduction to Literature in French I (to 1789)	
LG 312	Introduction to Literature in French II (from 1789 to present)	
LG 314	Advanced French Conversation	
LG 326	Advanced Communication in French	
LG 327	Adv French Comp-Conversatn - W	
LG 412	Readings Francophone Lit	
LG 415	Readings in the French Novel	
LG 416	Identites Francaises	
LG 492	Seminar -	

**Minor Or Concentration Requirements**  
 A minor in any field or a concentration in a second language is required for this degree program **18-24**  
**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

## Graduation Plan

(124 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
EH 101	English Composition I <sup>1</sup>	3
LG 111	Introductory French I	3
Natural Science with Lab	Area III, B <sup>2</sup>	4
LG 110	World Languages	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EH 102	English Composition II	3
Math course	MA 110 or higher (Area III, A) <sup>2</sup>	3
IS 100	Global Issues	3
LG 112	Introductory French II	3
Social/Behavioral Elective	Area IV <sup>2</sup>	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
CA 110	Public Speaking	3
Natural Science with Lab	Area III, B <sup>2</sup>	4
EH 235	World Lit before 1650	3
LG 211	Intermediate French I	3
Course for Minor or Concentration		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
LG 205	Modern Lit in Translation	3
EH 236	World Lit after 1650 <sup>2</sup>	3
Social/Behavioral Elective	Area IV <sup>2</sup>	4
LG 212	Intermediate French II	3
Course for Minor or Concentration		3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
History	US or Western Civilization I (Area IV) <sup>2</sup>	3
LG 326	Advanced Communication in French	3
Natural Science with Lab	Area III, B <sup>2</sup>	4

Course for Minor or Concentration		3
<b>Hours</b>		<b>13</b>
<b>Spring</b>		
LG 327	Adv French Comp-Conversatn - W	3
IST 300	Global Orientn-Ed Abroad	1
Select one French Elective of the following:		3
LG 311	Introduction to Literature in French I (to 1789)	
LG 312	Introduction to Literature in French II (from 1789 to present)	
LG 314	Advanced French Conversation	
LG 412	Readings Francophone Lit	
LG 415	Readings in the French Novel	
LG 416	Identites Francaises	
LG 492	Seminar -	
Fine Arts Elective	Area II <sup>2</sup>	3
Course for Minor or Concentration		3
<b>Hours</b>		<b>13</b>
<b>Summer</b>		
IS 391	Study Abroad -	0
French Elective Abroad	300 level or higher	3
French Elective Abroad	300 level or higher	3
French Elective Abroad	300 level or higher	3
<b>Hours</b>		<b>9</b>
<b>Fourth Year</b>		
<b>Fall</b>		
Select one French Elective of the following:		3
LG 311	Introduction to Literature in French I (to 1789)	
LG 312	Introduction to Literature in French II (from 1789 to present)	
LG 314	Advanced French Conversation	
LG 415	Readings in the French Novel	
LG 416	Identites Francaises	
LG 492	Seminar -	
Social/Behavioral Elective	Area IV <sup>2</sup>	3
Humanities Electives	Area II <sup>2</sup>	3
Course for Minor or Concentration		3
Course for Minor or Concentration		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
LG 480	Senior Seminar - W	3
Course for Minor or Concentration		3
Course for Minor or Concentration		3
Elective		3
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>124</b>

<sup>1</sup> Recommended Course  
<sup>2</sup> See General Education Requirements

## Modern Languages and Literature (BA) - German Concentration

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
	General Education (p. 96)	53-57
<b>Major Requirements</b>		<b>49</b>
	<i>Modern Languages And Literature Core</i>	25

A. Complete the following:

IS 100	Global Issues	3
LG 110	World Languages	3
LG 205	Modern Lit in Translation	3
EH 235	World Lit before 1650	3
IST 300	Global Orientn-Ed Abroad	1
LG 290	Sp Top - (on an approved study abroad program)	3
or LG 390	Special Topics -	
LG 490	Special Topics - (on an approved study abroad program)	6
LG 480	Senior Seminar - W	3
Majors must complete 9 hours of an approved study abroad program.		
<i>German Concentration</i>		24

**A. Complete the following sequences:**

Introductory sequence:

LG 151	Introductory German I	6
& LG 152	and Introductory German II	
or LG 153	Accelerated Intro German	

Intermediate sequence:

LG 251	Intermediate German I	3
LG 252	Intermediate German II	3

**B. Select two of the following:**

LG 361	German Lit thru Classicism	
LG 362	German Cult-Lit 19th Century	
LG 363	Modern-Contemp German Cult-Lit	
LG 364	Highlights German Cult-Lit	
Select two of the following:		6
LG 366	Adv German Grammar	
LG 367	Advanced German Conversation	
LG 368	Adv German Composition - W	

**Minor or Second Concentration Requirements**

A minor in any field or a concentration in a second language is required for this degree program **18-24**

**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

## Graduation Plan

(124 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
EH 101	English Composition I <sup>1</sup>	3
LG 151	Introductory German I	3
Natural Science with Lab	Area III, B <sup>2</sup>	4
LG 110	World Languages	3
<b>Hours</b>		15
<b>Spring</b>		
EH 102	English Composition II	3
MA 110	Finite Mathematics (or higher - Area III, A) <sup>2</sup>	3
IS 100	Global Issues	3
LG 152	Introductory German II	3
Social/Behavioral Elective	Area IV <sup>2</sup>	3
<b>Hours</b>		15

<b>Second Year</b>		
<b>Fall</b>		
CA 110	Public Speaking	3
Natural Science with Lab	Area III, B <sup>2</sup>	4
EH 235	World Lit before 1650	3
LG 251	Intermediate German I	3
Course for Minor or Concentration		3
<b>Hours</b>		16

<b>Spring</b>		
LG 205	Modern Lit in Translation	3
EH 236	World Lit after 1650 <sup>2</sup>	3
Social/Behavioral Elective	Area IV <sup>2</sup>	4
LG 252	Intermediate German II	3
Course for Minor or Concentration		3
<b>Hours</b>		16

<b>Third Year</b>		
<b>Fall</b>		
History	US or Western Civilization I (Area IV) <sup>2</sup>	3
Select one German Elective of the following:		3
LG 361	German Lit thru Classicism	
LG 362	German Cult-Lit 19th Century	
LG 364	Highlights German Cult-Lit	
LG 366	Adv German Grammar	
LG 367	Advanced German Conversation	
LG 368	Adv German Composition - W	
Natural Science with Lab	Area II, B <sup>2</sup>	4
Course for Minor or Concentration		3
IST 300	Global Orientn-Ed Abroad	1
Fine Arts elective	Area II <sup>2</sup>	3
<b>Hours</b>		17

<b>Spring</b>		
IS 391	Study Abroad -	0
German Elective Abroad	300 level or higher	3
German Elective Abroad	300 level or higher	3
German Elective Abroad	300 level or higher	3
Select one German Elective of the following:		3
LG 361	German Lit thru Classicism	
LG 362	German Cult-Lit 19th Century	
LG 363	Modern-Contemp German Cult-Lit	
LG 364	Highlights German Cult-Lit	
LG 366	Adv German Grammar	
LG 367	Advanced German Conversation	
LG 368	Adv German Composition - W	
Course for Minor or Concentration		3
<b>Hours</b>		15

<b>Fourth Year</b>		
<b>Fall</b>		
Select one German Elective of the following:		3
LG 311	Introduction to Literature in French I (to 1789)	
LG 312	Introduction to Literature in French II (from 1789 to present)	
LG 314	Advanced French Conversation	
LG 412	Readings Francophone Lit	
LG 415	Readings in the French Novel	
LG 416	Identites Francaises	
LG 492	Seminar -	
Social/Behavioral Elective	Area IV <sup>2</sup>	3
Humanities Elective	Area II <sup>2</sup>	3
Course for Minor or Concentration		3
Course for Minor or Concentration		3
<b>Hours</b>		15

Spring		
LG 480	Senior Seminar - W	3
Course for Minor or Concentration		3
Course for Minor or Concentration		3
Elective		3
Select one German Elective of the following:		3
LG 361	German Lit thru Classicism	
LG 362	German Cult-Lit 19th Century	
LG 363	Modern-Contemp German Cult-Lit	
LG 364	Highlights German Cult-Lit	
LG 366	Adv German Grammar	
LG 367	Advanced German Conversation	
LG 368	Adv German Composition - W	
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>124</b>

<sup>1</sup> Recommended Course

<sup>2</sup> See General Education Requirements

## Modern Languages and Literature (BA) - Russian Concentration

### Degree Requirements

At this time, the Russian concentration can only be completed with Study Abroad. Please see the department if you are interested in this program so that we can develop a personalized plan.

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		<b>49</b>
<i>Modern Languages And Literature</i>		<i>25</i>
A. Complete the following:		
IS 100	Global Issues	3
LG 110	World Languages	3
LG 205	Modern Lit in Translation	3
EH 235	World Lit before 1650	3
IST 300	Global Orientn-Ed Abroad	1
LG 290	Sp Top - (on an approved study abroad program)	3
or LG 390	Special Topics -	
LG 490	Special Topics - (on an approved study abroad program)	6
LG 480	Senior Seminar - W	3
Majors must complete 9 hours of an approved study abroad program.		
<i>Russian Concentration</i>		<i>24</i>
A. Complete the following sequences:		
Introductory sequence:		
LG 171	Introductory Russian I	6
& LG 172	and Introductory Russian II	
or LG 173	Accelerated Intro Russian	
Intermediate sequence:		
LG 271	Intermediate Russian I	3
LG 272	Intermediate Russian II	3
B. Select one or both of the following:		
LG 374	Adv Russian Grammar	3-6

LG 376	Adv Russian Composition - W	
C. Select 6-9 hours from the following to total 24 hours in the concentration:		6-9
LG 372	Golden Age of Russian Lit - W	
LG 373	Intensive Third Year Russian	
LG 374	Adv Russian Grammar	
LG 375	Adv Russian Conversation (to be taken three times for a minimum of three course credits)	
LG 376	Adv Russian Composition - W	
LG 380	Russian Poetry	
LG 381	Russian Prose in Context	

### Minor Requirements

A minor in any field or a concentration in a second language is required for this degree program 18-24

**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

## Graduation Plan

(124 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
EH 101	English Composition I <sup>1</sup>	3
LG 171	Introductory Russian I	3
Natural Science with Lab	Area III, B <sup>2</sup>	4
LG 110	World Languages	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EH 102	English Composition II	3
MA 110	Finite Mathematics (or higher - Area III, A) <sup>2</sup>	3
IS 100	Global Issues	3
LG 172	Introductory Russian II	3
Social/Behavioral Elective	Area IV <sup>2</sup>	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
CA 110	Public Speaking	3
Natural Science with Lab	Area III, B <sup>2</sup>	4
EH 235	World Lit before 1650	3
LG 271	Intermediate Russian I	3
Course for Minor or Concentration		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
LG 205	Modern Lit in Translation	3
EH 236	World Lit after 1650 <sup>2</sup>	3
Social/Behavioral Elective	Area IV <sup>2</sup>	4
LG 272	Intermediate Russian II	3
Course for Minor or Concentration		3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
History	US or Western Civilization I (Area IV) <sup>2</sup>	3
LG 374	Adv Russian Grammar	3
or LG 376	or Adv Russian Composition - W	
Natural Science with Lab	Area III, B <sup>2</sup>	4

Course for Minor or Concentration	3
<b>Hours</b>	<b>13</b>
<b>Spring</b>	
LG 327 Adv French Comp-Conversatn - W	3
IST 300 Global Orientn-Ed Abroad	1
Select one Russian Elective of the following:	3
LG 372 Golden Age of Russian Lit - W	
LG 273 Intensive Second Year Russian	
LG 374 Adv Russian Grammar	
LG 375 Adv Russian Conversation	
LG 376 Adv Russian Composition - W	
LG 380 Russian Poetry	
LG 381 Russian Prose in Context	
Fine Arts Elective Area II <sup>2</sup>	3
Course for Minor or Concentration	3
<b>Hours</b>	<b>13</b>
<b>Summer</b>	
IS 391 Study Abroad -	0
Russian Elective Abroad 300 level or higher	3
Russian Elective Abroad 300 level or higher	3
Russian Elective Abroad 300 level or higher	3
<b>Hours</b>	<b>9</b>
<b>Fourth Year</b>	
<b>Fall</b>	
Select one Russian Elective of the following:	3
LG 372 Golden Age of Russian Lit - W	
LG 273 Intensive Second Year Russian	
LG 374 Adv Russian Grammar	
LG 375 Adv Russian Conversation	
LG 376 Adv Russian Composition - W	
LG 380 Russian Poetry	
LG 381 Russian Prose in Context	
Social/Behavioral Elective Area IV <sup>2</sup>	3
Humanities Electives Area II <sup>2</sup>	3
Course for Minor or Concentration	3
Course for Minor or Concentration	3
<b>Hours</b>	<b>15</b>
<b>Spring</b>	
LG 480 Senior Seminar - W	3
Course for Minor or Concentration	3
Course for Minor or Concentration	3
Elective	3
<b>Hours</b>	<b>12</b>
<b>Total Hours</b>	<b>124</b>

<sup>1</sup> Recommended Course  
<sup>2</sup> See General Education Requirements

# Modern Languages and Literature (BA) - Spanish Concentration

## Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		<b>52</b>
<i>Modern Languages And Literature</i>		25

A. Complete the following:

IS 100	Global Issues	3
LG 110	World Languages	3
LG 205	Modern Lit in Translation	3
EH 235	World Lit before 1650	3
IST 300	Global Orientn-Ed Abroad	1
LG 290	Sp Top - (on an approved study abroad program)	3
or LG 390	Special Topics -	
LG 490	Special Topics - (on an approved study abroad program)	6
LG 480	Senior Seminar - W	3
Majors must complete 9 hours of an approved study abroad program.		
<i>Spanish Concentration</i>		<b>27</b>

A. Complete the following sequences:

Introductory Sequence:

LG 131	Introductory Spanish I	3
LG 132	Introductory Spanish II	3

Intermediate Sequence:

LG 231	Intermediate Spanish I	3
LG 232	Intermediate Spanish II	3

B. Complete the following:

LG 333	Spanish Conversatn-Comp	3
LG 334	Adv Spanish Grammar-Comp - W	3
LG 336	Intro Textual Analys Hisp Lit	3
LG 431	Hispanic Civilizations	3

C. Complete the following:

LG 432	Rdgs in Spanish Literature	3
or LG 433	Rdgs in Latin Amer Literature	

**Minor Requirements**

A minor in any field or a concentration in a second language is required for this degree program 18-24

**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

## Graduation Plan

(127 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
EH 101	English Composition I <sup>1</sup>	3
LG 131	Introductory Spanish I	3
Natural Science with Lab	Area III, B <sup>2</sup>	4
LG 110	World Languages	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EH 102	English Composition II	3
Math course	MA 110 or higher (Are)a III, A <sup>2</sup>	3
IS 100	Global Issues	3
LG 132	Introductory Spanish II	3
Social/Behavioral Elective	Area IV <sup>2</sup>	3
<b>Hours</b>		<b>15</b>

**Second Year**

<b>Fall</b>		
CA 100	Intro to Communication	3
Natural Science with Lab	Area III, B <sup>2</sup>	4
EH 235	World Lit before 1650	3
LG 231	Intermediate Spanish I	3
Course for Minor or Concentration		3

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<b>Hours</b>	<b>16</b>
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**Spring**

LG 205	Modern Lit in Translation	3
EH 236	World Lit after 1650 <sup>1</sup>	3
Social/Behavioral Elective	Area IV <sup>2</sup>	4
LG 232	Intermediate Spanish II	3
Course for Minor or Concentration		3

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<b>Hours</b>	<b>16</b>
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**Third Year**

<b>Fall</b>		
History	US or Western Civilization I (Area IV) <sup>2</sup>	3
LG 333	Spanish Conversatn-Comp	3
Natural Science with Lab	Area III, B <sup>2</sup>	4
Course for Minor or Concentration		3
LG 336	Intro Textual Analys Hisp Lit	3

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<b>Hours</b>	<b>16</b>
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**Spring**

LG 334	Adv Spanish Grammar-Comp - W	3
IST 300	Global Orientn-Ed Abroad	1
LG 431	Hispanic Civilizations	3
Fine Arts Elective	Area II <sup>2</sup>	3
Course for Minor or Concentration		3

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<b>Hours</b>	<b>13</b>
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**Summer**

IS 391	Study Abroad -	0
Spanish Elective Abroad	300 level or higher	3
Spanish Elective Abroad	300 level or higher	3
Spanish Elective Abroad	300 level or higher	3

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<b>Hours</b>	<b>9</b>
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**Fourth Year**

<b>Fall</b>		
LG 432	Rdgs in Spanish Literature	3
Social/Behavioral Elective	Area IV <sup>2</sup>	3
Humanities Elective	Area II <sup>2</sup>	3
Course for Minor or Concentration		3
Course for Minor or Concentration		3

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<b>Hours</b>	<b>15</b>
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**Spring**

LG 480	Senior Seminar - W	3
Course for Minor or Concentration		3
Course for Minor or Concentration		3
Elective		3

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<b>Hours</b>	<b>12</b>
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<b>Total Hours</b>	<b>127</b>
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<sup>1</sup> Recommended Course<sup>2</sup> See General Education Requirements

## Russian Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

#### Minor in Russian

Students must complete a minimum of nine semester hours beyond the Introductory and Intermediate sequences. The student must complete three (9 hrs) of upper-division courses in Russian.

Code	Title	Hours
LG 171	Introductory Russian I	3
LG 172	Introductory Russian II	3
LG 271	Intermediate Russian I	3
LG 272	Intermediate Russian II	3
Russian Upper Division (300/400) Electives		9
<b>Total Hours</b>		<b>21</b>

**Note:** Language majors may not minor in a different language, instead they must declare a double concentration in their major. In such cases, the minor requirement is waived.

## Spanish Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

#### Minor in Spanish

Students must complete a minimum of nine semester hours beyond the Introductory and Intermediate sequences. At least three of those nine hours must be taken on campus at the University of South Alabama. LG 333 and LG 334 are recommended. Remaining credits are to be selected from the upper-division courses in Spanish.

Code	Title	Hours
LG 131	Introductory Spanish I	3
LG 132	Introductory Spanish II	3
LG 231	Intermediate Spanish I	3
LG 232	Intermediate Spanish II	3
Spanish Upper Division (300/400) Electives		9

**Note:** Language majors may not minor in a different language, instead they must declare a double concentration in their major. In such cases, the minor requirement is waived.

## Museum Studies

### Department Information

Museum Studies Program

<http://www.southalabama.edu/colleges/artsandsci/museumstudies/>

(251) 460-6907

Title	Name
Co-Directors	Dr. Philip J. Carr, Dr. Marsha Hamilton
Affiliates	Dr. Kara Burns
	Dr. Patrick Cesarini
	Dr. Kern Jackson
	Ms. Jennifer Knutson
	Dr. Christina Lindeman
	Dr. David Meola
	Dr. Erin Nelson
	Dr. Elizabeth Rivenbark
	Dr. Jason Strickland
	Dr. Lorraine Ahem

Museums, institutions dedicated to the acquisition, preservation, study, and exhibition of works of artistic, historical, or scientific value, play an integral role in today's societies through the act of discovery and the preservation of knowledge of both the past and present. The Museum Studies Program, using an interdisciplinary approach (e.g. humanities, social sciences, visual arts), offers a minor that allows students to gain a firm understanding of the histories, theories and skills involved in museum work. The minor in Museum Studies provides basic preparation to enter the museum industry by introducing students to both the variety of roles played by museums in today's societies and the diversity of museum careers.

For additional information about the program, please contact:

Dr. Philip Carr  
Museum Studies Program  
Archaeology Museum, ARCM 107  
6052 USA Drive South  
University of South Alabama 36688-0001  
Phone (251) 460-6907  
E-mail address [pcarr@southalabama.edu](mailto:pcarr@southalabama.edu); or

Dr. Marsha Hamilton  
Department of History  
5991 USA Drive North, Room 344  
University of South Alabama  
Mobile, AL 36688-0001  
e-mail address [mhamilton@southalabama.edu](mailto:mhamilton@southalabama.edu) (<http://bulletin.southalabama.edu/programs-az/arts-sciences/museum-studies/>)  
[mailtomhamilton@southalabama.edu](mailto:mailtomhamilton@southalabama.edu):/).

## Degrees, Programs, or Concentrations

- Museum Studies Minor (p. 291)

## Courses

### African-American Studies (AFR)

#### AFR 101 Intro to African Amer Studies 3 cr

An interdisciplinary investigation of the origins, experiences, conditions, accomplishments and contributions of people of African ancestry in the United States.

## College of Arts/Sciences (CAS)

### CAS 100 First Yr Exp - 2 cr

A course for first-year students majoring in the College of Arts & Sciences that assists with maximizing the student's potential to achieve academic success and to adjust responsibly to the individual and interpersonal challenges presented by college life. Taught in small groups, the course provides an introduction to the nature of higher education and a general orientation to the functions and resources of the University.

### CAS 190 Special Topics - 1-3 cr

This variable content course deals with selected topics from any of the disciplines in the College of Arts and Sciences. Topics will focus on current and relevant issues and may contain a service-learning component. The course may be repeated for credit when the topic varies for a maximum of six credit hours.

## Gerontology (GRN)

### GRN 272 Gender and Aging 3 cr

This course examines the dynamics of gender and aging within society from an interdisciplinary perspective. Students will be introduced to controversies in gender over the life course. These include, but are not limited to, definitions and cultural boundaries, gender in childhood, gender and relationships, gender in education and the workplace, gender and sexuality, as well as gender in late life.

### GRN 290 Special Topics - 3 cr

This designation is used for interdisciplinary courses on aging on a variety of subjects. This course does not replace any course in a single discipline. May be repeated as long as the topic changes, to maximum of six semester hours.

### GRN 435 Health Disparities Life Span 3 cr

This course examines differences in health status across the life span. The course will focus heavily on racial/ethnic and socioeconomic disparities in health applying a social determinants' of health framework. Issues that will be considered include how income, education, neighborhood conditions, access to health care, and other community factors shape opportunities to be healthy. The course is cross-listed as SY 435 and GRN 435 and has been approved as an elective for the Undergraduate Certificate in Gerontology and the interdisciplinary minor in Gerontology.

**Prerequisite:** SY 109 Minimum Grade of D

**Cross-Listed:** SY 435

### GRN 490 Special Topics 3 cr

This course is designated for upper division students and graduate students, particularly those pursuing studies for the Certificate of Gerontology. The course content focuses on interdisciplinary treatments on various topics on aging. This course does not replace any course in a single discipline. (Examples of special topics: Trends and Issues in Gerontology; Leadership and Advocacy in Gerontology; Housing and Lifestyle Changes over the Life Course). May be repeated as long as the topic changes, to maximum of six semester hours.

**Prerequisite:** SY 372 Minimum Grade of D

### GRN 494 Directed Studies 1-3 cr

Under the guidance of a faculty member, the student will pursue directed research on readings of an approved topic in Gerontology. May be repeated as long as the topic changes, to a maximum of six semester hours. Requires permission of Director of Gerontology.

**Prerequisite:** SY 372 Minimum Grade of D

**GRN 496 Internship - Gerontology 3,6 cr**

This course is to provide a practicum experience in gerontology in a setting selected by the student and approved by the Program Director. The course emphasis is on the experiential learning process and outcomes. The undergraduate student will apply theoretical concepts in specific areas of interest related to aging and intergenerational relations. Interns will meet as a group three times during the semester for orientation, professional development, and evaluation activities. The 3-hour internship requires 100 contact hours; the 6-hour internship requires 200 hours. Permission of Director of Gerontology is required.

**Prerequisite:** SY 372 Minimum Grade of C

**GRN 535 Health Disparities Life Span 3 cr**

The main purpose of this seminar is to provide students with an understanding of how social factors contribute to racial/ethnic, socioeconomic and gender disparities in health and health care. We will examine how dyadic relationships such as interpersonal forms of discrimination, marriage, and social ties may contribute to health disparities. We will also examine the ways in which neighborhood and community context, as well as inequalities in socioeconomic status materially shape health and access to health care services. The course is cross-listed as GRN 435/535 and SY 435/535 and has been approved as an elective for the Undergraduate/Graduate Certificate in Gerontology and the interdisciplinary minor in Gerontology.

**Cross-Listed:** SY 535

**GRN 594 Dir St in Gerontology - 1-3 cr**

Under the guidance of a faculty member, the student will pursue directed research or readings of an approved topic in Gerontology. May be repeated as long as the topic changes, to maximum of six credit hours. Requires permission of the Director of Gerontology.

**GRN 596 Internship - Gerontology 3,6 cr**

This course is to provide a practicum experience in gerontology in a setting selected by the student and approved by the Program Director. The course emphasis is on the experiential learning process and outcomes. The graduate student will apply theoretical concepts to leadership roles, conducting research and influencing social and health care policies related to aging and intergenerational relationships. Interns will meet as a group three times during the semester for orientation, professional development, and evaluation activities. The 3-hour internship requires 100 contact hours; the 6-hour internship requires 200 hours. Permission of Director of Gerontology is required.

**Prerequisite:** SY 523 Minimum Grade of B

**GRN 597 GRN Teaching Apprenticeship 1-3 cr**

Directed Studies/Apprenticeship that focuses on teaching Gerontology. The student will work directly with a member of the Gerontology graduate faculty to learn pedagogy, innovation in teaching, and course content that will equip the student for future teaching assignments. Many PhD programs offer both Teaching Assistantships and Research Assistantships. Gerontology students need to show evidence that they have had some teaching-related experience to compete strongly for the TA position. This course is also appropriate for students who anticipate careers in teaching within the field of Gerontology (aging or intergenerational studies). Arrangements must be made prior to registration. Permission of the Program Director is required.

**Prerequisite:** SY 372 Minimum Grade of C

**Gender Studies (GS)****GS 101 Intro to Gender Studies 3 cr**

This course provides an interdisciplinary, multicultural overview of the concept of gender and gender roles in patriarchal society. This course examines the social construction of gender in our society and how that has shaped such areas as economics, politics, cultural/social values, and the impact upon women and men in historical and contemporary terms.

**GS 290 Sp Tp-#MeToo, Black Lives Matter & Beyond 3 cr**

Study of selected topics with an area in gender studies. May be repeated for credit when content varies.

**GS 301 Moving Beyond Diversity 3 cr**

This course explores ways of fighting injustice and dismantling systemic oppression for those who are being disproportionately impacted generationally. The course offers a framework for activism that focuses on creating a culture that stands up for what is right by fighting against normalizing cycles of perpetuated injustices. Students will examine diverse perspectives that center on the capacity to mobilize solidarity for those efforts, strategies, and practices that negate performative allyship with systems-changing action for today's realities.

**GS 302 Black Women and Activism 3 cr**

This fully online three-hour credit course is interdisciplinary in nature and addresses the need to recognize and validate contributions made by Black women that sought and continue to uplift Black America throughout the late 19th and early 21st centuries. This cadre of activism will be contextualized through both womanist and feminist theories. Central to these works will be an examination for how multiple oppressions have shaped Black women's lives throughout their ongoing efforts to redefine self and bring empowerment to their communities through racial solidarity and advancement as a people. These women's underlying resistance strategies and intellectual discourse for offsetting the negative effects of racism and other oppressive measures will be mirrored through the use of race and gender as a socio-political construct. A postmodern response depicted through the lens of contemporary Black feminists for how both mainstream feminism and Black America have responded to these heroic forms of activism will be analyzed. These activists' contributions will unfold through the following curricula foci: 1) early roots of nationalism, 2) the emergence of both Black Feminist and Womanist Thought, and 3) political movements involving Black women activists. Additional cornerstones for learning will include participating in a posting process that involve sharing research and writing projects which in return will facilitate lively discussions on today's black women activism from their own respective domain (e.g. music, spirituality, film, arts and letters, judicial system, the intellectual and socio-political arenas).

**GS 304 #Me Too, Black Lives Matter & 3 cr**

The velocity of national protests fighting for human rights across the constitutional continuum of justice, dignity, and safety have evolved into an epidemic throughout American infrastructures. This course will plunge into the #MeToo Era, Black Lives Matter, and Woke Movements. Significant visibility for how social constructs of gender, race, and sexuality intersect with these protesters' outcries will be examined. Further considerations will be given to exposing those accused of sexual violence on various fronts as well as existing allegations of wrongful deaths will be a part of the course curriculum. An added dimension to the curriculum will include also focusing on political strategies and an operative activism model that are being used to effectively penetrate these existing cultures of power and dominance.

**GS 390 Special Topics 3 cr**

Advanced study of selected topics with an area in gender studies. May be repeated for credit when content varies.

**GS 490 Special Topics 3 cr**

Advanced study of selected topics within an area in Gender Studies. May be repeated for credit when content varies for a total of six hours.

**GS 492 Gender Studies Seminar - 3 cr**

Advanced study of selected topics in Gender Studies. May be repeated for credit when content varies for a total of six hours.

**GS 494 Directed Studies 1-3 cr**

Directed research under the guidance of a Gender Studies faculty member. Requires permission of instructor. Student is restricted to taking a maximum of six hours of Directed Studies.

**Prerequisite:** GS 101 Minimum Grade of D

**GS 496 Internship - 3-6 cr**

Practical learning through occupational or community work with an approved agency dealing with gender-related issues. Readings and final report supervised by gender studies faculty. Special Permission required.

**Prerequisite:** GS 101 Minimum Grade of D

**Interdisciplinary Progs (IDS)****IDS 290 Special Topics 1-3 cr**

A study of selected topics of an interdisciplinary nature. May be repeated for credit when content varies. Requires permission of instructor.

**IDS 490 Special Topics 1-3 cr**

Advanced study of selected topics of an interdisciplinary nature. May be repeated for credit when content varies. Requires permission of instructor.

**IDS 590 Sp Top 1-9 cr**

Specialized topics not generally listed in the course offerings. Requires consent of Graduate Director.

**International Studies (IS)****IS 100 Global Issues 3 cr**

This course introduces students to the basic structural components of the global system, including the nation-state system and the world economy, and explores the major schools of thought in such areas as security, economic prosperity and development, international law, gender and environmental studies. The course helps students understand the complex and interlinked issues facing global society, and current problems, and view the U.S. within a broader global context.

**IS 193 Study Abroad 1-6 cr**

This course is an introductory International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**IS 200 People-Nations - 3 cr**

Variable content course focusing on particular nation or region of the world. Course offers a multi-disciplinary introduction to the people, society and politics. May be repeated for credit when content varies up to a total of 6 hours.

**IS 210 Global Engagement Orientation 1 cr**

This course introduces students to international global issues, allows students to identify opportunities for active engagement in these issues, and provides the framework for successful completion of the Global Engagement Certificate.

**IS 290 Special Topics - 3 cr**

Study of selected topics within a particular Area Studies Concentration. May be repeated for credit when content varies.

**Prerequisite:** IS 100 Minimum Grade of D

**IS 293 Study Abroad 1-6 cr**

This course is an introductory International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**IS 363 Crime and Politics in LatinAm 3 cr**

An examination of the violent crime epidemic affecting many parts of Latin America, with specific focus on the themes of democratic transition, political economy, and foreign relations with the United States. Same as PSC 363 and CJ 363.

**Prerequisite:** (PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or IS 100 Minimum Grade of C)

**Cross-Listed:** CJ 363, PSC 363

**IS 371 Studies in Russia 3-6 cr**

This course will cover specific topics in the history, politics, and culture of modern Russian civilization. May be repeated for credit when content varies.

**IS 372 Studies in E. Europe & C. Asia 3-6 cr**

This course will cover specific topics in the history, politics, and culture of modern Eastern European and Central Asian civilizations. May be repeated for credit when content varies.

**IS 390 Sp Top- 1-3 cr**

Advanced study of selected topics within a particular concentration. May be repeated for credit when content varies.

**IS 391 Study Abroad - 18 cr**

Study of selected topics within a particular Area Studies Concentration. May be repeated.

**IS 393 Study Abroad 1-6 cr**

This course is an advanced International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**IS 410 Global Engagement Capstone 1 cr**

Global Engagement Capstone is required for students completing the Global Engagement Certificate (GEC), and is a one hour course designed to help students reflect on the 16 hours of coursework and nine hours of globally engaged activities they have completed. Students will create a portfolio during the course, which will be presented to students and affiliated faculty at its conclusion.

**Prerequisite:** IS 210 Minimum Grade of P

**IS 473 International Law 3 cr**

This course covers major issues, cases and topics in public and private international law. Course coverage includes individuals and corporations, diplomatic relations, jurisdiction, human rights, economic relations, treaties, environmental law, and more.

**Prerequisite:** (IS 100 Minimum Grade of C or PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C)

**Cross-Listed:** CJ 473, PSC 473

**IS 489 Leadership and World Leaders 3 cr**

An overview of the definitions, characteristics, and typologies of leadership, with a focus on lives and legacies of global influential political leaders over the past century.

**Prerequisite:** PSC 130 Minimum Grade of D or PSC 250 Minimum Grade of D or IS 100 Minimum Grade of D

**Cross-Listed:** PSC 251, PSC 489

**IS 490 Special Topics 3 cr**

Advanced study of selected topics within a particular Area Studies Concentration. May be repeated for credit when content varies.

**Prerequisite:** IS 100 Minimum Grade of D

**IS 491 Seminar on Terrorism 3 cr**

Study of a terrorism from a sociopolitical perspective with an emphasis on causes, policy, tactics and operational characteristics and counter-terrorism operations. Cross-listed with CJ 491 and PSC 491.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or PSC 130 Minimum Grade of C or IS 100 Minimum Grade of C

**Cross-Listed:** CJ 491, PSC 491

**IS 492 Seminar - 3 cr**

Advanced study of selected topics in international studies from a comparative perspective. May be repeated for credit when content varies.

**Prerequisite:** IS 100 Minimum Grade of D

**IS 493 Study Abroad 1-6 cr**

This course is an advanced International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**IS 494 Directed Studies 1-3 cr**

Directed research in the field of international studies. May be repeated or credit up to a total of 9 hours. Prerequisite: permission of IS Director

**IS 495 Senior Seminar - W 3 cr**

The course seeks to provide an interdisciplinary and cross-regional overview of the fields and research opportunities within international studies.

**Prerequisite:** EH 102 Minimum Grade of C

**IS 496 Prof St Internship - 3-9 cr**

Practical learning experiences through occupational or professional work with an approved international organization, governmental agency, or international business Prerequisite: Permission of IS Director

**IS 499 Senior Honors Thesis 3 cr**

The course covers major theoretical perspectives in organizational psychology based on empirical research and case studies. Students will explore learning theory, group dynamics, and change in different types of learning organizations.

**Prerequisite:** (EH 102 Minimum Grade of D or EH 105 Minimum Grade of D)

**IS 591 Study Abroad 12 cr**

Graduate level international exchange programs for University of South Alabama students.

**Museum Studies (MUM)****MUM 201 Intro to Museum Studies 3 cr**

This course is designed to provide a general introduction to museum history, practice, and the role of museums in contemporary society. The class will explore a range of museum positions, curatorial practices, collection management, museum administration, and the academic and public roles museums play in society.

**Prerequisite:** EH 102 Minimum Grade of C

**MUM 290 Special Topics - 3 cr**

Different subjects or themes in museum studies as announced. This course may be repeated twice when content varies, for a maximum of nine credit hours. Prerequisite: To be announced.

**MUM 390 Special Topics - 3 cr**

Different subjects or themes in museum studies as announced. This course may be repeated twice when content varies. for a maximum of nine credit hours. Prerequisite: To be announced.

**Museum Studies Minor****Degree Requirements**

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

**Core Requirements**

1. Twenty-one (21) credit hours in approved courses; nine (9) hours must be taken at the University of South Alabama.
2. **At least one (1) course must be taken in each of the three primary disciplines of anthropology, art history and history.**
3. MUM 201: Introduction to Museum Studies
4. At least three (3) and no more than six (6) credit hours from AN 496: Anthropology Internship, ARH 360: Traineeship in Museum Work, or HY 498: Internship in History.
5. Two (2) of the following courses: AN 435 Museum Methods in Archaeology, AN 442: Cultural Resources Management, ARH 493: Methodology of Art History, HY 496: Introduction to Public History.

Code	Title	Hours
<b>Required</b>		
MUM 201	Intro to Museum Studies	3
Choose at least 3 hours from one of the following:		3-6
AN 496	Anthropology Internship	
ARH 360	Traineeship in Museum Work	
HY 498	Internship in History	
Choose two of the following:		6
AN 435	Museum Methods in Archaeology	
AN 442	Cultural Resource Management	
ARH 493	Methodology of Art History-W	
HY 496	Public History	
<i>Choose from the following courses to reach 21 hours for the minor.</i>		
<i>Anthropology</i>		
AN 313		
AN 335	Field Work in Archaeology	
AN 340	Native American Cultures-W	
AN 347	Latin Amer Cultures-Societies	
AN 440	Adv Archaeological Field Meth	
AN 442	Cultural Resource Management	
<i>Art History</i>		
ARH 304	Ancient Grk Art and Architect	
ARH 306	Roman Art	
ARH 324	Italian Early Renaissance	
ARH 326	16th Century Italian Art	
ARH 332	Baroque Art and Architecture	
ARH 335	18th Century Art and Arch	
ARH 340	Early Modern Art	
ARH 344	Contemporary Art	
ARH 345	American Arts 1600 - 1940	

ARH 348	Native American Art
ARH 480	Women in Art-W
<i>English</i>	
EH 404	Grant Proposal Writing
<i>History</i>	
HY 228	Latin America
HY 312	America in the 1960s
HY 432	Colonial America
HY 433	The American Revolution
HY 435	Civil War and Reconstruction
HY 436	Modern US I 1877-1945
HY 437	Modern US II Since 1945 - W
HY 477	The Old South
HY 478	The New South

Other periods and topics in all disciplines must be approved by the Museum Studies Committee and Director.

## Music

### Department Information

Department of Music website  
<http://www.southalabama.edu/colleges/music/>

The Department of Music of the University of South Alabama is an accredited institutional member of the National Association of Schools of Music, 11250 Roger Bacon Drive, Suite 21, Reston, Virginia 20190; (703) 437-0700. Degree programs are offered for those students pursuing careers in music performance, music education, music business, and those who wish to combine studies in music with other academic disciplines.

All first-time freshmen must successfully complete CAS 100 as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry.

### Placement in Music Theory

Transfer students intending to take music theory must take a Theory Placement Examination. Contact the Music Office for details.

### Placement in Applied Music Classes

All students not previously enrolled in private music study at the University of South Alabama must audition prior to enrolling. Contact the Music Office for audition requirements and scheduling.

All students enrolled in private music study must fill out a Teacher Preference form for each Applied Music course in which they are enrolled. These forms must be filed on-line to the Music Office before registration begins. Once a student is registered and knows their schedule, they must submit their schedule information to their Applied teacher.

### Applied Music

Applied music is an integral and vital part of the total education in the field of music. In addition to performing in recitals, full-time music students are also required to attend concerts and recital class (MUA 100) for six semesters and take part in various programs given during their course of study.

Students choosing a minor in music must include applied music courses at the 200 level.

Credit for applied music is based on the minimum practice time per week, not on the length of the lesson period. Courses that show one hour's credit require one 30-minute lesson per week with a minimum practice period of 30 minutes per day. A two-hour course requires 60 minutes of lesson time a week and at least 60 minutes of practice time per day. Those that show three hours' credit require 60 minutes of lesson time per week with a minimum of two hours per day for practice. Satisfactory achievement and development are best achieved by practicing twice the above minimum requirements.

A student may take no more than two applied music courses in any given semester unless permission is obtained from the student's advisor, major applied teacher, and department chair.

### Senior Recital Requirements

A public senior recital (MUA 400) is required for the BM degree. Specific requirements vary according to the chosen concentration. See the Department of Music Student Handbook for details.

### Applied Music Levels

Students must audition in order to enroll in Applied Music courses. Contact the Department of Music for information.

- 100 Level (Elective) is designated for students majoring in other academic disciplines (when possible) or music majors who wish to study in a secondary applied area.
- 200 Level (Major/Lower Division) is designated for the first four semesters of study as a music major. A student must pass an examination at the end of the fourth semester in order to enroll at the 300 or 400 level. Music minors will also enroll at the 200 level.
- 300 Level (Major/Upper Division) is designated for the junior and senior music major in all concentrations except Performance.
- 400 Level (Major/Performance) is designated for the junior and senior music major with a concentration in Performance.

### Minor

Students pursuing a Bachelor of Music degree are not required to have an academic minor with the exception of the Bachelor of Music with Elective Studies in Outside Fields.

### Music Organizations

The Department of Music sponsors performing organizations open to all students of the University, providing satisfactory audition requirements have been met. Ensemble participation is recognized as an essential literature class in music and music education. The appropriate MAJOR ensemble (Wind Ensemble, Orchestra, Marching Band, Symphony Band or Concert Choir) must be elected each semester that a student is enrolled as a full-time student in music. Lower division credit is for 1st and 2nd year students. Upper division credit is for 3rd and 4th year students and reflects increased responsibility and leadership within the section and/or ensemble as assigned by the conductor/director. Graduate credit requires assisting the conductor/director with logistics, rehearsals, and presentation of concerts. Each course number is to be repeated four times for a two-year sequence of the course. All Bachelor of Music degree majors in guitar and piano must satisfactorily complete a minimum of six semester hours in a major ensemble, to be taken for three consecutive years and one semester hour in another ensemble in which they will play their principal performing instrument. Students are, in addition, encouraged to elect additional hours in both major and small

ensembles. Consult the appropriate curriculum in the section entitled Music Organizations for the requirements. The organizations include the Concert Choir; University Chorale; Marching Band; University Symphony Band; Wind Ensemble; University Band; Orchestra; Jazz Band; Woodwind, Brass, Guitar, Percussion, Trumpet, Clarinet, Trombone, Tuba-Euphonium, Flute, World Music, String, and Piano Ensembles; and Opera and Musical Theatre Workshop.

## Master of Music Graduate Studies

The Master of Music degree offers concentrations in Collaborative Keyboard, Music Education, Music Education-Alt. Choral or Instrumental, and Performance (Piano, Vocal, Brass, Percussion and Woodwinds). The program is designed to provide professional advancement for musician living and working along the Gulf Coast, produce research and/or performances, qualify students for admission to doctoral programs, and fulfill the mission of the University by offering high-quality teaching and public service that increases the education level of Alabama citizens, who can better participate in a global community and attain a higher quality of life.

The department's graduate faculty engage students to think critically as they address music practices and issues. Courses examine how music creates, sustains and changes personal lives, organizations, cultural institutions and society. Each concentration consists of 32-35 hours which culminate in performances, portfolios, recordings, or projects representing pedagogical work. The Music Education—Alt. Choral or Instrumental concentration consists of 46 hours culminating in a supervised student internship. Graduates of the traditional Music Education concentration and the Music Education—Alt. Choral or Instrumental concentrations are eligible for the Class A Professional Educator Certificate from the Alabama State Department of Education.

## Requirement for Admission

All applications must receive approval from the Graduate Coordinator of Music, the Director of Graduate Studies for the College of Arts and Sciences, and the Graduate Dean. The Office of Admissions should receive a resume limited to one page and three letters of recommendation addressing academic or professional abilities. Students are admitted each semester and must meet the following additional requirements:

## Regular Admission

### Undergraduate Requirements

Students must submit official copies of undergraduate transcripts indicating the following:

- A bachelor's degree in music.
- At least a 2.5 GPA on all undergraduate work, or at least a 2.75 GPA on the last 60 hours of undergraduate work.

For the Music Education—Alt. Choral or Instrumental concentration, students must also submit official copies of undergraduate transcripts indicating the following:

- A bachelor's degree from a regionally accredited institution with a minimum overall GPA of 2.75 or a master's or higher degree with a GPA of at least a 3.0. This GPA must be documented on the official transcript of the degree granting institution and must be the GPA that was used as the basis for granting the degree, not a GPA that includes post-degree courses. If admitted on master's or higher degree GPA, courses from that degree cannot be used to meet certification requirements.

- An academic major in the teaching field, appropriate credit hours in the teaching field (30/18: 30 hours in the field with 18 hours in upper-division), or a passing score on the prescribed Praxis subject assessment.
- GPA Exception for unconditional admission to Alternative Class A State Department of Education-approved programs: Individuals who have earned a bachelor's degree from a regionally accredited institution at the time the degree was earned and do not meet the minimum overall undergraduate GPA of 2.75, but have at least a 2.0 overall undergraduate GPA, may seek provisional admission to an Alternative Class A program if the alternate score on the Alabama prescribed Praxis subject-area test is obtained. The alternate scores can be found on the Alternate Score Requirements document at [www.alsde.edu](http://www.alsde.edu) (<http://www.alsde.edu>) (Department Offices: Educator Assessment: Educator Assessment Policies). The **only** tests and scores accepted are those listed on the Alternate Score Requirements document. All other requirements for admission must also be met.
- Students must pass a criminal background check.

### International Students:

- International students must submit documentation of TOEFL test scores of 525 or above (197 on computer-based test or 71 on internet-based test).
- Students who are required to take the English Language Proficiency Examination and whose scores suggest an English language deficiency must take the appropriate English as a Second Language courses. These courses are not counted as part of the 32-hour degree program.

### Departmental Admissions Requirements:

- Passing score in Graduate Music Theory and Music History Diagnostic Exam or Bachelor of Music degree from USA.
- Admittance requirements per area of specialization:
  - Collaborative Keyboards
    - Audition - recording or live. Admittance determined by area faculty
    - Contact Piano Area Coordinator for date, time and location
  - Music Education
    - Teaching Certificate
    - Video of teaching: 10 - 25 minutes. Acceptability determined by music education faculty
    - Contact Music Education Area Coordinator for date, time and location
  - Music Education-Alt. Choral or Instrumental
    - Interview with Music Education Faculty
    - Contact Music Education Area Coordinator for date, time and location
  - Performance Piano, Brass, Percussion and Woodwinds
    - Audition - recording or live. Admittance determined by area faculty
    - Contact Area Coordinator for date, time and location
  - Performance: Voice
    - Audition - live on-site or live streamed via internet. Admittance determined by area faculty
    - Diagnostic exam in vocal diction (Italian, German, and French)
    - Contact Vocal Area Coordinator for date, time and location
- Diagnostic Exams

- Students admitted to graduate degree programs in the USA Department of Music must take graduate diagnostic exams in music theory and history. USA graduates are exempt. Diagnostic exams are administered twice a year, in August and January. The results of the exams are advisory only; however, students may not take graduate-level history and theory courses until students have earned a passing score on the exams. Advisors receive the results of the diagnostic exams. Students consult with their advisors to determine appropriate history and theory studies.
- Remedial Courses
  - Students who do not pass the diagnostic exams will be required to pass remedial courses before enrolling in the graduate-level core course.

### Non-degree Admission

Students may register for and complete up to 12 hours without formal entrance into the program.

### Undergraduate Requirements

Students must submit official copies of undergraduate transcripts indicating the following:

- A minimum GPA of at least 2.5 on all undergraduate work. In exceptional cases, applicants may be considered with at least a 2.75 GPA on the last 60 hours of undergraduate work.
- Students with a GPA below 2.5 may want to consider enrolling in undergraduate classes to increase their GPA average before applying to graduate school. USA course work completed after graduation is automatically averaged into the final GPA. The USA Office of Academic Records computes transfer credit averages and can advise students in determining when the minimum GPA has been met.

### Degree Requirements and Courses

Students must complete a minimum of 32 semester hours of credit (46 hours of credit for Music Education – Alt. Choral or Instrumental) in approved 500-level courses. A minimum of 20 semester hours must be completed at the University of South Alabama. Up to 12 hours of USA courses taken while in another program (or non-degree status) may be applied. Only courses not applied to another degree may count. Maximum of 12 hours with grades of "A", "B", or "S" of approved transfer credit is allowed. If the university is non-accredited, the individual USA graduate program will determine if the quality and content of the courses meet the standards of the program.

### Grade Requirements

- A minimum of a 3.0 GPA on all work attempted is required for graduation.
- Courses in which a student receives a "D" or below will not be counted toward the degree program.
- A maximum of two courses with a grade of "C" will be counted toward the degree program.
- Students receiving four grades of "C" or below, regardless of the overall GPA will be dismissed from the program.
- A student who receives a failing grade in a course for graduate credit may be dismissed from the program.

### Time Limitations

- All degree requirements must be completed within seven calendar years.

- Most students who take six-eight hours per semester (including summer term) complete the degree within a two-year period (two and a half for Music Education - Alt. Choral or Instrumental).
- The time required for degree completion depends on how many courses a student can take each semester and the ability of that student to complete the recital(s) or final project(s).

### Course Load

Six to ten credit hours per semester constitute a full-time course load.

Note: No more than twelve credits in this area are applicable toward a degree.

## Degrees, Programs, or Concentrations

- Music (BM) - Elective Studies in Business Concentration (p. 310)
- Music (BM) - Vocal Music Education Concentration (p. 312)
- Music (BM) – Elective Studies in Specific Outside Fields Concentration (p. 314)
- Music (BM) – Instrumental Music Education Concentration (p. 316)
- Music (BM) – Instrumental Performance Concentration (p. 319)
- Music (BM) – Vocal Performance Concentration (p. 321)
- Music (MM) - Brass Performance Concentration (<http://bulletin.southalabama.edu/programs-az/arts-sciences/music/music-mm-performance-concentration-brass/>)
- Music (MM) - Collaborative Keyboard Concentration (p. 323)
- Music (MM) - Music Education Concentration (p. 324)
- Music (MM) - Music Education Concentration - (Alternative Choral or Instrumental) (p. 325)
- Music (MM) - Percussion Performance Concentration (<http://bulletin.southalabama.edu/programs-az/arts-sciences/music/music-mm-performance-concentration-percussion/>)
- Music (MM) - Piano Performance Concentration (<http://bulletin.southalabama.edu/programs-az/arts-sciences/music/music-mm-performance-concentration-piano/>)
- Music (MM) - Vocal Performance Concentration (<http://bulletin.southalabama.edu/programs-az/arts-sciences/music/music-mm-performance-concentration-voice/>)
- Music (MM) - Woodwinds Performance Concentration (<http://bulletin.southalabama.edu/programs-az/arts-sciences/music/music-mm-performance-concentration-woodwinds/>)
- Music Minor (p. 326)

## Courses

### Applied Music A (MUA)

#### MUA 100 Recital Class 0 cr

A convocation required each term of all full-time music majors meeting each week in laboratory session to hear performances, perform, and discuss performing techniques, plus ten evening public programs. Six semesters of successful participation required for graduation with adjustments for transfer students.

#### MUA 101 Piano - Elective 1 cr

Private study at the elective level

#### MUA 102 Piano - Elective 2 cr

Private study at the elective level.

#### MUA 111 Organ - Elective 1 cr

Private study at the elective level.

**MUA 112 Organ - Elective 2 cr**

Private study at the elective level.

**MUA 121 Applied Voice - Elective 1 cr**

Applied Voice - Elective is designed for students who are neither music majors or minors to learn basic techniques of singing. Fundamentals of breath, tone, pitch, and musicianship will be explored through appropriate exercises and repertoire.

**MUA 122 Applied Voice - Elective 2 cr**

Applied Voice - Elective is designed for students who are neither music majors or minors to learn basic techniques of singing. Fundamentals of breath, tone, pitch, and musicianship will be explored through appropriate exercises and repertoire.

**MUA 124 Group Applied - Elective Voice 1 cr**

Applied voice lessons taught in groups of 4, consisting of individual instruction in technique and performance. Two 1-hour sessions per week TBA (MW or TR). This course is for non-majors. Majors and minors in music should take other applied courses. Special fee applies. Prerequisite: Admission by audition. Registration through the Department of Music.

**MUA 131 Violin - Elective 1 cr**

Private study at the elective level.

**MUA 132 Violin - Elective 2 cr**

Private study at the elective level.

**MUA 141 Viola - Elective 1 cr**

Private study at the elective level.

**MUA 142 Viola - Elective 2 cr**

Private study at the elective level.

**MUA 151 Violoncello - Elective 1 cr**

Private study at the elective level.

**MUA 152 Violoncello - Elective 2 cr**

Private study at the elective level.

**MUA 161 String Bass - Elective 1 cr**

Private study at the elective level.

**MUA 162 String Bass - Elective 2 cr**

Private study at the elective level.

**MUA 171 Harp - Elective 1 cr**

Private study at the elective level.

**MUA 172 Harp - Elective 2 cr**

Private study at the elective level.

**MUA 181 Guitar - Elective 1 cr**

Private study at the elective level.

**MUA 182 Guitar - Elective 2 cr**

Private study at the elective level.

**MUA 186 Percussion - Elective 1 cr**

Private study at the elective level.

**MUA 187 Percussion - Elective 2 cr**

Private study at the elective level.

**MUA 201 Piano Major-Lower Division 1 cr**

Private study at the secondary level.

**MUA 202 Piano Major-Lower Division 2 cr**

Private study at the secondary level.

**MUA 211 Organ Major-Lower Division 1 cr**

Private study at the secondary level.

**MUA 212 Organ Major-Lower Division 2 cr**

Private study at the secondary level.

**MUA 221 Voice Major-Lower Division 1 cr**

Private study at the secondary level.

**MUA 222 Voice Major-Lower Division 2 cr**

Private study at the secondary level.

**MUA 231 Violin Major-Lower Division 1 cr**

Private study at the secondary level.

**MUA 232 Violin Major-Lower Division 2 cr**

Private study at the secondary level.

**MUA 241 Viola Major-Lower Division 1 cr**

Private study at the secondary level.

**MUA 242 Viola Major-Lower Division 2 cr**

Private study at the secondary level.

**MUA 251 Violoncello Major-Lower Div 1 cr**

Private study at the secondary level.

**MUA 252 Violoncello Major-Lower Div 2 cr**

Private study at the secondary level.

**MUA 261 String Bass Major-Lower Div 1 cr**

Private study at the secondary level.

**MUA 262 String Bass Major-Lower Div 2 cr**

Private study at the secondary level.

**MUA 271 Harp Major-Lower Division 1 cr**

Private study at the secondary level.

**MUA 272 Harp Major-Lower Division 2 cr**

Private study at the secondary level.

**MUA 281 Guitar Major-Lower Division 1 cr**

Private study at the secondary level.

**MUA 282 Guitar Major-Lower Division 2 cr**

Private study at the secondary level.

**MUA 286 Percussion Major-Lower Div 1 cr**

Private study at the secondary level.

**MUA 287 Percussion Major-Lower Div 2 cr**

Private study at the secondary level.

**MUA 300 Junior Recital 0 cr**

Performance concentration junior recital. To be taken with a 400 level applied music course.

**MUA 301 Piano Major-Upper Division 1 cr**

Private study at the concentration level.

**MUA 302 Piano Major-Upper Division 2 cr**

Private study at the concentration level.

**MUA 311 Organ Major-Upper Division 1 cr**

Private study at the concentration level.

**MUA 312 Organ Major-Upper Division 2 cr**

Private study at the concentration level.

**MUA 321 Voice Major-Upper Division 1 cr**

Private study at the concentration level.

**MUA 322 Voice Major-Upper Division 2 cr**

Private study at the concentration level.

**MUA 331 Violin Major-Upper Division 1 cr**

Private study at the concentration level.

**MUA 332 Violin Major-Upper Division 2 cr**  
Private study at the concentration level.

**MUA 341 Viola Major-Upper Division 1 cr**  
Private study at the concentration level.

**MUA 342 Viola Major-Upper Division 2 cr**  
Private study at the concentration level.

**MUA 351 Violoncello Major-Upper Div 1 cr**  
Private study at the concentration level.

**MUA 352 Violoncello Major-Upper Div 2 cr**  
Private study at the concentration level.

**MUA 361 String Bass Major-Upper Div 1 cr**  
Private study at the concentration level.

**MUA 362 String Bass Major-Upper Div 2 cr**  
Private study at the concentration level.

**MUA 371 Harp Major-Upper Division 1 cr**  
Private study at the concentration level.

**MUA 372 Harp Major-Upper Division 2 cr**  
Private study at the concentration level.

**MUA 381 Guitar Major-Upper Division 1 cr**  
Private study at the concentration level.

**MUA 382 Guitar Major-Upper Division 2 cr**  
Private study at the concentration level.

**MUA 386 Percussion Major-Upper Div 1 cr**  
Private study at the concentration level.

**MUA 387 Percussion Major-Upper Div 2 cr**  
Private study at the concentration level.

**MUA 400 Senior Recital 0 cr**  
The Senior Recital provides a culminating performance experience of professional quality required of all concentrations of Bachelor of Music students. Committee approval needed to pass the course. To be taken in conjunction with the appropriate 300 or 400 level applied music course.

**MUA 401 Piano Major-Performance 1 cr**  
Private study in Piano at the major level

**MUA 402 Piano Major-Performance 2 cr**  
Private study at the major level

**MUA 403 Piano Major-Performance 3 cr**  
Private study at the major level

**MUA 411 Organ Major-Performance 1 cr**  
Private study at the major level

**MUA 412 Organ Major-Performance 2 cr**  
Private study at the major level

**MUA 413 Organ Major-Performance 3 cr**  
Private study at the major level

**MUA 421 Voice Major-Performance 1 cr**  
Private study at the major level

**MUA 422 Voice Major-Performance 2 cr**  
Private study at the major level

**MUA 423 Voice Major-Performance 3 cr**  
Private study at the major level

**MUA 431 Violin Major-Performance 1 cr**  
Private study at the major level

**MUA 432 Violin Major-Performance 2 cr**  
Private study at the major level

**MUA 433 Violin Major-Performance 3 cr**  
Private study at the major level

**MUA 441 Viola Major-Performance 1 cr**  
Private study at the major level

**MUA 442 Viola Major-Performance 2 cr**  
Private study at the major level

**MUA 443 Viola Major-Performance 3 cr**  
Private study at the major level

**MUA 451 Violoncello Major-Performance 1 cr**  
Private study at the major level

**MUA 452 Violoncello Major-Performance 2 cr**  
Private study at the major level

**MUA 453 Violoncello Major-Performance 3 cr**  
Private study at the major level

**MUA 461 String Bass Major-Performance 1 cr**  
Private study at the major level

**MUA 462 String Bass Major-Performance 2 cr**  
Private study at the major level

**MUA 463 String Bass Major-Performance 3 cr**  
Private study at the major level

**MUA 471 Harp Major-Performance 1 cr**  
Private study at the major level

**MUA 472 Harp Major-Performance 2 cr**  
Private study at the major level

**MUA 473 Harp Major-Performance 3 cr**  
Private study at the major level

**MUA 481 Guitar Major-Performance 1 cr**  
Private study at the major level

**MUA 482 Guitar Major-Performance 2 cr**  
Private study at the major level

**MUA 483 Guitar Major-Performance 3 cr**  
Private study at the major level

**MUA 486 Percussion Major-Performance 1 cr**  
Private study at the major level

**MUA 487 Percussion Major-Performance 2 cr**  
Private study at the major level

**MUA 488 Percussion Major-Performance 3 cr**  
Private study at the major level

**MUA 500 Graduate Recital 1 cr**  
Graduate recital. To be taken in conjunction with a 500- level applied music course.

**MUA 501 Piano 1 cr**  
Private study at the graduate level.

**MUA 502 Piano 2 cr**  
Private study at the graduate level.

**MUA 503 Piano 3 cr**  
Private study at the graduate level.

**MUA 507 Applied Collaborative Piano 1 cr**

The Director for Collaborative Keyboard studies will meet with the student enrolled in Applied Collaborative Piano to assign literature, which will be studied during the semester. For MUA 507, the student meets with the instructor 30 minutes each week to study vocal music and at least 1 collaborative assignment with strings, winds or brass. The goal of the course is to learn standard repertoire for piano with voice and various instruments.

**MUA 508 Applied Collaborative Piano 2 cr**

The Director for Collaborative Keyboard studies will meet with the student enrolled in Applied Collaborative Piano to assign literature, which will be studied during the semester. For MUA 508, the student meets with the instructor 60 minutes each week to study vocal music and collaborates with at least 2 different instrument types (string, woodwinds, brass). The goal of the course is to learn standard repertoire for piano with voice and various instruments.

**MUA 509 Applied Collaborative Piano 3 cr**

The Director for Collaborative Keyboard studies will meet with the student enrolled in Applied Collaborative Piano to assign literature, which will be studied during the semester. For MUA 509, the student meets with the instructor 60 minutes each week to study vocal music and collaborates with 3 different instrument types (string, woodwinds, brass). The goal of the course is to learn standard repertoire for piano with voice and various instruments.

**MUA 511 Organ 1 cr**

Private study at the graduate level.

**MUA 512 Organ 2 cr**

Private study at the graduate level.

**MUA 513 Organ 3 cr**

Private study at the graduate level.

**MUA 521 Voice 1 cr**

Private study at the graduate level.

**MUA 522 Voice 2 cr**

Private study at the graduate level.

**MUA 523 Voice 3 cr**

Private study at the graduate level.

**MUA 531 Violin 1 cr**

Private study at the graduate level.

**MUA 532 Violin 2 cr**

Private study at the graduate level.

**MUA 533 Violin 3 cr**

Private study at the graduate level.

**MUA 541 Viola 1 cr**

Private study at the graduate level.

**MUA 542 Viola 2 cr**

Private study at the graduate level.

**MUA 543 Viola 3 cr**

Private study at the graduate level.

**MUA 551 Violoncello 1 cr**

Private study at the graduate level.

**MUA 552 Violoncello 2 cr**

Private study at the graduate level.

**MUA 553 Violoncello 3 cr**

Private study at the graduate level.

**MUA 561 String Bass 1 cr**

Private study at the graduate level.

**MUA 562 String Bass 2 cr**

Private study at the graduate level.

**MUA 563 String Bass 3 cr**

Private study at the graduate level.

**MUA 581 Guitar 1 cr**

Private study at the graduate level.

**MUA 582 Guitar 2 cr**

Private study at the graduate level.

**MUA 583 Guitar 3 cr**

Private study at the graduate level.

**MUA 586 Percussion 1 cr**

Private study at the graduate level.

**MUA 587 Percussion 2 cr**

Private study at the graduate level.

**MUA 588 Percussion 3 cr**

Private study at the graduate level.

**MUA 599 Curr, Ped & Instrct Techniques 2 cr**

This is an integrated study concentrating on the following subjects: literature, pedagogy, studio performance and master class. Studies focus on pedagogy, both private and group teaching methods, and instructional techniques grounded in research.

**Applied Music B (MUB)****MUB 101 Flute Elective 1 cr**

Private study at the elective level.

**MUB 102 Flute Elective 2 cr**

Private study at the elective level.

**MUB 111 Oboe - Elective 1 cr**

Private study at the elective level.

**MUB 112 Oboe - Elective 2 cr**

Private study at the elective level.

**MUB 121 Clarinet - Elective 1 cr**

Private study at the elective level.

**MUB 122 Clarinet - Elective 2 cr**

Private study at the elective level.

**MUB 131 Bassoon - Elective 1 cr**

Private study at the elective level.

**MUB 132 Bassoon - Elective 2 cr**

Private study at the elective level.

**MUB 141 Saxophone-Elective 1 cr**

Private study at the elective level.

**MUB 142 Saxophone-Elective 2 cr**

Private study at the elective level.

**MUB 151 Trumpet-Cornet Elective 1 cr**

Private study at the elective level.

**MUB 152 Trumpet-Cornet Elective 2 cr**

Private study at the elective level.

**MUB 161 French Horn - Elective 1 cr**

Private study at the elective level.

**MUB 162 French Horn - Elective 2 cr**

Private study at the elective level.

**MUB 171 Trombone - Elective 1 cr**

Private study at the elective level.

**MUB 172 Trombone - Elective 2 cr**

Private study at the elective level.

**MUB 181 Baritone-Euphonium - Elective 1 cr**

Private study at the elective level.

**MUB 182 Baritone-Euphonium - Elective 2 cr**

Private study at the elective level.

**MUB 186 Tuba - Elective 1 cr**

Private study at the elective level.

**MUB 187 Tuba - Elective 2 cr**

Private study at the elective level.

**MUB 201 Flute Major-Lower Division 1 cr**

Private study at the secondary level.

**MUB 202 Flute Major-Lower Division 2 cr**

Private study at the secondary level.

**MUB 211 Oboe Major-Lower Division 1 cr**

Private study at the secondary level.

**MUB 212 Oboe Major-Lower Division 2 cr**

Private study at the secondary level.

**MUB 221 Clarinet Major-Lower Division 1 cr**

Private study at the secondary level.

**MUB 222 Clarinet Major-Lower Division 2 cr**

Private study at the secondary level.

**MUB 231 Bassoon Major-Lower Division 1 cr**

Private study at the secondary level.

**MUB 232 Bassoon Major-Lower Division 2 cr**

Private study at the secondary level.

**MUB 241 Saxophone Major-Lower Division 1 cr**

Private study at the secondary level.

**MUB 242 Saxophone Major-Lower Division 2 cr**

Private study at the secondary level.

**MUB 251 Trumpet-Cornet Major-Lower Div 1 cr**

Private study at the secondary level.

**MUB 252 Trumpet-Cornet Major-Lower Div 2 cr**

Private study at the secondary level.

**MUB 261 French Horn Major - Lower Div 1 cr**

Private study at the secondary level.

**MUB 262 French Horn Major - Lower Div 2 cr**

Private study at the secondary level.

**MUB 271 Trombone Major-Lower Division 1 cr**

Private study at the secondary level.

**MUB 272 Trombone Major-Lower Division 2 cr**

Private study at the secondary level.

**MUB 281 Baritone-Euphonium Maj-Low Div 1 cr**

Private study at the secondary level.

**MUB 282 Baritone-Euphonium Maj-Low Div 2 cr**

Private study at the secondary level.

**MUB 286 Tuba Major - Lower Division 1 cr**

Private study at the secondary level.

**MUB 287 Tuba Major - Lower Division 2 cr**

Private study at the secondary level.

**MUB 301 Flute Major-Upper Division 1 cr**

Private study at the concentration level.

**MUB 302 Flute Major-Upper Division 2 cr**

Private study at the concentration level.

**MUB 311 Oboe Major-Upper Division 1 cr**

Private study at the concentration level.

**MUB 312 Oboe Major-Upper Division 2 cr**

Private study at the concentration level.

**MUB 321 Clarinet Major-Upper Division 1 cr**

Private study at the concentration level.

**MUB 322 Clarinet Major-Upper Division 2 cr**

Private study at the concentration level.

**MUB 331 Bassoon Major-Upper Division 1 cr**

Private study at the concentration level.

**MUB 332 Bassoon Major-Upper Division 2 cr**

Private study at the concentration level.

**MUB 341 Saxophone-Major Upper Division 1 cr**

Private study at the concentration level.

**MUB 342 Saxophone-Major Upper Division 2 cr**

Private study at the concentration level.

**MUB 351 Trumpet-Cornet Major-Upper Div 1 cr**

Private study at the concentration level.

**MUB 352 Trumpet-Cornet Major-Upper Div 2 cr**

Private study at the concentration level.

**MUB 361 French Horn-Major Upper Div 1 cr**

Private study at the concentration level.

**MUB 362 French Horn-Major Upper Div 2 cr**

Private study at the concentration level.

**MUB 371 Trombone-Major Upper Division 1 cr**

Private study at the concentration level.

**MUB 372 Trombone-Major Upper Division 2 cr**

Private study at the concentration level.

**MUB 381 Baritone-Euphonium Maj-Upp Div 1 cr**

Private study at the concentration level.

**MUB 382 Baritone-Euphonium Maj-Upp Div 2 cr**

Private study at the concentration level.

**MUB 386 Tuba-Major Upper Division 1 cr**

Private study at the concentration level.

**MUB 387 Tuba-Major Upper Division 2 cr**

Private study at the concentration level.

**MUB 401 Flute Major-Performance 1 cr**

Private study at the major level.

**MUB 402 Flute Major-Performance 2 cr**

Private study at the major level.

**MUB 403 Flute Major-Performance 3 cr**

Private study at the major level.

**MUB 411 Oboe Major-Performance 1 cr**

Private study at the major level.

**MUB 412 Oboe Major-Performance 2 cr**

Private study at the major level.

**MUB 413 Oboe Major-Performance 3 cr**

Private study at the major level.

**MUB 421 Clarinet Major-Performance 1 cr**  
Private study at the major level.

**MUB 422 Clarinet Major-Performance 2 cr**  
Private study at the major level.

**MUB 423 Clarinet Major-Performance 3 cr**  
Private study at the major level.

**MUB 431 Bassoon Major-Performance 1 cr**  
Private study at the major level.

**MUB 432 Bassoon Major-Performance 2 cr**  
Private study at the major level.

**MUB 433 Bassoon Major-Performance 3 cr**  
Private study at the major level.

**MUB 441 Saxophone-Major Performance 1 cr**  
Private study at the major level.

**MUB 442 Saxophone-Major Performance 2 cr**  
Private study at the major level.

**MUB 443 Saxophone-Major Performance 3 cr**  
Private study at the major level.

**MUB 451 Trumpet-Cornet-Major Perform 1 cr**  
Private study at the major level.

**MUB 452 Trumpet-Cornet-Major Perform 2 cr**  
Private study at the major level.

**MUB 453 Trumpet-Cornet-Major Perform 3 cr**  
Private study at the major level.

**MUB 461 French Horn-Major Performance 1 cr**  
Private study at the major level.

**MUB 462 French Horn-Major Performance 2 cr**  
Private study at the major level.

**MUB 463 French Horn-Major Performance 3 cr**  
Private study at the major level.

**MUB 471 Trombone-Major Performance 1 cr**  
Private study at the major level.

**MUB 472 Trombone-Major Performance 2 cr**  
Private study at the major level.

**MUB 473 Trombone-Major Performance 3 cr**  
Private study at the major level.

**MUB 481 Baritone-Euphonium-Maj Perform 1 cr**  
Private study at the major level.

**MUB 482 Baritone-Euphonium Maj Perform 2 cr**  
Private study at the major level.

**MUB 483 Baritone-Euphonium-Maj Perform 3 cr**  
Private study at the major level.

**MUB 486 Tuba-Major Performance 1 cr**  
Private study at the major level.

**MUB 487 Tuba-Major Performance 2 cr**  
Private study at the major level.

**MUB 488 Tuba-Major Performance 3 cr**  
Private study at the major level.

**MUB 501 Flute 1 cr**  
Private study at the graduate level.

**MUB 502 Flute 2 cr**  
Private study at the graduate level.

**MUB 503 Flute 3 cr**  
Private study at the graduate level.

**MUB 511 Oboe 1 cr**  
Private study at the graduate level.

**MUB 512 Oboe 2 cr**  
Private study at the graduate level.

**MUB 513 Oboe 3 cr**  
Private study at the graduate level.

**MUB 521 Clarinet 1 cr**  
Private study at the graduate level.

**MUB 522 Clarinet 2 cr**  
Private study at the graduate level.

**MUB 523 Clarinet 3 cr**  
Private study at the graduate level.

**MUB 531 Bassoon 1 cr**  
Private study at the graduate level.

**MUB 532 Bassoon 2 cr**  
Private study at the graduate level.

**MUB 533 Bassoon 3 cr**  
Private study at the graduate level.

**MUB 541 Saxophone 1 cr**  
Private study at the graduate level.

**MUB 542 Saxophone 2 cr**  
Private study at the graduate level.

**MUB 543 Saxophone 3 cr**  
Private study at the graduate level.

**MUB 551 Trumpet-Cornet 1 cr**  
Private study at the graduate level.

**MUB 552 Trumpet-Cornet 2 cr**  
Private study at the graduate level.

**MUB 553 Trumpet-Cornet 3 cr**  
Private study at the graduate level.

**MUB 561 French Horn 1 cr**  
Private study at the graduate level.

**MUB 562 French Horn 2 cr**  
Private study at the graduate level.

**MUB 563 French Horn 3 cr**  
Private study at the graduate level.

**MUB 571 Trombone 1 cr**  
Private study at the graduate level.

**MUB 572 Trombone 2 cr**  
Private study at the graduate level.

**MUB 573 Trombone 3 cr**  
Private study at the graduate level.

**MUB 581 Baritone Horn 1 cr**  
Private study at the graduate level.

**MUB 582 Baritone Horn 2 cr**  
Private study at the graduate level.

**MUB 583 Baritone Horn 3 cr**  
Private study at the graduate level.

**MUB 586 Tuba 1 cr**  
Private study at the graduate level.

**MUB 587 Tuba 2 cr**

Private study at the graduate level.

**MUB 588 Tuba 3 cr**

Private study at the graduate level.

**Music Education (MUE)****MUE 010 Music Education 0 cr**

The Piano Proficiency documents mastery of minimum piano proficiency skills for students who do not need to enroll in class piano.

**MUE 102 Elementary Class Piano 1 cr**

Functional keyboard playing. Open to music majors and minors only. No previous knowledge in piano necessary. To be taken in sequence.

**MUE 103 Elementary Class Piano 1 cr**

Functional keyboard playing. Open to music majors and minors only.

**Prerequisite:** MUE 102 Minimum Grade of D

**MUE 120 Elementary Class Voice 1 cr**

Beginning voice instruction emphasizing the fundamentals of singing and the vocal mechanism. This is the first semester of a two semester sequence.

**MUE 121 Intermediate Class Voice 1 cr**

This course is a continuation of MUE 120. Vocal fundamentals and the mechanics of singing will be emphasized. More advanced vocal exercises, diction, and interpretation will be stressed.

**Prerequisite:** MUE 120 Minimum Grade of D

**MUE 141 String Methods 1 cr**

The techniques of teaching the string instruments in class situations and the development of some proficiency on each string instrument.

**MUE 170 Elementary Class Percussion 1 cr**

Beginning percussion instruction with emphasis on development of sight-reading, concert style/mallet techniques and basic concepts of percussion instruments.

**MUE 182 Elementary Class Guitar 1 cr**

Beginning guitar instruction with the development of proficiency in sight reading and correct right and left hand techniques. No previous knowledge of guitar is necessary. Open to any university student except guitar majors. To be taken in sequence.

**MUE 183 Elementary Class Guitar 1 cr**

Beginning guitar instruction with the development of proficiency in sight reading and correct right and left hand techniques.

**Prerequisite:** MUE 182 Minimum Grade of D

**MUE 202 Intermediate Class Piano 1 cr**

A continuation of elementary class piano including sight reading and keyboard harmony. Open to music majors and minors only.

**Prerequisite:** MUE 103 Minimum Grade of D

**MUE 203 Intermediate Class Piano 1 cr**

A continuation of elementary class piano including sight-reading and keyboard harmony. Open to music majors and minors only.

**Prerequisite:** MUE 202 Minimum Grade of D

**MUE 212 Adv Keyboard Musicianship I 1 cr**

MUE 212 is the first of four courses required of all concentration level and performance level piano majors. During the course students develop sight reading ability, read lead sheets, learn accompanying strategies and practice systematic piano technique. Class piano pedagogy is also addressed. **Prerequisite:** Piano major or concentration.

**MUE 213 Adv Keyboard Musicianship II 1 cr**

The second of four courses required of all concentration level and performance level piano majors. During the course, students develop sight-reading ability, read lead sheets, learn accompanying strategies and practice systematic piano technique. Class piano pedagogy is also addressed.

**Prerequisite:** MUE 212 Minimum Grade of D

**MUE 236 Mus-Lit Integ for Early Chldhd 3 cr**

This course examines the use of music and literature integration in the early childhood classroom - establishing an active-learning environment, identifying elements of music in children's literature, engaging students in the storytelling process, and preparing music-literature instruction.

**MUE 240 String Methods 1 cr**

The techniques of teaching the string instruments in class situations and the development of some proficiency on each string instrument.

**MUE 241 Woodwind Methods 1 cr**

The techniques of teaching the woodwind instruments in class situations and the development of some proficiency on each of the main woodwinds.

**MUE 242 Brass Methods 1 cr**

The techniques of teaching the brass instruments in class situations and the development of some proficiency on each of the main brass instruments.

**MUE 243 Percussion Methods 1 cr**

The techniques of teaching percussion instruments in class situations and the development of some proficiency on all percussion instruments.

**MUE 301 Music Literacy Child and Youth 3 cr**

The fundamentals of music, music reading, and instruction for those working with children and youth in group settings.

**MUE 312 Adv Keyboard Music III Vocal 1 cr**

MUE 213 is the third of four courses required of all concentration and performance level piano majors. Students will develop sight reading ability, read lead sheets, learn accompanying strategies and practice systematic piano technique. Vocal accompanying workshops and class piano pedagogy are included.

**Prerequisite:** MUE 213 Minimum Grade of D

**MUE 313 Adv Keyboard Music IV Inst 1 cr**

MUE 313 is the fourth of four courses required of all concentration and performance level piano majors. During the course, students develop sight reading ability, read lead sheets, learn accompanying strategies and practice systematic piano technique. Instrumental accompanying workshops and class piano pedagogy are included.

**Prerequisite:** MUE 312 Minimum Grade of D

**MUE 322 Early Chld/Elem Mus Perf Mthds 3 cr**

The study of music and performance methods as used in dance and theatre throughout various early childhood and elementary settings.

**MUE 336 Performing Arts for Young Chld 3 cr**

This course provides an overview of the planning, preparation, and delivery of the performing arts in a developmentally appropriate environment. Students will explore dramatic arts, improvisation, use of musical instruments, and vocal exploration as a means of communication, expression, and learning for the young child. Appropriate learning environments and routines will be discussed regarding the individual child's needs of social, physical, and sensory motor skills and the role of facilitating the growth through discovery.

**MUE 342 Brass Methods Class 1 cr**

The techniques of teaching the brass instruments in class situations and the development of some proficiency on each of the main brass instruments.

**MUE 345 Percussion Methods 1 cr**

The techniques of teaching percussion instruments and the development of some proficiency on all percussion instruments.

**MUE 346 Marching Band Techniques 1 cr**

The techniques of organization, administration, instruction, and rehearsal of the marching band.

**MUE 411 Woodwind Pedagogy 2 cr**

A survey of the teaching techniques, instruments, accessories and pedagogical materials for woodwind instruments. Prerequisite: Upper division studio study in woodwinds or permission of instructor

**MUE 412 Brass Pedagogy 2 cr**

This course is intended as a technique course specific to high and low brass instruments. Topics of study will include: development of technique, etudes, performance preparation, pedagogical literature, performance anxiety. Upper division studio study in brass or permission of instructor.

**MUE 413 Percussion Pedagogy 2 cr**

A comprehensive study of methods and materials used to teach percussion instruments. Upper division studio study in percussion or permission of instructor.

**MUE 414 Guitar Pedagogy 2 cr**

A survey of the teaching techniques, instruments, accessories and pedagogical materials for guitar. Prerequisite: Upper division studio study in guitar or permission of the instructor.

**MUE 415 String Pedagogy 3 cr**

A comprehensive study that is intended as a technique course specific string instruments. Topics of study include: development of technique, performance preparation, pedagogical literature, and performance anxiety. Prerequisite: Upper division studio study in strings or permission of instructor.

**MUE 430 Exceptional Music 3 cr**

The philosophical and practical approach to increasing the effectiveness of learning and content retention for the exceptional student through music.

**MUE 434 Keyboard, Voice, Guitar 3 cr**

The study of music literature, note reading, and the effective practice of incorporating keyboard, voice, and guitar through music education and music therapy.

**MUE 436 Integrating Arts in Education 1-3 cr**

This course examines arts integration as a philosophical approach to increasing the effectiveness of learning and content retention in the PK-12 classroom.

**MUE 444 Elementary/General Music 3 cr**

Music program, methods, music literature, and teaching aids for elementary and middle school students. Prerequisites: Junior level or above in music education, concentration, admission to candidacy, completion of two-thirds of teaching field.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**MUE 446 Piano Pedagogy 2 cr**

Methods and materials for the private lesson. Lab practice in teaching included. Offered in alternate years. Prerequisite: Piano major or piano concentration.

**MUE 448 Vocal Pedagogy 2 cr**

Theory and practice of the art of teaching singing as it relates to Voice Science, with regard to both current and historical practices, physiology, function, acoustics, observations, and hands-on experience. Prerequisite: Upper division in vocal studio studies or permission of instructor

**MUE 455 Tch Mu in Middle-Scndary Sch 3 cr**

Assists the student in organizing materials and in developing methods of teaching music in middle and secondary schools. Prerequisites: Junior level or above in music education concentration, admission to candidacy, completion of two-thirds of teaching field.

**MUE 494 Directed Studies - 1-3 cr**

An individual project concerned with the student's special interests in music education. May be repeated for a maximum of six hours. Prerequisite: Department Chair permission.

**MUE 501 Instrumental Music Education 3 cr**

Study of the organization, development, appraisal, role and future trends of instrumental programs in the public schools.

**MUE 502 Choral Music Education 3 cr**

Choral Music Education is designed to provide broad exposure to elements that comprise a comprehensive choral program at the elementary and secondary levels.

**MUE 512 Foundations of Music Education 4 cr**

Sequential study of major philosophies guiding music teaching and the history of music education that have led to contemporary issues and problems in Music Education. Major philosophies including Pestalozzi, Reimer, and the praxial approach of Mark and history from perspectives of sociology, psychology, philosophy, curriculum, history and comparative curricula, including emerging trends in the profession.

**MUE 513 Curr and Assess in Music Ed 4 cr**

Critical evaluation of current literature, research, and assessment tools used in the curriculum and teaching of music. This course examines the relationship between curriculum theory and philosophy of music education. Through the study of traditional and contemporary models of curriculum development and evaluation, students broaden their understanding of curriculum as it impacts the learning process. Field experience required.

**MUE 515 String Pedagogy 3 cr**

A comprehensive study that is intended as a technique course specific to all string instruments. Topics of study will include: development of technique, etudes, performance preparation, pedagogical literature, and performance anxiety.

**MUE 519 Brass Pedagogy 3 cr**

A teaching techniques course specific to brass instruments. Topics of study will include teaching philosophy and techniques, pedagogical literature, lesson structure, and resources for further brass research.

**MUE 520 Adv Stdy in EC/Elem/Gen Music 4 cr**

Music supervision and administration, program development, conducting children's choirs, inclusion, instructional materials and innovative teaching techniques for early childhood and elementary music programs, including Kodaly, Orff, Dacroze, and Gordon.

**MUE 534 Keyboard, Voice, Guitar 3 cr**

The study of music literature, note reading, and the effective practice of incorporating keyboard, voice, and guitar through music education and music therapy.

**MUE 536 Integrating Arts in Education 1-3 cr**

This course examines arts integration as a philosophical approach to increasing the effectiveness of learning and content retention in the PK-12 classroom.

**MUE 540 Adv Study in Tchg Choral Music 4 cr**

Focus of the course is to enhance the student's knowledge of rehearsal techniques and instructional strategies, strengthening the role of the conductor, techniques for analytical preparation of choral music, and organization of choral programs. Emphasis will also be given to expanding knowledge of choral repertoire and resources for the choral conductor.

**MUE 548 Graduate Vocal Pedagogy 2 cr**

Vocal Pedagogy is a 2 credit hour course for the upper level undergraduate voice major and graduate vocal performance majors. It focuses on the art, science and profession of teaching singing. Class meetings will be dedicated to lecture, class discussion, presentations, and workshops with various pedagogical and voice science topics.

**MUE 560 Adv Study in Tchg Instr Music 4 cr**

The purpose of this course is to help the student develop teaching materials, gain greater familiarity with instrumental music repertoire, and develop instructional strategies for instrumental music. Emphasis will be placed on rehearsal procedures, analytical techniques, organizational structure, instrumental music program management, and advanced instrumental conducting.

**MUE 564 Woodwind Pedagogy 3 cr**

This course involves the study of teaching principles of the woodwind family, with specialized instruction given to students' primary woodwind instrument. Focusing on the art of teaching by examining pedagogical concepts and history, woodwind performance majors will experience teaching demonstrations and the discovery of new and standard teaching literature for woodwind instruments.

**MUE 570 Internship in Music Education 6 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the P-12 program. Students will be placed with persons holding a valid teaching certification in the appropriate field. Prereq: All program coursework completed.

**MUE 585 Practicum in Music Education 1-4 cr**

Observation and involvement in the teaching of undergraduate music courses at the college level with opportunities for individual research and teaching experiences.

**MUE 587 Percussion Pedagogy 2 cr**

A comprehensive study of methods and materials used to teach percussion instruments.

**MUE 589 Reading and Conference 1 cr**

Guided study in preparation of the portfolio-video recording and self critique, pedagogical project and research paper - which should be taken in conjunction with preparation of the final portfolio.

**MUE 590 Special Topics - 1-3 cr**

Special topics in music education designed to meet specific needs and special interests, and to explore current issues in the field. May be repeated for a maximum of nine hours when content varies. Requires permission of department chair.

**Music Literature (MUL)****MUL 101 Introduction to Music 3 cr**

Music, what it is and how to listen to it; basic materials of music and the great style periods of music literature in the Western World. Attendance at approved concerts is required.

**MUL 201 Contemporary Music 3 cr**

An introduction to music-literature trends in the 20th century.

**MUL 235 Survey Musical Masterworks I 2 cr**

This course is the first of a two semester sequence and will familiarize the student with the vocabulary, traditions, conventions, genres, and repertoire of the art music world. The course will focus on the 'greatest hits' of the concert repertoire and other works of a regional/timely interest.

**Prerequisite:** MUT 113 Minimum Grade of C

**MUL 236 Survey Musical of Masterwks II 2 cr**

This course is the second of a two semester sequence and will familiarize the student with the vocabulary, traditions, conventions, genres, repertoire of the art music world. The course will focus on the 'greatest hits' of the concert repertoire and other works of a regional/timely interest.

**Prerequisite:** MUL 235 Minimum Grade of D

**MUL 315 History of Music Theatre - W 3 cr**

A comprehensive overview of the origins and evolution of American Music Theatre to present time. The course also includes both general and specific information toward appropriate performance choices. Cross-listed with DRA 315. Credit cannot be received for both DRA 315 and MUL 315.

**Cross-Listed:** DRA 315

**MUL 335 History of Music I - W 3 cr**

Music of the Western World from pre-Christian times to 1750: evolution of forms, styles, and media.

**Prerequisite:** MUT 113 Minimum Grade of C and MUL 236 Minimum Grade of D and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**MUL 336 History of Music II - W 3 cr**

Music of the Western World from 1750 to the present: evolution of forms, styles, and media.

**Prerequisite:** MUL 335 Minimum Grade of D and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**MUL 411 Woodwind Literature 3 cr**

A survey of the major works of the solo, concerto, and chamber music repertoire for the woodwind instruments. Prerequisites: Upper division studio study in woodwinds or permission of instructor.

**MUL 412 Brass Literature 3 cr**

A survey of the major works of the solo, concerto, and chamber music repertoire for brass instruments. Prerequisite: Upper division brass studio study or permission of instructor.

**MUL 413 Percussion Literature 3 cr**

A survey of the major works of the solo, concerto, and chamber music repertoire for percussion instruments. Prerequisite: Upper division studio study in percussion or permission of instructor.

**MUL 414 Guitar Literature 3 cr**

A survey of the major works of the solo, concerto, and chamber music repertoire for guitar. Prerequisite: Upper division studio study in guitar or permission of instructor.

**MUL 415 String Literature 3 cr**

A survey of the major works of the solo, concerto, chamber music repertoire for string instruments. Prerequisite: Upper division studio study in strings or permission of instructor.

**MUL 438 Keyboard Literature 3 cr**

Major works and styles in the keyboard literature from English Virginalists through the contemporary period. Offered in alternate years. Prerequisites: Upper division piano study or instructor permission.

**MUL 442 Organ Literature 3 cr**

Music for pipe organ, both secular and sacred. Offered in alternate years. Prerequisites: Upper division organ study or instructor permission.

**MUL 444 Vocal Solo Literature 3 cr**

A comprehensive overview of standard solo vocal repertoire within the foundation of historical performance practice of sacred and secular vocal music from its beginnings to the present.

**Prerequisite:** MUL 335 Minimum Grade of D and MUL 336 Minimum Grade of D

**MUL 494 Dir St - 1-3 cr**

An individual project concerned with the student's special interests. May be repeated for up to 6 hours. Requires Department Chair permission.

**MUL 501 Graduate Research in Music 2 cr**

Methods and materials of research in music. Bibliography and bibliographical aids. Introduction to musicology. Critical and historical writing. A survey of references and sources consulted in graduate music courses; format for papers and thesis, including footnotes and bibliography.

**MUL 512 Brass Literature 3 cr**

A survey of the major works of the method, solo, orchestral, and chamber music repertoire for brass instruments.

**MUL 515 String Literature 3 cr**

A survey of the major works of the solo, concerto, and chamber music repertoire for string instruments.

**MUL 530 Symphonic Literature 3 cr**

A survey of the development of the symphony and related forms from its origins through the twentieth century.

**MUL 535 American Music 4 cr**

Early music in the colonies. Various attempts to create an individual 'American' musical style. Diversity of influences: European, African American, Native American, Spanish-Mexican, religious, jazz, folk song, minstrel, etc. Music of Billings, Mason, Gottschalk, MacDowell, Sousa, Ives, Gershwin, Copland, and others.

**MUL 544 Art Song Literature & History 2 cr**

Art Song Literature and History is an advanced study of art song literature from 1800-present for the graduate vocal performance major. Elements of form, style, poetic materials, and performance practice will be covered. Special emphasis will be given to elements of preparation and literature exploration for the emerging performer.

**MUL 545 Opera Literature and History 2 cr**

Opera Literature and History is designed to provide the student with a comprehensive study of opera from its earliest development to the present day. Elements of form, style, social/political influences, and stagecraft will be explored. Critical analysis of operatic works will be developed through guided listening and viewing assignments.

**MUL 546 Collab Piano Lit for Vocal 3 cr**

The graduate-level Vocal Accompanying Literature course offers a survey of music composed for voice(s) and piano from the pianist's perspective. Music for solo voice and piano will be explored chronologically. Additional units will feature standard choral music, choral/vocal music for church services, strategies for playing musical theater scores and techniques for operatic score reduction.

**MUL 564 Woodwind Literature 3 cr**

Woodwind Literature examines solo and chamber woodwind literature. The course will focus on the evolution of woodwind literature and masterworks in the repertoire.

**MUL 566 Coll Piano Lit for Instruments 3 cr**

Graduate-level Collaborative Piano Literature for keyboard and various instruments is a survey course which seeks to expose students to musical works written for solo instrument and piano/keyboard, standard chamber music (piano trios, quartets and quintets), non-standard chamber music and piano concertos. Collaborative duos will be explored by instrument type (violin, flute, trumpet, etc.), while chamber music will be studied chronologically.

**MUL 585 Grad Piano Literature Survey 2 cr**

The chronological survey includes units on pre-piano literature from England, France, Germany and Italy, early development of the classical sonata, the Viennese Classical period, late Beethoven and Schubert, the Romantics, Brahms and Nationalism, Debussy and Impressionism, piano music from 1920-1950, piano music since 1950.

**MUL 587 Percussion Literature 3 cr**

A survey of the major works of solo, concerto and chamber music repertoire for percussion instruments.

**MUL 590 Spec Topics in Music History 1-4 cr**

A study of works and styles appropriate to the topics listed: (1) Middle Ages; (2) Renaissance; (3) Baroque Period; (4) Classical Period; (5) Romantic Period; (6) Modern. May be repeated for credit when topics vary.

**Music Organization (MUO)****MUO 111 University Concert Choir 0.5,1 cr**

This large ensemble is open to all majors, and performs the masterpieces of choral literature. Required of all voice majors, and a placement audition is required for all participants.

**MUO 114 Chamber Singers 0.5 cr**

A small, select ensemble devoted to the performance of vocal chamber music. Audition and instructor permission required.

**MUO 115 Chorale 0.5,1 cr**

The Chorale is the preeminent choral ensemble on campus. Chorale members are chosen through special auditions, and perform in area schools and venues to promote the University and the Department of Music.

**MUO 116 USA Opera Theatre 0.5-1 cr**

A performing ensemble dedicated to training students in the fundamentals of stage craft, performance, and production through experience with music for the stage. Standards of opera, operetta, and American musical theater are explored in scene exercises and fully-staged productions on and off campus. Enrollment is open to all students through audition or permission of the instructor. Course is cross-listed with DRA 116. Credit cannot be received for both MUO 116 and DRA 116. **Cross-Listed:** DRA 116

**MUO 117 University Symphony Band 0.5,1 cr**

A large performing ensemble of woodwind, brass and percussion instrumentalists with an emphasis on wind band literature and live performance. Open to music majors and non-music majors with prior instrumental performance experience in high school or junior college.

**MUO 118 Woodwind Ensemble 0.5 cr**

The study and performance of literature for all combinations of woodwind instruments.

**MUO 119 Brass Ensemble 0.5 cr**

The study and performance of literature for all combinations of brass instruments.

**MUO 120 Percussion Ensemble 0.5 cr**

The study and performance of literature for all combinations of percussion instruments.

**MUO 121 Jazz Band 0.5 cr**

The ensemble study of jazz with an emphasis on literature and live performance.

**MUO 122 Basketball Pep Band 0.5 cr**

Performs for USA Basketball Games throughout the basketball season. Schedule varies annually.

**MUO 123 String Ensemble 0.5 cr**

The study and performance of literature for all combinations of string instruments.

**MUO 124 Piano Ensemble 0.5 cr**

The study and performance of two-piano and piano-ensemble literature. Required of piano majors.

**MUO 125 Guitar Ensemble 0.5 cr**

The study and performance for ensemble literature for guitar Required for all guitar majors.

**MUO 126 Collegium Musicum 0.5 cr**

A performing ensemble dedicated to combined chamber music experience of both vocal and instrumental forces, playing one-to-a-part, and focusing on music written before 1800. Enrollment is open to the entire university community through audition or permission of the co-directors. By virtue of the terms of the attached constitution, members will learn to choose repertoire, budget and raise small funds, develop programs, reserve performance space, organize print material, and explore the dynamics of team production. This team-taught course will also be dedicated to sharing cultural forces and encouraging the exchange of attitudes shared historically by all people.

**MUO 127 Wind Ensemble 0.5,1 cr**

A select performing ensemble of woodwind, brass, and percussion instrumentalists with an emphasis on wind ensemble literature and live performance. Open to music majors and non-majors with prior instrumental performance experience in high school or junior college. Audition or permission of instructor required for participation.

**MUO 129 Mixed Chamber Ensemble 0.5 cr**

The study and performance of chamber literature for all combinations of instruments and voices.

**MUO 130 University Marching Band 1 cr**

A large performing ensemble of woodwind, brass, percussion instrumentalists, and appropriate auxiliary personnel with an emphasis on live performance for athletic events. Open to music majors and non-music majors with prior instrumental performance experience in high school or junior college.

**MUO 131 University Winterguard 0.5,1 cr**

A large performing ensemble consisting of appropriate auxiliary personnel (flags, rifles, sabres, etc.) with an emphasis on live performance.

**MUO 133 University Orchestra 0.5,1 cr**

A large performing ensemble of string, woodwind, brass, and percussion instrumentalists with an emphasis on orchestral literature and live performance. Open to music majors and non-music majors with prior instrumental performance experience in high school or junior college. Audition or permission of instructor required for participation.

**MUO 136 World Music Ensemble 0.5 cr**

The study and performance of world literature for all combinations of instruments with an emphasis on music from non-Western cultures.

**MUO 137 University Band 0.5,1 cr**

A performing ensemble of woodwind, brass, and percussion instrumentalists with an emphasis on concert band literature and live performance. Open to music majors and non-majors with prior instrumental performance experience in high school, junior college, or at the university level. No audition is required for this ensemble and it is open to the entire campus community as well as faculty and staff.

**MUO 138 Flute Choir 0.5 cr**

The study and performance of literature for all combinations of flutes.

**MUO 139 Trumpet Ensemble 0.5 cr**

The study and performance of literature for all combinations of trumpets.

**MUO 140 Horn Choir 0.5 cr**

The study and performance of literature for all combinations of horns.

**MUO 141 Trombone Choir 0.5 cr**

The study and performance of literature for all combinations of trombones.

**MUO 142 Tuba-Euphonium Ensemble 0.5 cr**

The study and performance of literature for all combinations of tubas and euphoniums.

**MUO 143 Brass Choir 0.5 cr**

The study and performance of literature for large brass ensemble.

**MUO 144 USA Steel Band 0.5 cr**

The study and performance of literature for steel band including the traditional styles of soca and calypso music from the Caribbean. Instructor permission required.

**MUO 145 Clarinet Ensemble 0.5 cr**

The study and performance of literature for all combinations of clarinets.

**MUO 411 University Concert Choir 0.5,1 cr**

This large ensemble is open to all majors, and performs the masterpieces of choral literature. Required for all voice majors, and a placement audition is required for all participants.

**MUO 414 Chamber Singers 0.5 cr**

A small, select ensemble devoted to the performance of vocal chamber music. Audition and instructor permission required.

**MUO 415 Chorale 0.5,1 cr**

The Chorale is the preeminent choral ensemble on campus. Chorale members are chosen through special auditions and perform in area schools and venues to promote the University and the Department of Music.

**MUO 416 USA Opera Theatre 0.5-1 cr**

A performing ensemble dedicated to training students in the fundamentals of stage craft, performance, and production through experience with music for the stage. Standards of opera, operetta, and American musical theater are explored in scene exercises and fully-staged productions on and off campus. Enrollment is open to all students through audition or permission of the instructor. Course is cross-listed with DRA 416. Credit cannot be received for both MUO 416 and DRA 416.  
**Cross-Listed:** DRA 116

**MUO 417 University Symphony Band 0.5,1 cr**

A large performing ensemble of woodwind, brass and percussion instrumentalists with an emphasis on wind band literature and live performance. Open to music majors and non-music majors with prior instrumental performance experience in high school or junior college.

**MUO 418 Woodwind Ensemble 0.5 cr**

The study and performance of literature for all combinations of woodwind instruments.

**MUO 419 Brass Ensemble 0.5 cr**

The study and performance of literature for all combinations of brass instruments.

**MUO 420 Percussion Ensemble 0.5 cr**

The study and performance of literature for all combinations of percussion instruments.

**MUO 421 Jazz Band 0.5 cr**

The ensemble study of jazz with an emphasis on literature and live performance.

**MUO 423 String Ensemble 0.5 cr**

The study and performance of literature for all combinations of string instruments.

**MUO 424 Piano Ensemble 0.5 cr**

The study and performance of two-piano and piano-ensemble literature. Required of piano majors.

**MUO 425 Guitar Ensemble 0.5 cr**

The study and performance of ensemble literature for guitar. Required of guitar majors.

**MUO 426 Collegium Musicum 0.5 cr**

A performing ensemble dedicated to combined chamber music experience of both vocal and instrumental forces, playing one-to-a-part, and focusing on music written before 1800. Enrollment is open to the entire university community through audition or permission of the co-directors. By virtue of the terms of the attached constitution, members will learn to choose repertoire, budget and raise small funds, develop programs, reserve performance space, organize print material, and explore the dynamics of team production. This team-taught course will also be dedicated to sharing cultural forces and encouraging the exchange of attitudes shared historically by all people.

**MUO 427 Wind Ensemble 0.5,1 cr**

A select performing ensemble of woodwind, brass and percussion instrumentalists with an emphasis on wind ensemble literature and live performance. Open to music majors and non-majors with prior instrumental performance experience in high school or junior college. Audition or permission of instructor required for participation.

**MUO 429 Mixed Chamber Ensemble 0.5 cr**

The study and performance of chamber literature for all combinations of instruments and voices.

**MUO 430 University Marching Band 1 cr**

A large performing ensemble of woodwind, brass, percussion instrumentalists, and appropriate auxiliary personnel with an emphasis on live performance for athletic events. Open to music majors and non-music majors with prior instrumental performances experience in high school or junior college.

**MUO 431 University Winterguard 0.5,1 cr**

A large performing ensemble consisting of appropriate auxiliary personnel (flags, rifles, sabres, etc.) with an emphasis on live performance.

**MUO 433 University Orchestra 0.5-1 cr**

A large performing ensemble of string, woodwind, brass and percussion instrumentalists, with an emphasis on orchestral literature and live performance. Open to music majors and non-music majors with prior instrumental performance experience in high school or junior college. Audition or permission of instructor required for participation.

**MUO 436 World Music Ensemble 0.5 cr**

The study and performance of world literature for all combinations of instruments with an emphasis on music from non-Western cultures.

**MUO 437 University Band 0.5,1 cr**

A performing ensemble of woodwind, brass, and percussion instrumentalists with an emphasis on concert band literature and live performance. Open to music majors and non-majors with prior instrumental performance experience in high school, junior college, or at the university level. No audition is required for this ensemble and it is open to the entire campus community as well as faculty and staff.

**MUO 438 Flute Choir 0.5 cr**

The study and performance of literature for all combinations of flutes.

**MUO 439 Trumpet Ensemble 0.5 cr**

The study and performance of literature for all combinations of trumpets.

**MUO 440 Horn Choir 0.5 cr**

The study and performance of literature for all combinations of horns.

**MUO 441 Trombone Choir 0.5 cr**

The study and performance of literature for all combinations of trombones.

**MUO 442 Tuba-Euphonium Ensemble 0.5 cr**

The study and performance of literature for all combinations of tubas and euphoniums.

**MUO 443 Brass Choir 0.5 cr**

The study and performance of literature for large brass ensemble.

**MUO 444 USA Steel Band 0.5 cr**

The study and performance of literature for steel band including the traditional styles of soca and calypso music from the Caribbean. Instructor permission required.

**MUO 445 Clarinet Ensemble 0.5 cr**

The Study and performance of literature for all combinations of clarinets.

**MUO 507 Ensemble with Coll Keyboard 1 cr**

The Director for Collaborative Keyboard studies will meet with the student enrolled in MUO 507 to determine an ensemble assignment. Assignments may include one of the following: accompany/collaborate with Opera Theater, Symphony Band, Wind Ensemble, Concert Choir, Chorale, Chamber Music Ensemble or smaller ensemble.

**MUO 511 University Concert Choir 0.5,1 cr**

This large ensemble is open to all majors, and performs the masterpieces of choral literature. Required for all voice majors, and a placement audition is required for all participants.

**MUO 514 Chamber Singers 0.5 cr**

A small, select ensemble devoted to the performance of vocal chamber music. Audition and instructor permission required.

**MUO 515 Chorale 0.5,1 cr**

The Chorale is the preeminent choral ensemble on campus. Chorale members are chosen through special auditions, and perform in area schools and venues to promote the University and the Department of Music.

**MUO 516 Opera & Musical Theatre Wrkshp 1 cr**

A performing ensemble dedicated to training students in the fundamentals of stage craft, performance, and production through experience with music for the stage. Standards of opera, operetta, and American musical theatre are explored in scene exercises and fully-staged productions on and off campus. Enrollment is open to all students through audition or permission of the instructor.

**MUO 517 University Symphony Band 0.5,1 cr**

A large performing ensemble of woodwind, brass and percussion instrumentalists with an emphasis on wind band literature and live performance. Open to music majors and non-music majors with prior instrumental performance experience in high school or junior college.

**MUO 518 Woodwind Ensemble 0.5 cr**

The study and performance of literature for all combinations of woodwind instruments.

**MUO 519 Brass Ensemble 0.5 cr**

The study and performance of literature for all combinations of brass instruments.

**MUO 520 Percussion Ensemble 0.5 cr**

The study and performance of literature for all combinations of percussion instruments.

**MUO 521 Jazz Band 0.5 cr**

The ensemble study of jazz with an emphasis on literature and live performance.

**MUO 523 String Ensemble 0.5 cr**

The study and performance of literature for all combinations of string instruments.

**MUO 524 Piano Ensemble 0.5 cr**

The study and performance of two-piano and piano-ensemble literature. Required of piano majors.

**MUO 525 Guitar Ensemble 0.5 cr**

The study and performance of ensemble literature for guitar. Required of guitar majors.

**MUO 526 Collegium Musicum 0.5 cr**

A performing ensemble dedicated to combined chamber music experience of both vocal and instrumental forces, playing one-to-a-part, and focusing on music written before 1800. Enrollment is open to the entire university community through audition or permission of the co-directors. By virtue of the terms of the attached constitution, members will learn to choose repertoire, budget and raise small funds, develop programs, reserve performance space, organize print material, and explore the dynamics of team production. This team-taught course will also be dedicated to sharing cultural forces and encouraging the exchange of attitudes shared historically by all people.

**MUO 527 Wind Ensemble 1 cr**

A select performing ensemble of woodwind, brass and percussion instrumentalist with an emphasis on wind ensemble literature and live performance. Open to music majors and non-majors with prior instrumental performance experience in high school or junior college. Audition or permission of instructor required for participation.

**MUO 529 Mixed Chamber Ensemble 0.5 cr**

The study and performance of chamber literature for all combinations of instruments and voices.

**MUO 530 University Marching Band 1 cr**

A large performing ensemble of woodwind, brass, percussion instrumentalists, and appropriate auxiliary personnel with an emphasis on live performance for athletic events. Open to music majors and non-majors with prior instrumental performance experience in high school or junior college.

**MUO 531 University Winterguard 0.5,1 cr**

A large performing ensemble consisting of appropriate auxiliary personnel (flags, rifles, sabres, etc.) with an emphasis on live performance.

**MUO 533 University Orchestra 0.5,1 cr**

A large performing ensemble of string, woodwind, brass and percussion instrumentalists with an emphasis on orchestral literature and live performance. Open to music majors and non-majors with prior instrumental performance experience in high school or junior college. Audition or permission of instructor required for participation.

**MUO 536 World Music Ensemble 0.5 cr**

The study and performance of world literature for all combinations of instruments with an emphasis on music from non-Western cultures.

**MUO 537 University Band 0.5,1 cr**

A performing ensemble of woodwind, brass and percussion instrumentalists with an emphasis on concert band literature and live performance. Open to music majors and non-majors with prior instrumental performance experience in high school, junior college, or at the university level. No audition is required for this ensemble and is open to the entire campus community as well as faculty and staff.

**MUO 538 Flute Choir 0.5 cr**

The study of performance of literature for all combinations of flutes.

**MUO 539 Trumpet Ensemble 0.5 cr**

The study and performance of literature for all combinations of trumpets.

**MUO 540 Horn Choir 0.5 cr**

The study and performance of literature for all combinations of horns.

**MUO 541 Trombone Choir 0.5 cr**

The study and performance of literature for all combinations of trombones.

**MUO 542 Tuba - Euphonium Ensemble 0.5 cr**

The study and performance of literature for all combinations of tubas and euphoniums.

**MUO 543 Brass Choir 0.5 cr**

The study and performance of literature for large brass ensemble.

**MUO 544 USA Steel Band 0.5 cr**

The study and performance of literature for steel band including the traditional styles of soca and calypso music from the Caribbean. Instructor permission required.

**MUO 545 Clarinet Ensemble 0.5 cr**

The study and performance of literature for all combinations of clarinets.

**Music Studio (MUS)****MUS 201 Intro to Music Edu Technology 2 cr**

Application of current Music Technology for the N-12 curriculum. Laboratory experience is given in selected software programs appropriate to music education.

**Prerequisite:** MUT 113 Minimum Grade of C

**MUS 202 Vocal Diction I 1 cr**

A lecture/performance course, rooted in the International Phonetic Alphabet (IPA), designed to enable singers to analyze and perform vocal repertoire in English and Italian. Prerequisite: Open to music majors and minors only.

**MUS 203 Vocal Diction II 1 cr**

A lecture/performance course, rooted in the International Phonetic Alphabet (IPA), designed to enable singers to analyze and perform vocal repertoire in French and German.

**Prerequisite:** MUS 202 Minimum Grade of D

**MUS 204 Introduction to Music Business 3 cr**

A general overview of the music industry is the primary objective of the course. Some emphasis will be placed on career options.

**MUS 304 Principles of Music Business I 3 cr**

A continuation of MUS 204, 304 will place emphasis on the legal aspects of the music industry.

**Prerequisite:** MUS 204 Minimum Grade of D

**MUS 305 Principles Music Business II 3 cr**

A continuation of MUS 304, 305 will address marketing and promoting in music.

**Prerequisite:** MUS 304 Minimum Grade of D

**MUS 404 Recording Technology 2 cr**

This course provides an overview of analog and digital audio, introduces students to basic recording/mixing tools and topics include: microphone and mixer preparation, studio and computing capture/edit. Also addressed: project management, assets, and project.

**Prerequisite:** MUT 213 Minimum Grade of C

**MUS 421 Music - Sound and Multimedia 2 cr**

This course familiarizes students with the techniques and materials for incorporating sound and music in the Wintel and Macintosh multimedia environments. Topics to be addressed will include making music with and without MIDI, sound resources, special effects, commercial libraries and sounds, digital sequencing, authoring environments, and legal issues.

**MUS 422 Sequencing 2 cr**

To familiarize students with professional-level music sequencing software, hardware, and techniques. Students will gain practical skills with MIDI recording, playback, and editing.

**MUS 470 Internship Music Bus 9-12 cr**

Internship is a program that provides qualified university students with supervised experience in production practices, management techniques, research applications, personnel matters, and other activities found in the modern music industry. Prerequisites: Completion of the Music Industry Concentration core including College of Business course requirements, permission of the participating business-organization, and approval of the departmental internship coordinator and department chair.

**MUS 490 Special Topics 1-3 cr**

This course introduces students to fundamental techniques and materials for working with studio-quality sound, hardware and software. Topics will be drawn from: MIDI/music networks, graphic notation, MIDI controllers/sequencers, sampling basics, and film and video synchronization fundamentals. May be repeated for a maximum of nine credit hours.

**Prerequisite:** MUS 421 Minimum Grade of D and MUS 422 Minimum Grade of D

**MUS 499 Senior Honors Proj in Music-H 3-6 cr**

With the guidance and advice of a faculty mentor, Honors Students will identify, and carry out a research project in music. The outcome of the research project will include a written report and formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three members of the faculty, chaired by the faculty mentor. Requires permission of department chair.

**MUS 501 Music Education Technology 3 cr**

Application of current Music Technology for the N-12 curriculum. Laboratory experience is given in selected software programs appropriate to music education.

**MUS 521 Music - Sound and Multimedia 3 cr**

To familiarize students with the techniques and materials for incorporating sound and music in the multimedia environment. Topics to be addressed will include making music with and without MIDI, sound resources, special effects, commercial libraries and sounds, digital sequencing, authoring environments, and legal issues.

**MUS 522 Sequencing 2 cr**

This course familiarizes students with professional-level music sequencing software, hardware, and techniques. Students will gain practical skills with MIDI recording, playback, and editing. Instructor permission required.

**MUS 585 Practicum in Coll Keyboard 2 cr**

The Director for Collaborative Keyboard studies will meet with the student enrolled in MUS 585 to assign literature, which will be studied during the semester. Assignments may include several selections with vocalists, as well as collaboration with strings, woodwinds and brass. The goal of the course is to gain practical experience as collaborator studying standard repertoire with a varied group of vocalists and instrumentalists.

**MUS 587 Arranging for Percussion 1 cr**

The analysis of existing musical works from various genres and the ability to create effective musical arrangements scored only for percussion instruments.

**MUS 590 Sp Top in Music Technology 1-3 cr**

Special topics in Music Technology. May be repeated for a maximum of 9 hours.

**Prerequisite:** MUS 522 Minimum Grade of D

**Music Theory (MUT)****MUT 112 Basic Music Theory I 3 cr**

Integrated course in aural and non-aural music theory including music skills, part writing analysis, counterpoint, sight singing, dictation, keyboard harmony, and computer applications in part writing and ear training.

**MUT 113 Basic Music Theory II 3 cr**

Elementary part-writing in two, three, and four voices. Sight-singing, ear-training, and keyboard harmony. Must be taken in sequence.

**Prerequisite:** MUT 112 Minimum Grade of C

**MUT 212 Intermediate Music Theory I 3 cr**

A continuation of elementary theory. Chromatic harmony and remote modulation; sight-singing, ear training, keyboard harmony. Must be taken in sequence.

**Prerequisite:** MUT 113 Minimum Grade of C

**MUT 213 Intermediate Music Theory II 3 cr**

A continuation of elementary theory. Chromatic harmony and remote modulation; sight-singing, ear-training, keyboard harmony. Must be taken in sequence.

**Prerequisite:** MUT 212 Minimum Grade of C

**MUT 312 Integrated Analytical Tech I 2 cr**

This is the first semester of a two semester sequence designed to familiarize students with the rudiments of formal analysis, counterpoint, and practical orchestration for 18th, 19th, and 20th century music - particularly emphasizing classical, jazz, pop, and selected world-music styles.

**Prerequisite:** MUT 213 Minimum Grade of C

**MUT 313 Integrated Analytical Tech II 2 cr**

This is the second semester of a two semester sequence designed to familiarize students with the rudiments of formal analysis, counterpoint, and practical orchestration for 18th, 19th, and 20th century musics- particularly emphasizing classical, jazz, pop, and selected world-music styles.

**Prerequisite:** MUT 312 Minimum Grade of C

**MUT 314 Introduction to Composition 2 cr**

Compositional techniques and the writing of original compositions for solo instruments and small ensembles.

**Prerequisite:** MUT 213 Minimum Grade of D

**MUT 361 Fundamentals of Conducting 3 cr**

Basic baton technique; simple and complex rhythms; score reading; practical choral and instrumental conducting techniques.

**Prerequisite:** MUT 213 Minimum Grade of D

**MUT 362 Instrumental Conducting 3 cr**

Advanced baton technique; psychology of rehearsal; interpretative and conducting techniques for instrumental organization.

**Prerequisite:** MUT 361 Minimum Grade of D

**MUT 364 Choral Cond and Lit 3 cr**

Advanced conducting with attention to the harmonic and formal analysis of choral works; special emphasis on performance practice.

**Prerequisite:** MUT 361 Minimum Grade of D

**MUT 412 Orchestration 2 cr**

The techniques of scoring for the orchestra, band, and small ensembles.

**Prerequisite:** MUT 213 Minimum Grade of D

**MUT 413 Band Arranging 2 cr**

The techniques of scoring for the modern concert wind band. Offered in alternate years.

**Prerequisite:** MUT 213 Minimum Grade of D

**MUT 421 Composition I 3 cr**

Original work in musical composition. To be taken in sequence. Offered by special arrangement only.

**Prerequisite:** MUT 314 Minimum Grade of D

**MUT 422 Composition II 3 cr**

Original work in musical composition. To be taken in sequence. Offered by special arrangement only.

**Prerequisite:** MUT 421 Minimum Grade of D

**MUT 431 Jazz Improvisation I 2 cr**

The study of elementary improvisation techniques used in contemporary jazz performance. Instructor permission required.

**MUT 432 Jazz Improvisation II 2 cr**

The study of intermediate to advanced improvisation techniques used in contemporary jazz performance. Instructor permission required.

**MUT 490 Special Topics - 1-3 cr**

Special topics in music theory and composition. May be repeated for a maximum of six hours credit when content varies.

**MUT 512 Intro Analysis of Music Lit 4 cr**

Introduction to the techniques of analysis applied to a selection of music literature emphasizing works from the seventeenth century to the middle of the twentieth century.

**MUT 513 Pedagogy of Theory 1-4 cr**

Practices and principles of teaching music theory, emphasizing most desirable and practical offerings possible. A comparative survey of current systems and materials for teaching music theory and aural skills. Review of materials and methods used in teaching the written music theory sequence and in teaching aural skills (music dictation and sight singing). Includes review of textbooks and technology used in the classroom.

**MUT 531 Jazz Improvisation I 2 cr**

The study of elementary improvisation techniques used in contemporary jazz performance. Instructor permission required.

**MUT 532 Jazz Improvisation II 2 cr**

The study of intermediate to advanced improvisation techniques used in contemporary jazz performance. Instructor permission required.

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
ABEND, ROBERT DAVID (robertabend@southalabama.edu)	Music	Assistant Professor	BME, Eastern Michigan University MM, Western Michigan University DMA, Michigan State University
BOHNET, ANDRA COOK (abohnet@southalabama.edu)	Music	Professor	BM, University of The Pacific MM, University of Southern CA PHD, Texas Tech University
DURANT, DAVID ZELL (ddurant@southalabama.edu)	Music	Professor	BM, University of Florida MM, University of Florida DMA, University of Alabama
FRANKLIN, KIP EDWARD (kipfranklin@southalabama.edu)	Music	Associate Professor	BM, Central Michigan University MM, Michigan State University MM, Michigan State University DMA, Michigan State University
HEAVNER, TRACY LEE (theavner@southalabama.edu)	Music	Professor	BME, Appalachian State University MME, Appalachian State University DME, University of Northern CO
HOLM, ROBERT E. (rholm@southalabama.edu)	Music	Professor	BA, Point Loma Nazarene University MM, University of Illinois-Urbana DMA, University of Illinois-Urbana
MADDOX, CLAYTON (claytonmaddox@southalabama.edu)	Music	Instructor	BM, University of Alabama MM, University of Memphis DMA, Louisiana State University

MOORE, LAURA M. (lauramoore@southalabama.edu)	Music	Associate Professor	BA, Davidson College MM, Johns Hopkins University MM, University of NC- Greensboro DMA, University of NC- Greensboro
PETERSEN, WILLIAM HANKS (wpetersen@southalabama.edu)	Music	Associate Professor	BME, Indiana University- Bloomington MM, Indiana University-Bloomington
ROWELL, THOMAS LAMAR (trowell@southalabama.edu)	Music	Professor	DM, Indiana University-Bloomington BM, Union University MM, Austin Peay State University DMA, Southwestern Baptist Theolog Sem
VANDE WAA, ARIE JOHN (ajvandewaa@southalabama.edu)	Music	Assistant Professor	BM, University of South Alabama MM, University of Alabama DM, University of Alabama
WOOD, PETER J. (pwood@southalabama.edu)	Music	Professor	BS, University of Illinois-Urbana MM, University of Wisconsin-Madis DM, Indiana University-Bloomington
ZOGHBY, LINDA V. (lzoghby@southalabama.edu)	Music	Assistant Professor	BM, Florida State University MM, Florida State University

## General Education Requirements

Code	Title	Hours
<b>Area I - Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II - Humanities &amp; Fine Arts</b>		
A. Complete the following:		
CA 110	Public Speaking	3
B. Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/footnote1/">http://bulletin.southalabama.edu/programs-az/arts-sciences/footnote1/</a> ) <sup>1,2</sup>		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
<b>Area III – Natural Sciences &amp; Mathematics</b>		
A. Select 3-4 hours from the following:		
MA 110	Finite Mathematics	3-4
MA 111	Math in Society	
MA 112	Precalculus Algebra	
MA 113	Precalculus Trigonometry	
MA 115	Precal Algebra-Trigonometry	
MA 120	Calculus and Its Applications	
MA 125	Calculus I	
MA 126	Calculus II	
MA 227	Calculus III	
MA 237	Linear Algebra I	
MA 238	Differential Equations I	
B. Select 8-10 hours from the following:		

AN 121 & 121L	Biological Anthropology and Biological Anthropology Lab
BLY 101 & 101L	Life Science I and Life Science I Laboratory
or BLY 121 & 121L	General Biology I and General Biology I Lab
BLY 102 & 102L	Life Science II and Life Science II Lab
or BLY 122 & 122L	General Biology II and General Biology II Laboratory
BMD 110	Introduction to A & P I
BMD 111	Introduction to A & P II
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab
CH 131 & 131L	General Chemistry I and General Chemistry I Lab
CH 132 & 132L	General Chemistry II and General Chemistry II Lab
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab
GY 111 & 111L	Physical Geology and Physical Geology Lab
GY 112 & 112L	Earth History and Earth History Lab
MAS 134 & 134L	Ocean Science and Ocean Science Lab
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab

or PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab
or PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab

**Area IV – History, Social & Behavioral Sciences**

A. Select one of the following:		3
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 121	World Civilization I	
HY 122	World Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	

B. Select three of the following: (<http://bulletin.southalabama.edu/programs-az/arts-sciences/footnote1/>)<sup>4</sup>

AN 100	Intro to Cultural Anthropology	9
AN 101	Intro Archaeology-Bio Anthro	
CA 100	Intro to Communication	
CA 211	Interpersonal Comm	
CJ 105	Introduction to Criminal Justice	
ECO 215	Prin of Microeconomics (see footnote table below (p. 310)) <sup>3</sup>	
ECO 216	Prin of Macroeconomics (see footnote table below (p. 310)) <sup>3</sup>	
GEO 114	People, Places, Environment	
GEO 115	World Regional Geography	
GS 101	Intro to Gender Studies	
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 121	World Civilization I	
HY 122	World Civilization II	
HY 135	US History to 1877 (see footnote table below (p. 310)) <sup>3</sup>	
HY 136	US History since 1877 (see footnote table below (p. 310)) <sup>3</sup>	
IS 100	Global Issues	
IST 201	Seasons of Life	
NAS 101	Intro Native American Studies	
PSC 130	Intro to US Government	
PSY 120	Introduction to Psychology	
PSY 250	Life Span Development	
SY 109	Introductory Sociology	
SY 112	Social Problems	

**Area V**

A. Complete the following:		
CAS 100	First Yr Exp -	2

**Total Hours 37-40**

**Footnote**

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226,

or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 121 & HY 122 or HY 135 & HY 136).  
<sup>2</sup> Students must select a six-hour sequence in literature or history. If a literature sequence is selected, choose a 6 hour sequence of EH 215 and EH 216, EH 225 and EH 226, or EH 235 and EH 236.  
<sup>3</sup> Recommended Course  
<sup>4</sup> No more than 6 hours in any one discipline may be counted.

**Music (BM) - Elective Studies in Business Concentration**

**Degree Requirements**

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 309)		37-40
<b>Major Requirements</b>		<b>89</b>
<i>Music Core Requirements</i>		<i>54</i>
Music Theory		
A. Complete the following:		
MUT 112	Basic Music Theory I	3
MUT 113	Basic Music Theory II	3
MUT 212	Intermediate Music Theory I	3
MUT 213	Intermediate Music Theory II	3
MUT 312	Integrated Analytical Tech I	2
MUT 313	Integrated Analytical Tech II	2
MUT 361	Fundamentals of Conducting	3
Music Literature		
A. Complete the following:		
MUL 235	Survey Musical Masterworks I	2
MUL 236	Survey Musical of Masterwks II	2
MUL 335	History of Music I - W	3
MUL 336	History of Music II - W	3
Applied Music		
A. Complete 8 hours from the following:		
MUA/B2**		8
B. Complete 6 hours from the following:		
MUA/B3**		6
MUA 400	Senior Recital	0
Major Ensemble		
A. Select four hours from the following:		
MUO 111	University Concert Choir	4
MUO 115	Chorale	
MUO 116	USA Opera Theatre	
MUO 117	University Symphony Band	
MUO 127	Wind Ensemble	
MUO 130	University Marching Band	
MUO 133	University Orchestra	
MUO 137	University Band	
B. Select three hours from the following:		
MUO 411	University Concert Choir	3
MUO 415	Chorale	
MUO 416	USA Opera Theatre	

MUO 417	University Symphony Band
MUO 427	Wind Ensemble
MUO 430	University Marching Band
MUO 433	University Orchestra
MUO 437	University Band

Recital Class

A. Complete six semesters of the following:

MUA 100	Recital Class	0
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Piano

Select one four hour sequence: 4

Option 1

MUE 102	Elementary Class Piano
MUE 103	Elementary Class Piano
MUE 202	Intermediate Class Piano
MUE 203	Intermediate Class Piano

Option 2

MUE 213	Adv Keyboard Musicianship II
MUE 212	Adv Keyboard Musicianship I
MUE 312	Adv Keyboard Music III Vocal
MUE 313	Adv Keyboard Music IV Inst

Concentration Requirements For Elective Studies In Business 35

Music Business

A. Complete the following:

MUS 204	Introduction to Music Business	3
MUS 304	Principles of Music Business I	3
MUS 305	Principles Music Business II	3
MUS 404	Recording Technology	2

Business

B. Complete the following:

ACC 211	Financial Accounting	3
ACC 212	Managerial Accounting	3
ECO 215	Prin of Microeconomics	3
ECO 216	Prin of Macroeconomics	3
MKT 320	Principles of Marketing	3

Internship

C. Complete the following:

MUS 470	Internship Music Bus	9-12
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Minor Requirements

A minor is not required for this degree program 0

**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

# Graduation Plan

(126 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
MUT 112	Basic Music Theory I <sup>1</sup>	3
MUE 102 or MUE 212	Elementary Class Piano <sup>1</sup> or Adv Keyboard Musicianship I	1
Select one of the following: <sup>1</sup>		1
MUO 111	University Concert Choir	

MUO 115	Chorale	
MUO 116	USA Opera Theatre	
MUO 117	University Symphony Band	
MUO 127	Wind Ensemble	
MUO 130	University Marching Band	
MUO 133	University Orchestra	
MUA/B 2	Applied Music <sup>1,2</sup>	2
MUA 100	Recital Class <sup>1</sup>	0
EH 101	English Composition I (Area I, A) <sup>2</sup>	3
HY 101 or HY 121 or HY 135	HY of Western Civilization I (Area IV, A) <sup>2</sup> or World Civilization I or US History to 1877	3
MA 110	Finite Mathematics (Area III, A) <sup>2</sup>	3
CAS 100	First Yr Exp - <sup>2</sup>	2
<b>Hours</b>		<b>18</b>

Spring

MUT 113	Basic Music Theory II <sup>1</sup>	3
MUE 103 or MUE 213	Elementary Class Piano <sup>1</sup> or Adv Keyboard Musicianship II	1
Select one of the following: <sup>1</sup>		1
MUO 111	University Concert Choir	
MUO 115	Chorale	
MUO 116	USA Opera Theatre	
MUO 117	University Symphony Band	
MUO 127	Wind Ensemble	
MUO 130	University Marching Band	
MUO 133	University Orchestra	
MUA/B 2	Applied Music <sup>1,2</sup>	2
MUA 100	Recital Class <sup>1</sup>	0
EH 102	English Composition II (Area I, B) <sup>2</sup>	3
HY 102 or HY 122 or HY 136	HY of Western Civilization II (Area IV, B) <sup>2</sup> or World Civilization II or US History since 1877	3
CA 110	Public Speaking (Area II, A) <sup>2</sup>	3
<b>Hours</b>		<b>16</b>

Second Year

Fall

MUT 212	Intermediate Music Theory I <sup>1</sup>	3
MUE 103 or MUE 213	Elementary Class Piano <sup>1</sup> or Adv Keyboard Musicianship II	1
Select one of the following: <sup>1</sup>		1
MUO 111	University Concert Choir	
MUO 115	Chorale	
MUO 116	USA Opera Theatre	
MUO 117	University Symphony Band	
MUO 127	Wind Ensemble	
MUO 130	University Marching Band	
MUO 133	University Orchestra	
MUA/B 2	Applied Music <sup>1,2</sup>	2
MUL 235	Survey Musical Masterworks I <sup>1</sup>	2
MUA 100	Recital Class <sup>1</sup>	0
Lab Science	Area III, B <sup>2</sup>	4
ACC 211	Financial Accounting <sup>3</sup>	3
<b>Hours</b>		<b>16</b>

Spring

MUT 213	Intermediate Music Theory II <sup>1</sup>	3
MUE 203 or MUE 313	Intermediate Class Piano <sup>1</sup> or Adv Keyboard Music IV Inst	1
Select one of the following: <sup>1</sup>		1
MUO 111	University Concert Choir	
MUO 115	Chorale	
MUO 116	USA Opera Theatre	
MUO 117	University Symphony Band	

MUO 127	Wind Ensemble	
MUO 130	University Marching Band	
MUO 133	University Orchestra	
MUA/B 2	Applied Music <sup>1,2</sup>	2
MUL 236	Survey Musical of Masterwks II <sup>1</sup>	2
MUA 100	Recital Class <sup>1</sup>	0
Humanities	Area III, B <sup>2</sup>	3
MUS 204	Introduction to Music Business <sup>3</sup>	3
ACC 212	Managerial Accounting <sup>3</sup>	3

**Hours** 18

**Third Year**

**Fall**

MUT 312	Integrated Analytical Tech I <sup>1</sup>	2
MUL 335	History of Music I - W <sup>1</sup>	3
MUT 361	Fundamentals of Conducting <sup>1</sup>	3
Select one of the following: <sup>1</sup>		1
MUO 411	University Concert Choir	
MUO 415	Chorale	
MUO 416	USA Opera Theatre	
MUO 417	University Symphony Band	
MUO 427	Wind Ensemble	
MUO 430	University Marching Band	
MUO 433	University Orchestra	
MUA/B 3	Applied Music <sup>1,2</sup>	2
MUA 100	Recital Class <sup>1</sup>	0
MUS 304	Principles of Music Business I <sup>3</sup>	3
ECO 215	Prin of Microeconomics <sup>3</sup>	3

**Hours** 17

**Spring**

MUT 313	Integrated Analytical Tech II <sup>1</sup>	2
MUL 336	History of Music II - W <sup>1</sup>	3
Select one of the following: <sup>1</sup>		1
MUO 411	University Concert Choir	
MUO 415	Chorale	
MUO 416	USA Opera Theatre	
MUO 417	University Symphony Band	
MUO 427	Wind Ensemble	
MUO 430	University Marching Band	
MUO 433	University Orchestra	
MUA/B 3	Applied Music <sup>1,2</sup>	2
MUA 100	Recital Class <sup>1</sup>	0
Social Science	Area IV, B <sup>2</sup>	3
MUS 305	Principles Music Business II <sup>3</sup>	3
ECO 216	Prin of Macroeconomics <sup>3</sup>	3

**Hours** 17

**Fourth Year**

**Fall**

MUA 400	Senior Recital <sup>1</sup>	0
Select one of the following: <sup>1</sup>		1
MUO 411	University Concert Choir	
MUO 415	Chorale	
MUO 416	USA Opera Theatre	
MUO 417	University Symphony Band	
MUO 427	Wind Ensemble	
MUO 430	University Marching Band	
MUO 433	University Orchestra	
MUA/B 3	Applied Music <sup>1,2</sup>	2
Social Science	Area IV, B <sup>2</sup>	3
Lab Science	Area III, B <sup>2</sup>	4
MUS 404	Recording Technology <sup>3</sup>	2
MKT 320	Principles of Marketing <sup>3</sup>	3

**Hours** 15

**Spring**

MUS 470	Internship Music Bus <sup>3</sup>	9-12
<b>Hours</b>		<b>9-12</b>
<b>Total Hours</b>		<b>126-129</b>

- <sup>1</sup> Core
- <sup>2</sup> Gen Ed, see General Education Requirements
- <sup>3</sup> Concentration

**Notes:**

No courses for the Baccalaureate music core or concentration are offered during the Maymester or summer semester.

# Music (BM) - Vocal Music Education Concentration

## Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 309)		37-40
<b>Major Requirements</b>		<b>86</b>
<i>Music Core Requirements</i>		
Music Theory		
A. Complete the following:		
MUT 112	Basic Music Theory I	3
MUT 113	Basic Music Theory II	3
MUT 212	Intermediate Music Theory I	3
MUT 213	Intermediate Music Theory II	3
MUT 312	Integrated Analytical Tech I	2
MUT 313	Integrated Analytical Tech II	2
MUT 361	Fundamentals of Conducting	3
Music Literature		
A. Complete the following:		
MUL 235	Survey Musical Masterworks I	2
MUL 236	Survey Musical of Masterwks II	2
MUL 335	History of Music I - W	3
MUL 336	History of Music II - W	3
Applied Music		
A. Complete 8 hours of the following:		
MUA 222	Voice Major-Lower Division	2
B. Complete 6 hours of the following:		
MUA 322	Voice Major-Upper Division	2
C. Complete the following:		
MUA 400	Senior Recital	0
Major Ensemble		
A. Select four hours from the following:		
MUO 111	University Concert Choir	
MUO 115	Chorale	
MUO 116	USA Opera Theatre	
B. Select three hours from the following:		
MUO 411	University Concert Choir	
MUO 415	Chorale	
MUO 416	USA Opera Theatre	

Recital Class		
A. Complete 6 semesters of the following:		
MUA 100	Recital Class	0
Piano		
A. Select one four-hour sequence:		
Option 1		
MUE 102	Elementary Class Piano	
MUE 103	Elementary Class Piano	
MUE 202	Intermediate Class Piano	
MUE 203	Intermediate Class Piano	
Option 2		
MUE 212	Adv Keyboard Musicianship I	
MUE 213	Adv Keyboard Musicianship II	
MUE 312	Adv Keyboard Music III Vocal	
MUE 313	Adv Keyboard Music IV Inst	
<i>Concentration Requirements For Vocal Music Education</i>		32
Methods		
A. Complete the following:		
MUA 181	Guitar - Elective (2 semesters)	1
MUS 202	Vocal Diction I	1
MUS 203	Vocal Diction II	1
MUE 448	Vocal Pedagogy	2
Education Courses		
A. Complete the following:		
EPY 351	Human Growth & Development	3
EDU 400	Edu Except Child and Youth	3
Music Education Courses		
A. Complete the following:		
MUE 444	Elementary/General Music	3
MUE 455	Tch Mu in Middle-Scndary Sch	3
Conducting and Technology		
A. Complete the following:		
MUT 364	Choral Cond and Lit	3
MUS 201	Intro to Music Edu Technology	2
or EDM 310	Microcomputing Systems	
Student Teaching		
A. Complete the following:		
SED 470	Stu Tchng N-12 Program	9
<b>Minor Requirements</b>		
A minor is not required for this degree program		0
<b>A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE</b>		<b>120</b>

All undergraduates must complete two designated writing credit (W) courses, at least one of which must be in the student's major or minor.

#### Notes:

1. Required for Candidacy – EH 101, EH 102, CA 110, MUS 201 (or EDM 310), EPY 351 and EDU 400
2. Candidacy Required – MUE 444 and MUE 455
3. Completion of a Music Education concentration and teacher certification requires a grade-point average of at least 2.50 on all course work attempted, no grade below a "C" in professional teacher

education, and at least a 2.50 grade-point average on all work attempted in the teaching specialization (music).

## Graduation Plan

(123 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
MUT 112	Basic Music Theory I <sup>1</sup>	3
MUE 102	Elementary Class Piano <sup>1</sup>	1
or MUE 212	or Adv Keyboard Musicianship I	
Select one of the following: <sup>1</sup>		1
MUO 111	University Concert Choir	
MUO 115	Chorale	
MUO 116	USA Opera Theatre	
MUA 222	Voice Major-Lower Division <sup>1</sup>	2
MUA 100	Recital Class <sup>1</sup>	0
EH 101	English Composition I (Area I, A) <sup>1,2</sup>	3
CA 110	Public Speaking (Area II, A) <sup>2,3</sup>	3
CAS 100	First Yr Exp - <sup>3</sup>	2
MUS 202	Vocal Diction I <sup>4</sup>	1
		<b>Hours</b>
		<b>16</b>
<b>Spring</b>		
MUT 113	Basic Music Theory II <sup>1</sup>	3
MUE 103	Elementary Class Piano <sup>1</sup>	1
or MUE 213	or Adv Keyboard Musicianship II	
Select one of the following: <sup>1</sup>		1
MUO 111	University Concert Choir	
MUO 115	Chorale	
MUO 116	USA Opera Theatre	
MUA 222	Voice Major-Lower Division <sup>1</sup>	2
MUA 100	Recital Class <sup>1</sup>	0
EH 102	English Composition II (Area II, A) <sup>3</sup>	3
Gen Ed	Area II, B; Area III, A; Area IV <sup>3</sup>	3
Gen Ed	Area II, B; Area III, A; Area IV <sup>3</sup>	3
MUS 203	Vocal Diction II <sup>4</sup>	1
Fingerprints must clear <sup>5</sup>		
		<b>Hours</b>
		<b>17</b>
<b>Second Year</b>		
<b>Fall</b>		
MUT 212	Intermediate Music Theory I <sup>1</sup>	3
MUE 202	Intermediate Class Piano <sup>1</sup>	1
or MUE 312	or Adv Keyboard Music III Vocal	
Select one of the following: <sup>1</sup>		1
MUO 111	University Concert Choir	
MUO 115	Chorale	
MUO 116	USA Opera Theatre	
MUL 235	Survey Musical Masterworks I <sup>1</sup>	2
MUA 222	Voice Major-Lower Division <sup>1</sup>	2
MUA 100	Recital Class <sup>1</sup>	0
Lab Science	Area III, B <sup>3</sup>	4
MUS 201	Intro to Music Edu Technology <sup>2,4</sup>	2
MUA 181	Guitar - Elective <sup>1</sup>	1
		<b>Hours</b>
		<b>16</b>
<b>Spring</b>		
MUT 213	Intermediate Music Theory II <sup>1</sup>	3
MUE 203	Intermediate Class Piano <sup>1</sup>	1
or MUE 313	or Adv Keyboard Music IV Inst	
Select one of the following: <sup>1</sup>		1
MUO 111	University Concert Choir	
MUO 115	Chorale	

MUO 116	USA Opera Theatre	
MUA 222	Voice Major-Lower Division <sup>1</sup>	2
MUL 236	Survey Musical of Masterwks II <sup>1</sup>	2
MUA 100	Recital Class <sup>1</sup>	0
EDU 400	Edu Except Child and Youth <sup>2,4</sup>	3
EDU 351		3
MUA 181	Guitar - Elective <sup>4</sup>	1
Get candidacy <sup>5</sup>		
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
MUT 312	Integrated Analytical Tech I <sup>1</sup>	2
MUL 335	History of Music I - W <sup>1</sup>	3
MUT 361	Fundamentals of Conducting <sup>1</sup>	3
MUO 411 or MUO 415	University Concert Choir <sup>1</sup> or Chorale	1
MUA 322	Voice Major-Upper Division <sup>1</sup>	2
MUA 100	Recital Class <sup>1</sup>	0
Gen Ed	Area II,B; Area III, A; Area IV <sup>3</sup>	3
MUE 448	Vocal Pedagogy <sup>4</sup>	2
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
MUT 313	Integrated Analytical Tech II <sup>1</sup>	2
MUL 336	History of Music II - W <sup>1</sup>	3
MUO 411 or MUO 415	University Concert Choir <sup>1</sup> or Chorale	1
MUA 322	Voice Major-Upper Division <sup>1</sup>	2
MUA 100	Recital Class <sup>1</sup>	0
Social Science	Area IV, B <sup>3</sup>	3
MUT 364	Choral Cond and Lit <sup>4</sup>	3
MUE 455	Tch Mu in Middle-Scndary Sch <sup>4,6</sup>	3
PRAXIS (Music: Content Knowledge) in Fall or early Spring <sup>5</sup>		
<b>Hours</b>		<b>17</b>
<b>Fourth Year</b>		
<b>Fall</b>		
MUO 411 or MUO 415	University Concert Choir <sup>1</sup> or Chorale	1
MUA 322	Voice Major-Upper Division <sup>1</sup>	2
MUA 400	Senior Recital <sup>1</sup>	0
Lab Science	Area III, B <sup>3</sup>	4
Social Science	Area IV, B <sup>3</sup>	3
Humanities	Area II, B <sup>3</sup>	3
MUE 444	Elementary/General Music <sup>4,6</sup>	3
Passing Grade on PRAXIS before student teaching <sup>5</sup>		
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
MUS 470	Internship Music Bus <sup>4</sup>	9
<b>Hours</b>		<b>9</b>
<b>Total Hours</b>		<b>123</b>

<sup>1</sup> Core<sup>2</sup> (CP) Candidacy Prerequisite<sup>3</sup> Gen Ed, see General Education Requirements<sup>4</sup> Concentration<sup>5</sup> Requirements from the State Department of Education<sup>6</sup> Courses require admission to candidacy.

No courses for the Baccalaureate music core or concentration are offered during the Maymester or summer semester.

## Music (BM) – Elective Studies in Specific Outside Fields Concentration Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 309)		37-40
<b>Major Requirements</b>		<b>60</b>
<i>Music Core Requirements</i>		<i>54</i>
Music Theory		
A. Complete the following:		
MUT 112	Basic Music Theory I	3
MUT 113	Basic Music Theory II	3
MUT 212	Intermediate Music Theory I	3
MUT 213	Intermediate Music Theory II	3
MUT 312	Integrated Analytical Tech I	2
MUT 313	Integrated Analytical Tech II	2
MUT 361	Fundamentals of Conducting	3
Music Literature		
A. Complete the following:		
MUL 235	Survey Musical Masterworks I	2
MUL 236	Survey Musical of Masterwks II	2
MUL 335	History of Music I - W	3
MUL 336	History of Music II - W	3
Applied Music		
A. Complete 8 hours of the following:		
MUA/B2**		2
B. Complete 6 hours of the following:		
MUA/B3**		2
C. Complete the following:		
MUA 400	Senior Recital	0
Major Ensemble		
A. Select four hours from the following:		
MUO 111	University Concert Choir	
MUO 115	Chorale	
MUO 116	USA Opera Theatre	
MUO 117	University Symphony Band	
MUO 127	Wind Ensemble	
MUO 130	University Marching Band	
MUO 133	University Orchestra	
MUO 137	University Band	
B. Select three hours from the following:		
MUO 411	University Concert Choir	
MUO 415	Chorale	
MUO 416	USA Opera Theatre	
MUO 417	University Symphony Band	
MUO 427	Wind Ensemble	
MUO 430	University Marching Band	
MUO 433	University Orchestra	
MUO 437	University Band	
Recital Class		

A. Complete 6 semesters of the following:

MUA 100	Recital Class	0
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Piano

Select one four hour sequence:		4
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Option 1

MUE 102	Elementary Class Piano	
MUE 103	Elementary Class Piano	
MUE 202	Intermediate Class Piano	
MUE 203	Intermediate Class Piano	

Option 2

MUE 212	Adv Keyboard Musicianship I	
MUE 213	Adv Keyboard Musicianship II	
MUE 312	Adv Keyboard Music III Vocal	
MUE 313	Adv Keyboard Music IV Inst	

Concentration Requirements For Elective Studies In Specific Outside Fields		6
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Applied Music

A. Complete the following:

MUA/B3**		2
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Major Ensemble

A. Select one of the following: 1

MUO 411	University Concert Choir	
MUO 415	Chorale	
MUO 416	USA Opera Theatre	
MUO 417	University Symphony Band	
MUO 427	Wind Ensemble	
MUO 430	University Marching Band	
MUO 433	University Orchestra	
MUO 437	University Band	

Upper Division Electives

A. Select six hours from the following: 6

MUE 300 - MUE 499		
MUL 300 - MUL 499		
MUO 300 - MUO 499		
MUT 300 - MUT 499		

Minor Requirements

A minor is required for this degree program	18-21
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A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120

**All undergraduates must complete two designated writing credit (W) courses, at least one of which must be in the student's major or minor.**

## Graduation Plan

(124 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
MUT 112	Basic Music Theory I <sup>1</sup>	3
MUE 102 or MUE 212	Elementary Class Piano <sup>1</sup> or Adv Keyboard Musicianship I	1
Select one of the following:		1
MUO 111	University Concert Choir	
MUO 115	Chorale	

MUO 116	USA Opera Theatre	
MUO 117	University Symphony Band	
MUO 127	Wind Ensemble	
MUO 130	University Marching Band	
MUO 133	University Orchestra	
MUO 137	University Band	
MUA/B2	Applied Music <sup>1,2</sup>	2
MUA 100	Recital Class <sup>1</sup>	0
EH 101	English Composition I (Area I, A) <sup>2</sup>	3
HY 101 or HY 121 or HY 135	HY of Western Civilization I (Area IV, A) <sup>2</sup> or World Civilization I or US History to 1877	3
CAS 100	First Yr Exp - <sup>2</sup>	2

**Hours 15**

**Spring**

MUT 113	Basic Music Theory II <sup>1</sup>	3
MUE 103 or MUE 213	Elementary Class Piano <sup>1</sup> or Adv Keyboard Musicianship II	1
Select one of the following: <sup>1</sup>		1

MUO 111	University Concert Choir	
MUO 115	Chorale	
MUO 116	USA Opera Theatre	
MUO 117	University Symphony Band	
MUO 127	Wind Ensemble	
MUO 130	University Marching Band	
MUO 133	University Orchestra	
MUO 137	University Band	
MUA/B2	Applied Music <sup>1,2</sup>	2
MUA 100	Recital Class <sup>1</sup>	0
EH 102	English Composition II (Area I, A) <sup>2</sup>	3
HY 102 or HY 122 or HY 136	HY of Western Civilization II (Area IV B) <sup>2</sup> or World Civilization II or US History since 1877	3
MA 110	Finite Mathematics (Area III, A) <sup>2</sup>	3

**Hours 16**

**Second Year**

**Fall**

MUT 212	Intermediate Music Theory I <sup>1</sup>	3
MUE 202 or MUE 312	Intermediate Class Piano <sup>1</sup> or Adv Keyboard Music III Vocal	1
Select one of the following: <sup>1</sup>		1

MUO 111	University Concert Choir	
MUO 115	Chorale	
MUO 116	USA Opera Theatre	
MUO 117	University Symphony Band	
MUO 127	Wind Ensemble	
MUO 130	University Marching Band	
MUO 133	University Orchestra	
MUO 137	University Band	
MUA/B 2	Applied Music <sup>1,2</sup>	2
MUL 235	Survey Musical Masterworks I <sup>1</sup>	2
MUA 100	Recital Class <sup>1</sup>	0
Lab Science	Area III, B <sup>2</sup>	4
Secondary Field <sup>3</sup>		3

**Hours 16**

**Spring**

MUT 213	Intermediate Music Theory II <sup>1</sup>	3
MUE 203 or MUE 313	Intermediate Class Piano <sup>1</sup> or Adv Keyboard Music IV Inst	1
Select one of the following: <sup>1</sup>		1

MUO 111	University Concert Choir	
MUO 115	Chorale	
MUO 116	USA Opera Theatre	

MUO 117	University Symphony Band	
MUO 127	Wind Ensemble	
MUO 130	University Marching Band	
MUO 133	University Orchestra	
MUO 137	University Band	
MUA/B 2	Applied Music <sup>1,2</sup>	2
MUL 236	Survey Musical of Masterwks II <sup>1</sup>	2
MUA 100	Recital Class <sup>1</sup>	0
Lab Science	Area III, B <sup>2</sup>	4
Secondary Field <sup>3</sup>		3

**Hours 16**

**Third Year**

<b>Fall</b>		
MUT 312	Integrated Analytical Tech I <sup>1</sup>	2
MUL 335	History of Music I - W <sup>1</sup>	3
MUT 361	Fundamentals of Conducting <sup>1</sup>	3
Select one of the following: <sup>1</sup>		1
MUO 411	University Concert Choir	
MUO 415	Chorale	
MUO 416	USA Opera Theatre	
MUO 417	University Symphony Band	
MUO 427	Wind Ensemble	
MUO 430	University Marching Band	
MUO 433	University Orchestra	
MUO 437	University Band	
MUA/B 3	Applied Music <sup>1,2</sup>	2
MUA 100	Recital Class <sup>1</sup>	0
CA 110	Public Speaking (Area II, A) <sup>2</sup>	3
Secondary Field <sup>3</sup>		3

**Hours 17**

<b>Spring</b>		
MUT 313	Integrated Analytical Tech II <sup>1</sup>	2
MUL 336	History of Music II - W <sup>1</sup>	3
Select one of the following: <sup>1</sup>		1
MUO 411	University Concert Choir	
MUO 415	Chorale	
MUO 416	USA Opera Theatre	
MUO 417	University Symphony Band	
MUO 427	Wind Ensemble	
MUO 430	University Marching Band	
MUO 433	University Orchestra	
MUO 437	University Band	
MUA/B 3	Applied Music <sup>1,2</sup>	2
MUA 100	Recital Class <sup>1</sup>	0
Social Science	Area IV, B <sup>3</sup>	3
Secondary Field <sup>3</sup>		6

**Hours 17**

**Fourth Year**

<b>Fall</b>		
Select one of the following: <sup>1</sup>		1
MUO 411	University Concert Choir	
MUO 415	Chorale	
MUO 416	USA Opera Theatre	
MUO 417	University Symphony Band	
MUO 427	Wind Ensemble	
MUO 430	University Marching Band	
MUO 433	University Orchestra	
MUO 437	University Band	
MUA/B 3	Applied Music <sup>1,2</sup>	2
Humanities	Area II, B <sup>2</sup>	3
Secondary Field <sup>3</sup>		3
Upper Division Music <sup>3</sup>		3

Electives <sup>3</sup> 3

**Hours 15**

<b>Spring</b>		
MUA 400	Senior Recital <sup>1</sup>	0
MUA/B 3	Applied Music <sup>1,2</sup>	2
Select one of the following: <sup>1</sup>		1
MUO 411	University Concert Choir	
MUO 415	Chorale	
MUO 416	USA Opera Theatre	
MUO 417	University Symphony Band	
MUO 427	Wind Ensemble	
MUO 430	University Marching Band	
MUO 433	University Orchestra	
MUO 437	University Band	
Social Science	Area IV, B <sup>2</sup>	3
Upper Division Music <sup>3</sup>		3
Secondary Field <sup>3</sup>		3

**Hours 12**

**Total Hours 124**

- <sup>1</sup> Core
- <sup>2</sup> Gen Ed, see General Education Requirements
- <sup>3</sup> Concentration

No courses for the Baccalaureate music core or concentration are offered during the Maymester or summer semester.

# Music (BM) – Instrumental Music Education Concentration

## Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 309)		37-40
<b>Major Requirements 86</b>		
<i>Music Core Requirements</i>		54
Music Theory		
A. Complete the following:		
MUT 112	Basic Music Theory I	3
MUT 113	Basic Music Theory II	3
MUT 212	Intermediate Music Theory I	3
MUT 213	Intermediate Music Theory II	3
MUT 312	Integrated Analytical Tech I	2
MUT 313	Integrated Analytical Tech II	2
MUT 361	Fundamentals of Conducting	3
Music Literature		
A. Complete the following:		
MUL 235	Survey Musical Masterworks I	2
MUL 236	Survey Musical of Masterwks II	2
MUL 335	History of Music I - W	3
MUL 336	History of Music II - W	3
Applied Music		
A. Complete 8 hours of the following:		
MUA/B 2**		2
B. Complete 6 hours of the following:		

MUA/B 3**		2
C. Complete the following:		
MUA 400	Senior Recital	0
Major Ensemble		
A. Select four hours from the following:		
MUO 117	University Symphony Band	
MUO 127	Wind Ensemble	
MUO 130	University Marching Band	
MUO 133	University Orchestra	
MUO 137	University Band	
B. Select three hours from the following:		
MUO 117	University Symphony Band	
MUO 427	Wind Ensemble	
MUO 430	University Marching Band	
MUO 433	University Orchestra	
MUO 437	University Band	
Recital Class		
A. Complete 6 semesters of the following:		
MUA 100	Recital Class	0
Piano		
Select one four hour sequence:		
Option 1		
MUE 102	Elementary Class Piano	
MUE 103	Elementary Class Piano	
MUE 202	Intermediate Class Piano	
MUE 203	Intermediate Class Piano	
Option 2		
MUE 212	Adv Keyboard Musicianship I	
MUE 213	Adv Keyboard Musicianship II	
MUE 312	Adv Keyboard Music III Vocal	
MUE 313	Adv Keyboard Music IV Inst	
<i>Concentration Requirements For Instrumental Music Education</i>		32
Methods		
A. Complete the following:		
MUE 240	String Methods	1
MUE 241	Woodwind Methods	1
MUE 242	Brass Methods	1
MUE 243	Percussion Methods	1
MUE 346	Marching Band Techniques	1
MUOALL	University Concert Choir	1

or MUOALL Chorale  
REGISTRATION  
SCHEDULES  
RELEASED  
IF 100% OF  
BALANCE[1]  
IS NOT PAID  
OR STUDENT  
IS NOT  
PARTICIPATING  
IN THE  
PAYMENT  
PLAN  
(AVOID THE  
VOID)115/415

Education Courses		
A. Complete the following:		
EPY 351	Human Growth & Development	3
EDU 400	Edu Except Child and Youth	3
Music Education Courses		
A. Complete the following:		
MUE 444	Elementary/General Music	3
MUE 455	Tch Mu in Middle-Scndary Sch	3
Conducting and Technology		
A. Select five hours from the following:		
MUT 362	Instrumental Conducting	3
MUS 201	Intro to Music Edu Technology	2
	or EDM 310 Microcomputing Systems	
Student Teaching		
A. Complete the following:		
SED 470	Stu Tchg N-12 Program	9
<b>Minor Requirements</b>		
A minor is not required for this degree program		0
<b>A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE</b>		<b>120</b>

**All undergraduates must complete two designated writing credit (W) courses, at least one of which must be in the student's major or minor.**

**Notes:**

1. Required for Candidacy  
– EH 101, EH 102, CA 110, MUS 201 (or EDM 310), EPY 351 and EDU 400
2. Candidacy Required – MUE 444 and MUE 455
3. Completion of a Music Education concentration and teacher certification requires a grade-point average of at least 2.50 on all course work attempted, no grade below a "C" in professional teacher education, and at least a 2.50 grade-point average on all work attempted in the teaching specialization (music).

## Graduation Plan

(123 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
MUT 112	Basic Music Theory I <sup>1</sup>	3

MUE 102 or MUE 212	Elementary Class Piano <sup>1</sup> or Adv Keyboard Musicianship I	1
Select one of the following: <sup>1</sup>		1
MUO 117	University Symphony Band	
MUO 127	Wind Ensemble	
MUO 130	University Marching Band	
MUO 133	University Orchestra	
MUO 137	University Band	
MUA/B 2	Applied Music <sup>1,2</sup>	2
MUA 100	Recital Class <sup>1</sup>	0
EH 101	English Composition I (Area I, A) <sup>2,3</sup>	3
CA 110	Public Speaking (Area II, A) <sup>2,3</sup>	3
CAS 100	First Yr Exp - <sup>2</sup>	2

**Hours** 15

**Spring**

MUT 113	Basic Music Theory II <sup>1</sup>	3
MUE 103 or MUE 213	Elementary Class Piano <sup>1</sup> or Adv Keyboard Musicianship II	1
Select one of the following: <sup>1</sup>		1
MUO 117	University Symphony Band	
MUO 127	Wind Ensemble	
MUO 130	University Marching Band	
MUO 133	University Orchestra	
MUO 137	University Band	
MUA/B 2	Applied Music <sup>1,2</sup>	2
MUA 100	Recital Class <sup>1</sup>	0
EH 102	English Composition II (Area II, A) <sup>2,3</sup>	3
Gen Ed	Area II, B; Area III, A; Area IV <sup>2</sup>	3
Gen Ed	Area II, B; Area III, A; Area IV <sup>2</sup>	3
Fingerprints must clear <sup>4</sup>		

**Hours** 16

**Second Year**

**Fall**

MUT 212	Intermediate Music Theory I <sup>1</sup>	3
MUE 202 or MUE 312	Intermediate Class Piano <sup>1</sup> or Adv Keyboard Music III Vocal	1
Select one of the following: <sup>1</sup>		1
MUO 117	University Symphony Band	
MUO 127	Wind Ensemble	
MUO 130	University Marching Band	
MUO 133	University Orchestra	
MUO 137	University Band	
MUA/B 2	Applied Music <sup>1,2</sup>	2
MUA 100	Recital Class <sup>1</sup>	0
MUL 235	Survey Musical Masterworks I <sup>1</sup>	2
Gen Ed	Area II, B; Area III, A; Area IV <sup>2</sup>	3
MUS 201	Intro to Music Edu Technology <sup>3,5</sup>	2
EDU 400	Edu Except Child and Youth <sup>3,5</sup>	3

**Hours** 17

**Spring**

MUT 213	Intermediate Music Theory II <sup>1</sup>	3
MUE 203 or MUE 313	Intermediate Class Piano <sup>1</sup> or Adv Keyboard Music IV Inst	1
Select one of the following: <sup>1</sup>		1
MUO 117	University Symphony Band	
MUO 127	Wind Ensemble	
MUO 130	University Marching Band	
MUO 133	University Orchestra	
MUO 137	University Band	
MUA/B 2	Applied Music <sup>1,2</sup>	2
MUA 100	Recital Class <sup>1</sup>	0
MUL 236	Survey Musical of Masterwks II <sup>1</sup>	2

MUE 240	String Methods <sup>5</sup>	1
EPY 351	Human Growth & Development <sup>3,5</sup>	3
Lab Science	Area III, B <sup>2</sup>	4
Get candidacy <sup>4</sup>		

**Hours** 17

**Third Year**

**Fall**

MUT 312	Integrated Analytical Tech I <sup>1</sup>	2
MUL 335	History of Music I - W <sup>1</sup>	3
MUT 361	Fundamentals of Conducting <sup>1</sup>	3
Select one of the following: <sup>1</sup>		1
MUO 417	University Symphony Band	
MUO 427	Wind Ensemble	
MUO 430	University Marching Band	
MUO 433	University Orchestra	
MUO 437	University Band	
MUA/B 3	Applied Music <sup>1,2</sup>	2
MUA 100	Recital Class <sup>1</sup>	0
Gen Ed	Area II, B; Area III, A; Area IV <sup>2</sup>	3
MUE 346	Marching Band Techniques <sup>5</sup>	1
MUE 241	Woodwind Methods <sup>5</sup>	1

**Hours** 16

**Spring**

MUT 313	Integrated Analytical Tech II <sup>1</sup>	2
MUL 336	History of Music II - W <sup>1</sup>	3
Select one of the following: <sup>1</sup>		1
MUO 417	University Symphony Band	
MUO 427	Wind Ensemble	
MUO 430	University Marching Band	
MUO 433	University Orchestra	
MUO 437	University Band	
MUA/B 3	Applied Music <sup>1,2</sup>	2
MUA 100	Recital Class <sup>1</sup>	0
MUT 362	Instrumental Conducting <sup>5</sup>	3
MUOALL REGISTRATION	University Concert Choir <sup>5</sup>	1
SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)411/415		

MUE 242	Brass Methods <sup>5</sup>	1
MUE 455	Tch Mu in Middle-Scndary Sch <sup>5,6</sup>	3
PRAXIS (Music: Content Knowledge) in Fall or early Spring <sup>4</sup>		

**Hours** 16

**Fourth Year**

**Fall**

Select one of the following: <sup>1</sup>		1
MUO 417	University Symphony Band	
MUO 427	Wind Ensemble	
MUO 430	University Marching Band	
MUO 433	University Orchestra	
MUO 437	University Band	
MUA/B 3	Applied Music <sup>1,2</sup>	2
MUA 400	Senior Recital <sup>1</sup>	0
Lab Science	Area III, B <sup>2</sup>	4
Social Science	Area IV, B <sup>2</sup>	3
Humanities	Area II, B <sup>2</sup>	3
MUE 243	Percussion Methods <sup>5</sup>	1
MUE 444	Elementary/General Music <sup>5,6</sup>	3
Passing Grade on PRAXIS before student teaching <sup>4</sup>		

**Hours** 17

Spring		
MUS 470	Internship Music Bus <sup>5</sup>	9
	<b>Hours</b>	<b>9</b>
	<b>Total Hours</b>	<b>123</b>

- <sup>1</sup> Core  
<sup>2</sup> Gen Ed, see General Education Requirements  
<sup>3</sup> Candidacy Prerequisite  
<sup>4</sup> Requirements from the State Department of Education  
<sup>5</sup> Concentration  
<sup>6</sup> Courses require admission to candidacy.

No courses for the Baccalaureate music core or concentration are offered during the Maymester or summer semester.

## Music (BM) – Instrumental Performance Concentration

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 309)		45-48
<b>Major Requirements</b>		<b>77</b>
<i>Music Core Requirements</i>		<i>54</i>
Music Theory		
A. Complete the following:		
MUT 112	Basic Music Theory I	3
MUT 113	Basic Music Theory II	3
MUT 212	Intermediate Music Theory I	3
MUT 213	Intermediate Music Theory II	3
MUT 312	Integrated Analytical Tech I	2
MUT 313	Integrated Analytical Tech II	2
MUT 361	Fundamentals of Conducting	3
Music Literature		
A. Complete the following:		
MUL 235	Survey Musical Masterworks I	2
MUL 236	Survey Musical of Masterwks II	2
MUL 335	History of Music I - W	3
MUL 336	History of Music II - W	3
Applied Music		
A. Complete 8 hours from the following:		
MUA/B 2**		2
B. Complete 6 hours from the following:		
MUA/B 4**		3
C. Complete the following:		
MUA 400	Senior Recital	0
Major Ensemble		
A. Select four hours from the following:		
MUO 117	University Symphony Band	
MUO 127	Wind Ensemble	
MUO 130	University Marching Band	
MUO 133	University Orchestra	
MUO 137	University Band	

B. Select three hours from the following:		3
MUO 417	University Symphony Band	
MUO 427	Wind Ensemble	
MUO 430	University Marching Band	
MUO 433	University Orchestra	
MUO 437	University Band	
Recital Class		
A. Complete 6 semesters of the following:		
MUA 100	Recital Class	0
Piano		
Select one four hour sequence:		
Option 1		
MUE 102	Elementary Class Piano	
MUE 103	Elementary Class Piano	
MUE 202	Intermediate Class Piano	
MUE 203	Intermediate Class Piano	
Option 2		
MUE 212	Adv Keyboard Musicianship I	
MUE 213	Adv Keyboard Musicianship II	
MUE 312	Adv Keyboard Music III Vocal	
MUE 313	Adv Keyboard Music IV Inst	
<i>Concentration Requirements For Instrumental Performance</i>		<i>23</i>
Applied Music		
A. Complete 6 hours from the following:		
MUA/B 4**		3
B. Complete the following:		
MUA 300	Junior Recital	0
Pedagogy/Literature		
A. Select five hours from MUE 4** (pedagogy) and MUL 4** (literature)		
Ensemble		
A. Select one hour from the following:		
MUO 417	University Symphony Band	
MUO 427	Wind Ensemble	
MUO 430	University Marching Band	
MUO 433	University Orchestra	
MUO 437	University Band	
B. Select two hours (four courses) from the following:		
MUO 118	Woodwind Ensemble	
MUO 119	Brass Ensemble	
MUO 120	Percussion Ensemble	
MUO 121	Jazz Band	
MUO 123	String Ensemble	
MUO 124	Piano Ensemble	
MUO 125	Guitar Ensemble	
MUO 129	Mixed Chamber Ensemble	
MUO 131	University Winterguard	
MUO 136	World Music Ensemble	
MUO 138	Flute Choir	
MUO 139	Trumpet Ensemble	
MUO 140	Horn Choir	
MUO 141	Trombone Choir	

MUO 142	Tuba-Euphonium Ensemble	
MUO 144	USA Steel Band	
MUO 145	Clarinet Ensemble	
<b>Upper-Division Electives</b>		
A. Select nine hours from the following:		9
MUE 300 - MUE 499		
MUL 300 - MUL 499		
MUO 300 - MUO 499		
MUT 300 - MUT 499		
<b>Minor Requirements</b>		
A minor is not required for this degree program		0
<b>A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE</b>		<b>120</b>

**All undergraduates must complete two designated writing credit (W) courses, at least one of which must be in the student's major or minor.**

## Graduation Plan

(124 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
MUT 112	Basic Music Theory I <sup>1</sup>	3
MUE 102 or MUE 212	Elementary Class Piano <sup>1</sup> or Adv Keyboard Musicianship I	1
Select one of the following: <sup>1</sup>		1
MUO 111	University Concert Choir	
MUO 117	University Symphony Band	
MUO 130	University Marching Band	
MUO 133	University Orchestra	
MUO 137	University Band	
MUA/B 2	Applied Music <sup>1,2</sup>	2
MUA 100	Recital Class <sup>1</sup>	0
EH 101	English Composition I (Area I, A) <sup>2</sup>	3
HY 101 or HY 121 or HY 135	HY of Western Civilization I (Area IV, A) <sup>2</sup> or World Civilization I or US History to 1877	3
CAS 100	First Yr Exp - <sup>2</sup>	2
MUO 100 - MUO 299	Small Ensemble <sup>3</sup>	0.5
<b>Hours</b>		<b>15.5</b>
<b>Spring</b>		
MUT 113	Basic Music Theory II <sup>1</sup>	3
MUE 103 or MUE 213	Elementary Class Piano <sup>1</sup> or Adv Keyboard Musicianship II	1
Select one of the following: <sup>1</sup>		1
MUO 111	University Concert Choir	
MUO 117	University Symphony Band	
MUO 130	University Marching Band	
MUO 133	University Orchestra	
MUO 137	University Band	
MUA/B 2	Applied Music <sup>1,2</sup>	2
MUA 100	Recital Class <sup>1</sup>	0
EH 102	English Composition II (Area I, B) <sup>2</sup>	3
HY 102 or HY 122 or HY 136	HY of Western Civilization II (Area IV, B) <sup>2</sup> or World Civilization II or US History since 1877	3
MUO 100 - MUO 299	Small Ensemble <sup>3</sup>	0.5
Elective <sup>3</sup>		3
<b>Hours</b>		<b>16.5</b>

<b>Second Year</b>		
<b>Fall</b>		
MUT 212	Intermediate Music Theory I <sup>1</sup>	3
MUEALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)202/312	Intermediate Class Piano <sup>1</sup>	1
Select one of the following: <sup>1</sup>		1
MUO 111	University Concert Choir	
MUO 117	University Symphony Band	
MUO 130	University Marching Band	
MUO 133	University Orchestra	
MUO 137	University Band	
MUA/B 2	Applied Music <sup>1,2</sup>	2
MUL 235	Survey Musical Masterworks I <sup>1</sup>	2
MUA 100	Recital Class <sup>1</sup>	0
CA 110	Public Speaking (Area II, B) <sup>2</sup>	3
Lab Science	Area III, B <sup>2</sup>	4
MUO 100 - MUO 299	Small Ensemble <sup>3</sup>	0.5
<b>Hours</b>		<b>16.5</b>

<b>Spring</b>		
MUT 213	Intermediate Music Theory II <sup>1</sup>	3
MUEALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)203/313	Intermediate Class Piano <sup>1</sup>	1
Select one of the following: <sup>1</sup>		1
MUO 111	University Concert Choir	
MUO 117	University Symphony Band	
MUO 130	University Marching Band	
MUO 133	University Orchestra	
MUO 137	University Band	
MUA/B 2	Applied Music <sup>1,2</sup>	2
MUL 236	Survey Musical of Masterwks II <sup>1</sup>	2
MUA 100	Recital Class <sup>1</sup>	0
Lab Science	Area III, B <sup>2</sup>	4
MA 110	Finite Mathematics (Area III, A) <sup>2</sup>	3
MUO 100 - MUO 299	Small Ensemble <sup>3</sup>	0.5
<b>Hours</b>		<b>16.5</b>

<b>Third Year</b>		
<b>Fall</b>		
MUT 312	Integrated Analytical Tech I <sup>1</sup>	2
MUL 335	History of Music I - W <sup>1</sup>	3
MUT 361	Fundamentals of Conducting <sup>1</sup>	3
Select one of the following: <sup>1</sup>		1
MUO 411	University Concert Choir	
MUO 417	University Symphony Band	
MUO 430	University Marching Band	
MUO 433	University Orchestra	
MUO 437	University Band	
MUA/B 4	Applied Music <sup>1,2</sup>	3
MUA 100	Recital Class <sup>1</sup>	0
Humanities	Area II, B <sup>2</sup>	3
MUO 300 - MUO 499	Small Ensemble <sup>3</sup>	0.5
<b>Hours</b>		<b>15.5</b>
<b>Spring</b>		
MUT 313	Integrated Analytical Tech II <sup>1</sup>	2
MUL 336	History of Music II - W <sup>1</sup>	3

Select one of the following: <sup>1</sup>		1
MUO 411	University Concert Choir	
MUO 417	University Symphony Band	
MUO 430	University Marching Band	
MUO 433	University Orchestra	
MUO 437	University Band	
MUA/B 4	Applied Music <sup>1,2</sup>	3
MUA 100	Recital Class <sup>1</sup>	0
Social Science	Area IV, B <sup>2</sup>	3
Upper Division Music <sup>3</sup>		3
Electives <sup>3</sup>		1
MUO 300 - MUO 499	Small Ensemble <sup>3</sup>	0.5
MUA 300	Junior Recital <sup>3</sup>	0
<b>Hours</b>		<b>16.5</b>

**Fourth Year**

<b>Fall</b>		
Select one of the following: <sup>1</sup>		1
MUO 411	University Concert Choir	
MUO 417	University Symphony Band	
MUO 430	University Marching Band	
MUO 433	University Orchestra	
MUO 437	University Band	
MUA/B 4	Applied Music <sup>1,2</sup>	3
Social Science	Area IV, B <sup>2</sup>	3
Select one of the following: <sup>3</sup>		2
MUE 411	Woodwind Pedagogy	
MUE 412	Brass Pedagogy	
MUE 413	Percussion Pedagogy	
MUE 414	Guitar Pedagogy	
MUE 415	String Pedagogy	
MUE 446	Piano Pedagogy	
Upper Division Music <sup>3</sup>		3
Electives <sup>3</sup>		2
MUO 300 - MUO 499	Small Ensemble <sup>3</sup>	0.5
<b>Hours</b>		<b>14.5</b>

**Spring**

MUA 400	Senior Recital <sup>1</sup>	0
MUA/B 4	Applied Music <sup>1,2</sup>	3
Select one of the following: <sup>3</sup>		3
MUL 411	Woodwind Literature	
MUL 412	Brass Literature	
MUL 413	Percussion Literature	
MUL 438	Keyboard Literature	
MUL 442	Organ Literature	
Select one of the following: <sup>3</sup>		1
MUO 411	University Concert Choir	
MUO 417	University Symphony Band	
MUO 430	University Marching Band	
MUO 433	University Orchestra	
MUO 437	University Band	
Upper Division Music <sup>3</sup>		3
Electives <sup>3</sup>		2
MUO 300 - MUO 499	Small Ensemble <sup>3</sup>	0.5
<b>Hours</b>		<b>12.5</b>
<b>Total Hours</b>		<b>124</b>

<sup>1</sup> Core  
<sup>2</sup> Gen Ed, see General Education Requirements  
<sup>3</sup> Concentration

No courses for the Baccalaureate music core or concentration are offered during the Maymester or summer semester.

# Music (BM) – Vocal Performance Concentration

## Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 309)		43-46
<b>Major Requirements</b>		<b>79</b>
<i>Music Core Requirements</i>		<i>54</i>
Music Theory		
A. Complete the following:		
MUT 112	Basic Music Theory I	3
MUT 113	Basic Music Theory II	3
MUT 212	Intermediate Music Theory I	3
MUT 213	Intermediate Music Theory II	3
MUT 312	Integrated Analytical Tech I	2
MUT 313	Integrated Analytical Tech II	2
MUT 361	Fundamentals of Conducting	3
Music Literature		
A. Complete the following:		
MUL 235	Survey Musical Masterworks I	2
MUL 236	Survey Musical of Masterwks II	2
MUL 335	History of Music I - W	3
MUL 336	History of Music II - W	3
Applied Music		
A. Complete 8 credits in the following:		
MUA 222	Voice Major-Lower Division	2
B. Complete 6 credits in the following:		
MUA 423	Voice Major-Performance	3
C. Complete the following:		
MUA 400	Senior Recital	0
Major Ensemble		
A. Select four hours from the following:		
MUO 111	University Concert Choir	
MUO 115	Chorale	
MUO 116	USA Opera Theatre	
B. Select three hours from the following:		
MUO 411	University Concert Choir	
MUO 415	Chorale	
MUO 416	USA Opera Theatre	
Recital Class		
A. Complete 6 semesters in the following:		
MUA 100	Recital Class	0
Piano		
Select one four hour sequence:		
Option 1		
MUE 102	Elementary Class Piano	
MUE 103	Elementary Class Piano	
MUE 202	Intermediate Class Piano	

MUE 203	Intermediate Class Piano	
<b>Option 2</b>		
MUE 212	Adv Keyboard Musicianship I	
MUE 213	Adv Keyboard Musicianship II	
MUE 312	Adv Keyboard Music III Vocal	
MUE 313	Adv Keyboard Music IV Inst	
<i>Concentration Requirements For Vocal Performance</i>		<b>25</b>
<b>Applied Music</b>		
A. Complete 6 hours in the following:		
MUA 423	Voice Major-Performance	<b>3</b>
B. Complete the following:		
MUA 300	Junior Recital	<b>0</b>
<b>Pedagogy/Literature</b>		
A. Complete the following:		
MUE 448	Vocal Pedagogy	<b>2</b>
MUL 444	Vocal Solo Literature	<b>3</b>
<b>Ensemble</b>		
A. Select one of the following:		
MUO 411	University Concert Choir	<b>1</b>
	or MUO 415 Chorale	
B. Complete 4 semesters of the following:		
MUO 416	USA Opera Theatre	<b>0.5</b>
<b>Diction and Language</b>		
A. Complete the following:		
MUS 202	Vocal Diction I	<b>1</b>
MUS 203	Vocal Diction II	<b>1</b>
LG 111	Introductory French I	<b>3</b>
LG 151	Introductory German I	<b>3</b>
<b>Upper-Division Electives</b>		
A. Select three hours from the following:		
MUE 300 - MUE 499		
MUL 300 - MUL 499		
MUO 300 - MUO 499		
MUT 300 - MUT 499		
<b>Minor Requirements</b>		
A minor is not required for this degree program		<b>0</b>
<b>A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE</b>		<b>120</b>

All undergraduates must complete two designated writing credit (W) courses, at least one of which must be in the student's major or minor.

## Graduation Plan

(124 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
MUT 112	Basic Music Theory I <sup>1</sup>	<b>3</b>
MUE 102	Elementary Class Piano <sup>1</sup>	<b>1</b>
	or MUE 212 or Adv Keyboard Musicianship I	
Select one of the following: <sup>1</sup>		<b>1</b>
MUO 111	University Concert Choir	
MUO 115	Chorale	
MUO 116	USA Opera Theatre	
MUA 222	Voice Major-Lower Division <sup>1</sup>	<b>2</b>

MUA 100	Recital Class <sup>1</sup>	<b>0</b>
EH 101	English Composition I (Area I, A) <sup>2</sup>	<b>3</b>
HY 101	HY of Western Civilization I (Area IV, A) <sup>2</sup>	<b>3</b>
	or HY 121 or World Civilization I	
	or HY 135 or US History to 1877	
CAS 100	First Yr Exp - <sup>2</sup>	<b>2</b>
MUS 202	Vocal Diction I <sup>3</sup>	<b>1</b>
Elective <sup>3</sup>		<b>1</b>

**Hours** **17**

### Spring

MUT 113	Basic Music Theory II <sup>1</sup>	<b>3</b>
MUE 103	Elementary Class Piano <sup>1</sup>	<b>1</b>
	or MUE 213 or Adv Keyboard Musicianship II	
Select one of the following: <sup>1</sup>		<b>1</b>
MUO 111	University Concert Choir	
MUO 115	Chorale	
MUO 116	USA Opera Theatre	
MUA 222	Voice Major-Lower Division <sup>1</sup>	<b>2</b>
MUA 100	Recital Class <sup>1</sup>	<b>0</b>
EH 102	English Composition II (Area I, B) <sup>2</sup>	<b>3</b>
HY 102	HY of Western Civilization II (for sequence, Area IV, B) <sup>2</sup>	<b>3</b>
	or HY 122 or World Civilization II	
	or HY 136 or US History since 1877	
MUS 203	Vocal Diction II <sup>3</sup>	<b>1</b>
Elective <sup>3</sup>		<b>1</b>

**Hours** **15**

### Second Year

#### Fall

MUT 212	Intermediate Music Theory I <sup>1</sup>	<b>3</b>
MUEALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)202/312	Intermediate Class Piano <sup>1</sup>	<b>1</b>
Select one of the following: <sup>1</sup>		<b>1</b>
MUO 111	University Concert Choir	
MUO 115	Chorale	
MUO 116	USA Opera Theatre	
MUL 235	Survey Musical Masterworks I <sup>1</sup>	<b>2</b>
MUA 222	Voice Major-Lower Division <sup>1</sup>	<b>2</b>
MUA 100	Recital Class <sup>1</sup>	<b>0</b>
CA 110	Public Speaking (Area II, A) <sup>2</sup>	<b>3</b>
MA 110	Finite Mathematics (Area III, A) <sup>2</sup>	<b>3</b>
Elective <sup>3</sup>		<b>1</b>

**Hours** **16**

#### Spring

MUT 213	Intermediate Music Theory II <sup>1</sup>	<b>3</b>
MUEALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)203/313	Intermediate Class Piano <sup>1</sup>	<b>1</b>
Select one of the following: <sup>1</sup>		<b>1</b>
MUO 111	University Concert Choir	
MUO 115	Chorale	
MUO 116	USA Opera Theatre	
MUA 222	Voice Major-Lower Division <sup>1</sup>	<b>2</b>
MUL 236	Survey Musical of Masterwks II <sup>1</sup>	<b>2</b>
MUA 100	Recital Class <sup>1</sup>	<b>0</b>
Lab Science	Area III, B <sup>2</sup>	<b>4</b>

LG 111	Introductory French I <sup>3</sup>	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
MUT 312	Integrated Analytical Tech I <sup>1</sup>	2
MUL 335	History of Music I - W <sup>1</sup>	3
MUT 361	Fundamentals of Conducting <sup>1</sup>	3
MUOALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)411/415	University Concert Choir	1
MUA 423	Voice Major-Performance <sup>1</sup>	3
MUA 100	Recital Class <sup>1</sup>	0
Lab Science	Area III, B <sup>2</sup>	4
MUO 416	USA Opera Theatre <sup>3</sup>	0.5
MUO 300 - MUO 499	Small Ensemble <sup>3</sup>	0.5
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
MUT 313	Integrated Analytical Tech II <sup>1</sup>	2
MUL 336	History of Music II - W <sup>1</sup>	3
MUOALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)411/415	University Concert Choir	1
MUA 423	Voice Major-Performance <sup>1</sup>	3
MUA 100	Recital Class <sup>1</sup>	0
Social Science	Area IV, B <sup>2</sup>	3
LG 151	Introductory German I <sup>3</sup>	3
MUO 416	USA Opera Theatre <sup>3</sup>	0.5
MUO 300 - MUO 499	Small Ensemble <sup>3</sup>	0.5
MUA 300	Junior Recital <sup>3</sup>	0
<b>Hours</b>		<b>16</b>
<b>Fourth Year</b>		
<b>Fall</b>		
MUOALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)411/415	University Concert Choir <sup>1</sup>	1
MUA 423	Voice Major-Performance <sup>1</sup>	3
Humanities	Area II, B <sup>2</sup>	3
MUO 416	USA Opera Theatre <sup>3</sup>	0.5
MUE 448	Vocal Pedagogy <sup>3</sup>	2
Upper Division Music <sup>3</sup>		3
Electives <sup>3</sup>		1
MUO 300 - MUO 499	Small Ensemble <sup>3</sup>	0.5
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
MUA 400	Senior Recital <sup>1</sup>	0
Social Science	Area IV, B <sup>2</sup>	3
MUA 423	Voice Major-Performance <sup>3</sup>	3
MUL 444	Vocal Solo Literature <sup>3</sup>	3

MUOALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)411/415	University Concert Choir <sup>3</sup>	1
MUO 416	USA Opera Theatre <sup>3</sup>	0.5
Electives <sup>3</sup>		2
MUO 300 - MUO 499	Small Ensemble <sup>3</sup>	0.5
<b>Hours</b>		<b>13</b>
<b>Total Hours</b>		<b>124</b>

<sup>1</sup> Core

<sup>2</sup> Gen Ed, see General Education Requirements

<sup>3</sup> Concentration

No courses for the Baccalaureate music core or concentration are offered during the Maymester or summer semester.

## Music (MM) - Collaborative Keyboard Concentration

### Degree Requirements

#### Degree Requirements and Courses

Students must complete a minimum of 32 semester hours of credit in approved 500-level courses. A minimum of 20 semester hours must be completed at the University of South Alabama. Up to 12 hours of USA courses taken while in another program (or non-degree status) may be applied. Only courses not applied to another degree may count. Maximum of 12 hours with grades of "A", "B", or "S" of approved transfer credit is allowed. If the university is non-accredited, the individual USA graduate program will determine if the quality and content of the courses meet the standards of the program.

### Grade Requirements

- A minimum of a 3.0 GPA on all work attempted is required for graduation.
- Courses in which a student receives a "D" or below will not be counted toward the degree program.
- A maximum of two courses with a grade of "C" will be counted toward the degree program.
- Students receiving four grades of "C" or below, regardless of the overall GPA will be dismissed from the program.
- A student who receives a failing grade in a course for graduate credit may be dismissed from the program.

### Time Limitations

- All degree requirements must be completed within seven calendar years.
- Most students who take nine hours per semester complete the degree within a two-year period.
- The time required for degree completion depends on how many courses a student can take each semester and the ability of that student to complete the recital(s) or final project(s).

### Course Load

Six to ten credit hours per semester constitute a full-time course load.

## Collaborative Keyboard Degree Checklist

(15 Courses, 32 Hours)

- All master's degree students will be advised by the Graduate Music Program Coordinator to ensure timely completion of the curriculum.
- The time required for degree completion depends on how many courses a student can take each semester and the ability of that student to complete the recital(s) or final project(s).

Code	Title	Hours
MUL 501	Graduate Research in Music	2
MUL 546	Collab Piano Lit for Vocal	3
MUL 566	Coll Piano Lit for Instruments	3
Complete 2 credits in the following:		2
MUO 507	Ensemble with Coll Keyboard	
Select 12 hours from the following:		12
MUL 535	American Music	
MUL 590	Spec Topics in Music History	
MUT 512	Intro Analysis of Music Lit	
MUT 513	Pedagogy of Theory	
Select eight hours from the following:		8
MUA 507	Applied Collaborative Piano	
MUA 508	Applied Collaborative Piano	
MUA 509	Applied Collaborative Piano	
Complete 2 credits in the following:		2
MUA 500	Graduate Recital	
<b>Total Hours</b>		<b>32</b>

## Comprehensive Exams

Each student will be evaluated to ensure achievement of program outcomes. This evaluation may be in the form of a comprehensive exam or other measurement tools, such as a recital. If unsatisfactory, after corrective action, the evaluation may be repeated up to two (2) times. Eligibility for graduation is contingent upon successful completion of the degree requirements specified by both the University and the Department of Music, including

1. Completion of all coursework with a minimum grade point average of 3.0 (A=4.0) and
2. Successful completion of comprehensive examinations after all course work is completed.

Approval of committee must be secured no less than two weeks prior to the scheduled date of the recital. The Graduate Coordinator will complete the "USA Graduate School Comprehensive Examination Committee Appointment Request and Evaluation Report" Form prior to recital. The Student will sign the form upon notification of recital results. A recital program will be attached and the form with program will be sent to the Graduate College.

## Music (MM) - Music Education Concentration

### Degree Requirements

#### Degree Requirements and Courses

Students must complete a minimum of 35 semester hours of credit in approved 500-level courses. A minimum of 20 semester hours must be

completed at the University of South Alabama. Up to 12 hours of USA courses taken while in another program (or non-degree status) may be applied. Only courses not applied to another degree may count. Maximum of 12 hours with grades of "A", "B", or "S" of approved transfer credit is allowed. If the university is non-accredited, the individual USA graduate program will determine if the quality and content of the courses meet the standards of the program.

### Grade Requirements

- A minimum of a 3.0 GPA on all work attempted is required for graduation.
- Courses in which a student receives a "D" or below will not be counted toward the degree program.
- A maximum of two courses with a grade of "C" will be counted toward the degree program.
- Students receiving four grades of "C" or below, regardless of the overall GPA will be dismissed from the program.
- A student who receives a failing grade in a course for graduate credit may be dismissed from the program.

### Time Limitations

- All degree requirements must be completed within seven calendar years.
- Most students who take nine hours per semester complete the degree within a two-year period.
- The time required for degree completion depends on how many courses a student can take each semester and the ability of that student to complete the recital(s) or final project(s).

### Course Load

Six to ten credit hours per semester constitute a full-time course load.

## Music Education Degree Checklist

(13-20 Courses, 35 hours)

- All master's degree students will be advised by the Graduate Music Program Coordinator to ensure timely completion of the curriculum.
- The time required for degree completion depends on how many courses a student can take each semester and the ability of that student to complete the recital(s) or final project(s).

Code	Title	Hours
MUL 501	Graduate Research in Music	2
MUA/B 5** - Applied Music (Maximum of 6 hours will apply towards degree)		2
MUE 512	Foundations of Music Education	4
MUE 513	Curr and Assess in Music Ed	4
MUT 513	Pedagogy of Theory	4
MUO 5** - Ensemble (Maximum of 6 hours will apply towards degree)		1
MUE 585	Practicum in Music Education (1 hour each course)	2
MUE 589	Reading and Conference	1
MUL 535	American Music	4
or MUL 590	Spec Topics in Music History	
Select one of the following:		3
EDF 515	Multicultural Education	
EDU 567	Multicultural Exp in Schools	
SPE 500	Nat-Needs of Exc Chld and Yth	

Select one of the following:	4
MUE 520 Adv Study in EC/Elem/Gen Music	
MUE 540 Adv Study in Tchg Choral Music	
MUE 560 Adv Study in Tchg Instr Music	
Select four hours of the following:	4
MUT 512 Intro Analysis of Music Lit	
MUE 520 Adv Study in EC/Elem/Gen Music	
MUE 540 Adv Study in Tchg Choral Music	
MUE 560 Adv Study in Tchg Instr Music	
MUL 535 American Music	
MUL 590 Spec Topics in Music History	
<b>Total Hours</b>	<b>35</b>

#### Reading and Conference (MUE 589)

Students submit one Portfolio/Final Project to the faculty committee three weeks prior to an oral examination during finals week of the semester of graduation with two of the following:

- A video recording (min. 35 minutes) of the candidate's teaching or conducting, illustrating the students learning/rehearsing process with notable progress, accompanied by a written self-critique;
- A project representing pedagogical work in music education (e.g. choral arrangement; folk song collection and analysis; curriculum project; marching band unit; a composition or arrangement or set of compositions or arrangements with notes for rehearsal and/or performance)
- A paper demonstrating knowledge of music or teaching specialization (e.g. a history, theory or research paper; an article published in a music teaching periodical)

### Comprehensive Exams

Each student will be evaluated to ensure achievement of program outcomes. This evaluation may be in the form of a comprehensive exam or other measurement tools, such as a recital. If unsatisfactory, after corrective action, the evaluation may be repeated up to two (2) times. Eligibility for graduation is contingent upon successful completion of the degree requirements specified by both the University and the Department of Music, including

1. Completion of all coursework with a minimum grade point average of 3.0 (A=4.0) and
2. Successful completion of comprehensive examinations after all course work is completed.

Approval of committee must be secured no less than two weeks prior to the scheduled date of the recital. The Graduate Coordinator will complete the "USA Graduate School Comprehensive Examination Committee Appointment Request and Evaluation Report" Form prior to recital. The Student will sign the form upon notification of recital results. A recital program will be attached and the form with program will be sent to the Graduate College.

## Music (MM) - Music Education Concentration - (Alternative Choral or Instrumental)

### Degree Requirements

#### Degree Requirements and Courses

This program is designed to provide initial teacher preparation at the graduate level primarily for students interested in pursuing a career in teaching but whose undergraduate degree did not include a teacher education program. Students must complete a minimum of 46 semester hours of credit in approved 500-level courses. A minimum of 20 semester hours must be completed at the University of South Alabama. Up to 12 hours of USA courses taken while in another program (or non-degree status) may be applied. Only courses not applied to another degree may count. Maximum of 12 hours with grades of "A", "B", or "S" of approved transfer credit is allowed. If the university is non-accredited, the individual USA graduate program will determine if the quality and content of the courses meet the standards of the program.

#### Grade Requirements

- A minimum of a 3.0 GPA on all work attempted is required for graduation.
- Courses in which a student receives a "D" or below will not be counted toward the degree program.
- A maximum of two courses with a grade of "C" will be counted toward the degree program.
- Students receiving four grades of "C" or below, regardless of the overall GPA will be dismissed from the program.
- A student who receives a failing grade in a course for graduate credit may be dismissed from the program.

#### Time Limitations

- All degree requirements must be completed within seven calendar years.
- Most students who take nine hours per semester complete the degree within a two-and-a-half-year period.
- The time required for degree completion depends on how many courses a student can take each semester and the ability of that student to complete the recital(s) or final project(s).

#### Course Load

Six to ten credit hours per semester constitute a full-time course load.

### Music Education ALT. Choral or ALT. Instrumental Degree Checklist

(14 Courses, 46 Hours)

- All master's degree students will be advised by the Graduate Music Program Coordinator to ensure timely completion of the curriculum.
- The time required for degree completion depends on how many courses a student can take each semester and the ability of that student to complete the recital(s) or final project(s).

Code	Title	Hours
MUL 501	Graduate Research in Music	2
Complete 2 credits in applied music: (Maximum of 6 hours will apply towards degree)		2
MUA/B 5**		

MUE 512	Foundations of Music Education	4
MUE 513	Curr and Assess in Music Ed	4
Complete 1 credit of ensemble: (Maximum of 6 hours will apply towards degree)		1
MUO 5**		
MUS 501	Music Education Technology	3
Select seven hours from the following:		7
MUE 502	Choral Music Education	
or MUE 540	Adv Study in Tchg Choral Music	
MUE 501	Instrumental Music Education	
or MUE 560	Adv Study in Tchg Instr Music	
MUT 512	Intro Analysis of Music Lit	4
or MUT 513	Pedagogy of Theory	
MUL 535	American Music	4
or MUL 590	Spec Topics in Music History	
SPE 500	Nat-Needs of Exc Chld and Yth	3
RED 541	Literacy in the Content Area	3
EPY 525	Assessment & Research in Educ	3
Required Internship in Music Education (see academic advisor for details)		6
<b>Total Hours</b>		<b>46</b>

### Internship in Music Education

The internship is a supervised learning experience in a work setting similar to that in which the educator will eventually be employed. The internship provides the student an opportunity to apply the theories and concepts learned during the graduate program of study. Students enroll in the internship during the final semester of study after all other degree coursework is complete.

### Alabama State Department of Education Certification Requirements

A student applying for initial teacher certification will be required to pass the appropriate Praxis II test(s) and have a successful score on his/her edTPA portfolio. ALSDE certification requirements are subject to change and students will be required to meet those which are in place the semester they are applying for certification. Prior to registering for any Praxis II exam, please verify current requirements by going directly to the ALABAMA portion of the Praxis II website at:

<https://www.ets.org/praxis/al> (<https://www.ets.org/praxis/al/>)

## Music Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Minor in Music

A minimum of 23 semester hours in music, including the following

Code	Title	Hours
MUT 112 & MUT 113	Basic Music Theory I and Basic Music Theory II	6
MUL 235	Survey Musical Masterworks I	2
MUL 236	Survey Musical of Masterwks II	2
MUA/B 200		6

Select four hours from the following:		4
MUO 111	University Concert Choir	
MUO 115	Chorale	
MUO 116	USA Opera Theatre	
MUO 117	University Symphony Band	
MUO 127	Wind Ensemble	
MUO 130	University Marching Band	
or MUO 137	University Band	
MUO 133	University Orchestra	
Music Upper Division (300/400) Elective		3
<b>Total Hours</b>		<b>23</b>

## Native American Studies

### Department Information

(251) 461-1948

Native American Studies

<http://www.southalabama.edu/colleges/artsandsci/nativeamerican/>

### Native American Studies Staff

Title	Name
Co-Directors	Dr. Philip J. Carr
Affiliates	Dr. Patrick Cesarini
	Dr. Deidra Suwanee Dees
	Dr. Sam Fisher
	Dr. Kevin Meeker
	Dr. Erin Nelson
	Dr. Elizabeth Rivenbark
	Dr. Phillip Smith

The Native American Studies Minor provides an interdisciplinary approach to understanding the experience of the Indigenous people of North America through courses in the humanities and social sciences. Employing course work across various disciplines, the minor examines both historical and contemporary issues from the perspective of Native Americans. The Native American Studies minor allows students to augment a wide range of majors, and position them for employment in government, education, and other areas by providing an increased understanding of the unique history, cultural traditions, and political status of Native Americans. The field of Native American Studies works to demonstrate the relevance of the American Indian perspective to the contemporary economic, political, and social issues locally and around the world.

For a description of these courses, please refer to the appropriate departments. For further information about the program contact

Dr. Philip Carr  
 Native American Studies Program  
 Department of Anthropology, HUMB21  
 University of South Alabama  
 Mobile, AL 36688-0002  
 Phone (251) 461-1948  
 E-mail address: [pcarr@southalabama.edu](mailto:pcarr@southalabama.edu)

## Degrees, Programs, or Concentrations

- Native American Studies Minor (p. 330)

## Courses

### African-American Studies (AFR)

#### AFR 101 Intro to African Amer Studies 3 cr

An interdisciplinary investigation of the origins, experiences, conditions, accomplishments and contributions of people of African ancestry in the United States.

### College of Arts/Sciences (CAS)

#### CAS 100 First Yr Exp - 2 cr

A course for first-year students majoring in the College of Arts & Sciences that assists with maximizing the student's potential to achieve academic success and to adjust responsibly to the individual and interpersonal challenges presented by college life. Taught in small groups, the course provides an introduction to the nature of higher education and a general orientation to the functions and resources of the University.

#### CAS 190 Special Topics - 1-3 cr

This variable content course deals with selected topics from any of the disciplines in the College of Arts and Sciences. Topics will focus on current and relevant issues and may contain a service-learning component. The course may be repeated for credit when the topic varies for a maximum of six credit hours.

### Gerontology (GRN)

#### GRN 272 Gender and Aging 3 cr

This course examines the dynamics of gender and aging within society from an interdisciplinary perspective. Students will be introduced to controversies in gender over the life course. These include, but are not limited to, definitions and cultural boundaries, gender in childhood, gender and relationships, gender in education and the workplace, gender and sexuality, as well as gender in late life.

#### GRN 290 Special Topics - 3 cr

This designation is used for interdisciplinary courses on aging on a variety of subjects. This course does not replace any course in a single discipline. May be repeated as long as the topic changes, to maximum of six semester hours.

#### GRN 435 Health Disparities Life Span 3 cr

This course examines differences in health status across the life span. The course will focus heavily on racial/ethnic and socioeconomic disparities in health applying a social determinants' of health framework. Issues that will be considered include how income, education, neighborhood conditions, access to health care, and other community factors shape opportunities to be healthy. The course is cross-listed as SY 435 and GRN 435 and has been approved as an elective for the Undergraduate Certificate in Gerontology and the interdisciplinary minor in Gerontology.

**Prerequisite:** SY 109 Minimum Grade of D

**Cross-Listed:** SY 435

#### GRN 490 Special Topics 3 cr

This course is designated for upper division students and graduate students, particularly those pursuing studies for the Certificate of Gerontology. The course content focuses on interdisciplinary treatments on various topics on aging. This course does not replace any course in a single discipline. (Examples of special topics: Trends and Issues in Gerontology; Leadership and Advocacy in Gerontology; Housing and Lifestyle Changes over the Life Course). May be repeated as long as the topic changes, to maximum of six semester hours.

**Prerequisite:** SY 372 Minimum Grade of D

#### GRN 494 Directed Studies 1-3 cr

Under the guidance of a faculty member, the student will pursue directed research on readings of an approved topic in Gerontology. May be repeated as long as the topic changes, to a maximum of six semester hours. Requires permission of Director of Gerontology.

**Prerequisite:** SY 372 Minimum Grade of D

#### GRN 496 Internship - Gerontology 3,6 cr

This course is to provide a practicum experience in gerontology in a setting selected by the student and approved by the Program Director. The course emphasis is on the experiential learning process and outcomes. The undergraduate student will apply theoretical concepts in specific areas of interest related to aging and intergenerational relations. Interns will meet as a group three times during the semester for orientation, professional development, and evaluation activities. The 3-hour internship requires 100 contact hours; the 6-hour internship requires 200 hours. Permission of Director of Gerontology is required.

**Prerequisite:** SY 372 Minimum Grade of C

#### GRN 535 Health Disparities Life Span 3 cr

The main purpose of this seminar is to provide students with an understanding of how social factors contribute to racial/ethnic, socioeconomic and gender disparities in health and health care. We will examine how dyadic relationships such as interpersonal forms of discrimination, marriage, and social ties may contribute to health disparities. We will also examine the ways in which neighborhood and community context, as well as inequalities in socioeconomic status materially shape health and access to health care services. The course is cross-listed as GRN 435/535 and SY 435/535 and has been approved as an elective for the Undergraduate/Graduate Certificate in Gerontology and the interdisciplinary minor in Gerontology.

**Cross-Listed:** SY 535

#### GRN 594 Dir St in Gerontology - 1-3 cr

Under the guidance of a faculty member, the student will pursue directed research or readings of an approved topic in Gerontology. May be repeated as long as the topic changes, to maximum of six credit hours. Requires permission of the Director of Gerontology.

#### GRN 596 Internship - Gerontology 3,6 cr

This course is to provide a practicum experience in gerontology in a setting selected by the student and approved by the Program Director. The course emphasis is on the experiential learning process and outcomes. The graduate student will apply theoretical concepts to leadership roles, conducting research and influencing social and health care policies related to aging and intergenerational relationships. Interns will meet as a group three times during the semester for orientation, professional development, and evaluation activities. The 3-hour internship requires 100 contact hours; the 6-hour internship requires 200 hours. Permission of Director of Gerontology is required.

**Prerequisite:** SY 523 Minimum Grade of B

**GRN 597 GRN Teaching Apprenticeship 1-3 cr**

Directed Studies/Apprenticeship that focuses on teaching Gerontology. The student will work directly with a member of the Gerontology graduate faculty to learn pedagogy, innovation in teaching, and course content that will equip the student for future teaching assignments. Many PhD programs offer both Teaching Assistantships and Research Assistantships. Gerontology students need to show evidence that they have had some teaching-related experience to compete strongly for the TA position. This course is also appropriate for students who anticipate careers in teaching within the field of Gerontology (aging or intergenerational studies). Arrangements must be made prior to registration. Permission of the Program Director is required.

**Prerequisite:** SY 372 Minimum Grade of C

**Gender Studies (GS)****GS 101 Intro to Gender Studies 3 cr**

This course provides an interdisciplinary, multicultural overview of the concept of gender and gender roles in patriarchal society. This course examines the social construction of gender in our society and how that has shaped such areas as economics, politics, cultural/social values, and the impact upon women and men in historical and contemporary terms.

**GS 290 Sp Tp-#MeToo, Black Lives Matter & Beyond 3 cr**

Study of selected topics with an area in gender studies. May be repeated for credit when content varies.

**GS 301 Moving Beyond Diversity 3 cr**

This course explores ways of fighting injustice and dismantling systemic oppression for those who are being disproportionately impacted generationally. The course offers a framework for activism that focuses on creating a culture that stands up for what is right by fighting against normalizing cycles of perpetuated injustices. Students will examine diverse perspectives that center on the capacity to mobilize solidarity for those efforts, strategies, and practices that negate performative allyship with systems-changing action for today's realities.

**GS 302 Black Women and Activism 3 cr**

This fully online three-hour credit course is interdisciplinary in nature and addresses the need to recognize and validate contributions made by Black women that sought and continue to uplift Black America throughout the late 19th and early 21st centuries. This cadre of activism will be contextualized through both womanist and feminist theories. Central to these works will be an examination for how multiple oppressions have shaped Black women's lives throughout their ongoing efforts to redefine self and bring empowerment to their communities through racial solidarity and advancement as a people. These women's underlying resistance strategies and intellectual discourse for offsetting the negative effects of racism and other oppressive measures will be mirrored through the use of race and gender as a socio-political construct. A postmodern response depicted through the lens of contemporary Black feminists for how both mainstream feminism and Black America have responded to these heroic forms of activism will be analyzed. These activists' contributions will unfold through the following curricula foci: 1) early roots of nationalism, 2) the emergence of both Black Feminist and Womanist Thought, and 3) political movements involving Black women activists. Additional cornerstones for learning will include participating in a posting process that involve sharing research and writing projects which in return will facilitate lively discussions on today's black women activism from their own respective domain (e.g. music, spirituality, film, arts and letters, judicial system, the intellectual and socio-political arenas).

**GS 304 #Me Too, Black Lives Matter & 3 cr**

The velocity of national protests fighting for human rights across the constitutional continuum of justice, dignity, and safety have evolved into an epidemic throughout American infrastructures. This course will plunge into the #MeToo Era, Black Lives Matter, and Woke Movements. Significant visibility for how social constructs of gender, race, and sexuality intersect with these protesters' outcries will be examined. Further considerations will be given to exposing those accused of sexual violence on various fronts as well as existing allegations of wrongful deaths will be a part of the course curriculum. An added dimension to the curriculum will include also focusing on political strategies and an operative activism model that are being used to effectively penetrate these existing cultures of power and dominance.

**GS 390 Special Topics 3 cr**

Advanced study of selected topics with an area in gender studies. May be repeated for credit when content varies.

**GS 490 Special Topics 3 cr**

Advanced study of selected topics within an area in Gender Studies. May be repeated for credit when content varies for a total of six hours.

**GS 492 Gender Studies Seminar - 3 cr**

Advanced study of selected topics in Gender Studies. May be repeated for credit when content varies for a total of six hours.

**GS 494 Directed Studies 1-3 cr**

Directed research under the guidance of a Gender Studies faculty member. Requires permission of instructor. Student is restricted to taking a maximum of six hours of Directed Studies.

**Prerequisite:** GS 101 Minimum Grade of D

**GS 496 Internship - 3-6 cr**

Practical learning through occupational or community work with an approved agency dealing with gender-related issues. Readings and final report supervised by gender studies faculty. Special Permission required.

**Prerequisite:** GS 101 Minimum Grade of D

**Interdisciplinary Progs (IDS)****IDS 290 Special Topics 1-3 cr**

A study of selected topics of an interdisciplinary nature. May be repeated for credit when content varies. Requires permission of instructor.

**IDS 490 Special Topics 1-3 cr**

Advanced study of selected topics of an interdisciplinary nature. May be repeated for credit when content varies. Requires permission of instructor.

**IDS 590 Sp Top 1-9 cr**

Specialized topics not generally listed in the course offerings. Requires consent of Graduate Director.

**International Studies (IS)****IS 100 Global Issues 3 cr**

This course introduces students to the basic structural components of the global system, including the nation-state system and the world economy, and explores the major schools of thought in such areas as security, economic prosperity and development, international law, gender and environmental studies. The course helps students understand the complex and interlinked issues facing global society, and current problems, and view the U.S. within a broader global context.

**IS 193 Study Abroad 1-6 cr**

This course is an introductory International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**IS 200 People-Nations - 3 cr**

Variable content course focusing on particular nation or region of the world. Course offers a multi-disciplinary introduction to the people, society and politics. May be repeated for credit when content varies up to a total of 6 hours.

**IS 210 Global Engagement Orientation 1 cr**

This course introduces students to international global issues, allows students to identify opportunities for active engagement in these issues, and provides the framework for successful completion of the Global Engagement Certificate.

**IS 290 Special Topics - 3 cr**

Study of selected topics within a particular Area Studies Concentration. May be repeated for credit when content varies.

**Prerequisite:** IS 100 Minimum Grade of D

**IS 293 Study Abroad 1-6 cr**

This course is an introductory International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**IS 363 Crime and Politics in LatinAm 3 cr**

An examination of the violent crime epidemic affecting many parts of Latin America, with specific focus on the themes of democratic transition, political economy, and foreign relations with the United States. Same as PSC 363 and CJ 363.

**Prerequisite:** (PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or IS 100 Minimum Grade of C)

**Cross-Listed:** CJ 363, PSC 363

**IS 371 Studies in Russia 3-6 cr**

This course will cover specific topics in the history, politics, and culture of modern Russian civilization. May be repeated for credit when content varies.

**IS 372 Studies in E. Europe & C. Asia 3-6 cr**

This course will cover specific topics in the history, politics, and culture of modern Eastern European and Central Asian civilizations. May be repeated for credit when content varies.

**IS 390 Sp Top- 1-3 cr**

Advanced study of selected topics within a particular concentration. May be repeated for credit when content varies.

**IS 391 Study Abroad - 18 cr**

Study of selected topics within a particular Area Studies Concentration. May be repeated.

**IS 393 Study Abroad 1-6 cr**

This course is an advanced International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**IS 410 Global Engagement Capstone 1 cr**

Global Engagement Capstone is required for students completing the Global Engagement Certificate (GEC), and is a one hour course designed to help students reflect on the 16 hours of coursework and nine hours of globally engaged activities they have completed. Students will create a portfolio during the course, which will be presented to students and affiliated faculty at its conclusion.

**Prerequisite:** IS 210 Minimum Grade of P

**IS 473 International Law 3 cr**

This course covers major issues, cases and topics in public and private international law. Course coverage includes individuals and corporations, diplomatic relations, jurisdiction, human rights, economic relations, treaties, environmental law, and more.

**Prerequisite:** (IS 100 Minimum Grade of C or PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C)

**Cross-Listed:** CJ 473, PSC 473

**IS 489 Leadership and World Leaders 3 cr**

An overview of the definitions, characteristics, and typologies of leadership, with a focus on lives and legacies of global influential political leaders over the past century.

**Prerequisite:** PSC 130 Minimum Grade of D or PSC 250 Minimum Grade of D or IS 100 Minimum Grade of D

**Cross-Listed:** PSC 251, PSC 489

**IS 490 Special Topics 3 cr**

Advanced study of selected topics within a particular Area Studies Concentration. May be repeated for credit when content varies.

**Prerequisite:** IS 100 Minimum Grade of D

**IS 491 Seminar on Terrorism 3 cr**

Study of a terrorism from a sociopolitical perspective with an emphasis on causes, policy, tactics and operational characteristics and counter-terrorism operations. Cross-listed with CJ 491 and PSC 491.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or PSC 130 Minimum Grade of C or IS 100 Minimum Grade of C

**Cross-Listed:** CJ 491, PSC 491

**IS 492 Seminar - 3 cr**

Advanced study of selected topics in international studies from a comparative perspective. May be repeated for credit when content varies.

**Prerequisite:** IS 100 Minimum Grade of D

**IS 493 Study Abroad 1-6 cr**

This course is an advanced International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**IS 494 Directed Studies 1-3 cr**

Directed research in the field of international studies. May be repeated or credit up to a total of 9 hours. Prerequisite: permission of IS Director

**IS 495 Senior Seminar - W 3 cr**

The course seeks to provide an interdisciplinary and cross-regional overview of the fields and research opportunities within international studies.

**Prerequisite:** EH 102 Minimum Grade of C

**IS 496 Prof St Internship - 3-9 cr**

Practical learning experiences through occupational or professional work with an approved international organization, governmental agency, or international business Prerequisite: Permission of IS Director

**IS 499 Senior Honors Thesis 3 cr**

The course covers major theoretical perspectives in organizational psychology based on empirical research and case studies. Students will explore learning theory, group dynamics, and change in different types of learning organizations.

**Prerequisite:** (EH 102 Minimum Grade of D or EH 105 Minimum Grade of D)

**IS 591 Study Abroad 12 cr**

Graduate level international exchange programs for University of South Alabama students.

## Museum Studies (MUM)

### MUM 201 Intro to Museum Studies 3 cr

This course is designed to provide a general introduction to museum history, practice, and the role of museums in contemporary society. The class will explore a range of museum positions, curatorial practices, collection management, museum administration, and the academic and public roles museums play in society.

**Prerequisite:** EH 102 Minimum Grade of C

### MUM 290 Special Topics - 3 cr

Different subjects or themes in museum studies as announced. This course may be repeated twice when content varies, for a maximum of nine credit hours. Prerequisite: To be announced.

### MUM 390 Special Topics - 3 cr

Different subjects or themes in museum studies as announced. This course may be repeated twice when content varies. for a maximum of nine credit hours. Prerequisite: To be announced.

## Native American Studies Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Minor in Native American Studies

#### Core Requirements

1. Students must complete at least 18 credit hours in approved courses, of which, at least 9 hours must be taken at this University.
2. The courses must include at least one course from humanities and one from the social sciences.
3. All students must take NAS 101.
4. A minimum of nine hours must be at the course level 300 or above.

Code	Title	Hours
<b>Core Courses</b>		
NAS 101	Intro Native American Studies	3
NAS 390	Directed Studies-	1-6
NAS 496	Internship Native Am Studies	3-6
AN 340	Native American Cultures-W	3
<i>Humanities</i>		
Select at least one course of the following:		3
ARH 390	Special Topics - (Modern and Contemporary Native American Art)	
EH 482	Am Literature (Studies in Native American Literature: Native American Fiction)	
EH 482	Am Literature (Studies in Native American Literature: Native American Short Stories)	

PHL/RELALL Special Topics - (Native American Thought)

REGISTRATION

SCHEDULES

RELEASED

IF 100% OF

BALANCE[1]

IS NOT PAID

OR STUDENT

IS NOT

PARTICIPATING

IN THE

PAYMENT

PLAN (AVOID

THE VOID)390

#### Social Sciences

Select at least one course of the following:

3

AN 313

AN 340 Native American Cultures-W

AN 442 Cultural Resource Management

HY 290 Special Topics- (Native American History and Culture)

PSC 490 Special Topics (Native American Sovereignty)

PSY 490 Special Topics (Psychology of Native American Expression)

**Total Hours**

**18**

## Philosophy

### Department Information

Department of Philosophy website

<http://www.southalabama.edu/philosophy> (<http://www.southalabama.edu/philosophy/>)

### Undergraduate Studies

Through reasoned reflection, philosophy seeks to understand human experience in all its various aspects. Courses examine the moral, social, political, aesthetic, and religious dimensions of human existence, topics in special fields such as science, and the historical development of philosophy. In these courses students can develop skills in the presentation, interpretation, analysis, and evaluation of differing viewpoints, and refine their own beliefs about deeply important issues. Philosophy majors can choose from three concentrations: Philosophy, Religion, or Classics.

### General Education Requirements for Philosophy Majors

General Education Requirements for Philosophy are specified on the College of Arts and Sciences section.

All first-time freshmen must successfully complete CAS 100 as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry. PHL 461 will fulfill the technology proficiency requirement for Philosophy majors.

Philosophy Majors can now fulfill the Minor requirement by taking one of the other concentrations offered.

- Majors concentrating in Classics can fulfill the Minor requirement by using Philosophy or Religion concentration.

- Majors concentrating in Philosophy can fulfill the Minor requirement by using Religion or Classics concentration.
- Majors concentrating in Religion can fulfill the Minor requirement by using Philosophy or Classics concentration.

## Graduate Studies

Although the Department of Philosophy has no graduate program, graduate-level courses are offered for those students who need such work.

## Degrees, Programs, or Concentrations

- Classics Minor (p. 337)
- Philosophy (BA) Classics Concentration (p. 337)
- Philosophy (BA) Philosophy Concentration (p. 338)
- Philosophy (BA) Religion Concentration (p. 339)
- Philosophy and Medicine Minor (p. 340)
- Philosophy Minor (p. 340)
- Religion Minor (p. 341)

## Courses

### Argument (ARG)

#### ARG 120 Critical Thinking 3 cr

This course will examine complex types of reasoning, including statistical judgment, decision making, and causal and analogical thinking. Emphasis will be placed on the analysis of concrete examples of reasoning in various fields. Students will learn how to evaluate arguments, fallacies, common errors, and biases in reasoning and decision making. Identical with PHL 120. Credit cannot be received for both ARG 120 and PHL 120. Fulfills the General Education requirement.

**Cross-Listed:** PHL 120

#### ARG 210 Argumentation 3 cr

Examines the role of argumentation in a democratic society and aims to develop critical thinking and reasoned advocacy. Course makes functional a knowledge of tests of evidence and the modes of logical reasoning. Students participate in various forms of argumentation and debating. Identical with ARG 210. Students cannot receive credit for both ARG 210 and CA 210.

**Cross-Listed:** CA 210

#### ARG 222 Rhetoric, Culture and Society 3 cr

**Cross-Listed:** CA 222

#### ARG 321 Symbolic Logic 3 cr

A study of sentential and predicate logics and related topics. Identical with 321. Credit cannot be received for both ARG 321 and PHL 321.

**Cross-Listed:** PHL 321

#### ARG 371 Approaches to English Grammar 3 cr

A course designed primarily to help education majors translate between the languages of conventional grammar and the syntactical grammar relevant to the teaching of English at Precollege levels. Consideration will also be given to the rationales basic to the formation of different grammars and to methods of presenting grammatical material in a classroom situation. Non-education majors interested in a sophisticated approach to the study of grammar might also benefit from this course. Identical with EH 371. Credit cannot be received for both ARG 371 and EH 371.

**Prerequisite:** EH 101 Minimum Grade of C and EH 102 Minimum Grade of C

**Cross-Listed:** EH 371

#### ARG 390 Special Topics - 3 cr

Different figures, periods, or topics of significance in Argument will be studied as announced. May be repeated, when content varies, for a total of six hours. Requires Sophomore, Junior or Senior standing.

#### ARG 402 Rhetoric: Ancient and Modern 3 cr

Readings in rhetorical theory, ancient and modern, are applied in specific writing assignments with encourage students to adopt a point of view and address a specific audience. Identical to EH 402. If credit for ARG 402 is received, then credit cannot be received for EH 402.

**Prerequisite:** EH 101 Minimum Grade of C and EH 102 Minimum Grade of C

**Cross-Listed:** EH 402

#### ARG 481 Studies in Rhetoric 3 cr

Seminar in specific topics dealing with writing, rhetoric, or language studies. May be repeated once for credit when course content varies. Identical with EH 481. Credit cannot be received for both ARG 481 and EH 481 when it is on the same specific topic. Junior standing required.

**Prerequisite:** EH 101 Minimum Grade of C and EH 102 Minimum Grade of C

**Cross-Listed:** EH 481

#### ARG 490 Special Topics - 3 cr

An investigation of issues and concepts in Argument for advanced undergraduate students. May be repeated, when content varies, for a total of six hours. Prerequisites: Junior or Senior standing.

#### ARG 492 Seminar 3 cr

#### ARG 494 Directed Studies- 1-3 cr

Directed research in Argument under the guidance of a member of the department. Credit according to the magnitude of the individual project. May be repeated, if content varies, for a total of six hours. Prerequisites: Junior or Senior standing and approval of directing professor and department chair.

## Classics (CLA)

#### CLA 103 Art History I 3 cr

A survey of art and architecture of Europe and the Near East from the prehistoric to the end of the Gothic era. Identical with ARH 103. Credit cannot be received for both CLA 103 and ARH 103. Core Course.

**Cross-Listed:** ARH 103

#### CLA 105 Encounter with the Humanities 3 cr

Introduction to the various disciplines within the humanities with emphasis on the role each plays in a liberal arts education. Identical with AIS 105. Credit cannot be received for both CLA 105 and AIS 105. Core Course.

**Cross-Listed:** AIS 105

#### CLA 110 Intro Anc Greek Roman Culture 3 cr

A survey of the history, literature, philosophy, religion, art architecture, sociology, and political institutions of the Greek and Roman world with readings in translation from major Greek and Latin authors.

#### CLA 240 Western Philosophy: Classical 3 cr

Survey of classical Greek philosophy. The philosophers surveyed may include Presocratic philosophers, Socrates, Plato, Aristotle, and Hellenistic philosophers. Fulfills the General Education Requirement. Identical with CLA 240. Credit cannot be received for both PHL 240 and CLA 240.

**Cross-Listed:** PHL 240

**CLA 290 Sp Top - 3 cr**

Different figures, periods or topics of significance in Classics will be studied as announced. May be repeated, when content varies, for a total of six hours.

**CLA 304 Ancient Greek Art Architecture 3 cr**

Architecture, sculpture, and painting in Ancient Greece and the expansion and influence of Greek culture in the Ancient World.

**Prerequisite:** ARH 103 Minimum Grade of C or CLA 110 Minimum Grade of C

**Cross-Listed:** ARH 304

**CLA 306 Roman Art 3 cr**

Roman Art: Architecture, sculpture, and painting in Ancient Rome and its empire.

**Prerequisite:** (ARH 103 Minimum Grade of C or CLA 103 Minimum Grade of C) or CLA 110 Minimum Grade of C

**Cross-Listed:** ARH 306

**CLA 310 Classical Mythology 3 cr**

Through the disciplines of English and Philosophy, this course will provide an introduction to myths and to the literature that recounts the myths and to the literature that recounts the myths, legends, and folktales of ancient Greece and Rome. This course will also look at how different writers treat the material and why their treatments vary. Cross-listed with PHL 310, REL 310, and EH 310. Credit cannot be received for both CLA 310 and either PHL 310 or REL 310 or EH 310.

**Prerequisite:** (A01 27 or S01 610 or USEH P or EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** EH 310, PHL 310, REL 310

**CLA 311 Classical Political Thought 3 cr**

The course examines the central themes of classical Western political philosophy through the reading and discussing of the primary works of such thinkers as Plato, Aristotle, Augustine, and Aquinas. (Cross-listed as PHL 311 and PSC 311).

**Cross-Listed:** PHL 311, PSC 311

**CLA 390 Sp Top - 3 cr**

Different figures, periods or topics of significance in Classics will be studied as announced. May be repeated, when content varies, for a total of six hours.

**CLA 402 Rhetoric: Ancient and Modern 3 cr**

Readings in rhetorical theory, ancient and modern, are applied in specific writing assignments which encourage students to adopt a point of view and address a specific audience.

**Prerequisite:** EH 101 Minimum Grade of C and EH 102 Minimum Grade of C

**Cross-Listed:** ARG 402, EH 402

**CLA 454 Ancient Greek Culture 3 cr**

Through the disciplines of History and Philosophy, ancient Greek culture, including its history, literature, philosophy, art and architecture will be examined.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**CLA 455 Ancient Roman Culture 3 cr**

Through the disciplines of History and Philosophy, ancient Roman culture, including its history, literature, philosophy, art and architecture will be examined.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**CLA 492 Seminar - 3 cr**

An in-depth investigation of figures, periods or topics in Classics for advanced undergraduates. May be repeated, when content varies, for a total of six hours.

**CLA 494 Directed Studies 1-3 cr**

Directed research in Classics under the guidance of a member of the department. Credit according to the magnitude of the individual project. May be repeated, if content varies, for a total of three hours. Prerequisites: Junior or senior standing and approval of directing professor and department chair.

**CLA 499 Honors Thesis -W 3-6 cr**

Extended research paper prepared under the direction of thesis advisor plus two-person committee selected by advisor in consultation with student. Prerequisites: The student must have developed a proposal for the thesis in consultation with the advisor, and received permission for the work from the committee. In addition, the student must be a senior major or minor, have completed the common core, and have at least 3.3 GPA in the Classics concentration of the Philosophy major. Credit for this course is only given as an addition to the hours required for the major.

**Prerequisite:** (PHL 120 and PHL 240 (may be taken concurrently) and PHL 245 and PHL 321 and PHL 461 and PHL 310) or (REL 310 or CLA 310)

**CLA 594 Directed Studies 3 cr**

Directed research in philosophy under the guidance of a member of the department. May be repeated, if content varies, for a total of six hours.

**Prerequisite:** Graduate Student in Department conferring a Graduate Degree (hence not open to Philosophy majors in any Concentration in Philosophy.)

**Cross-Listed:** PHL 594, REL 594

**Philosophy (PHL)****PHL 110 Introduction to Philosophy 3 cr**

An introduction to philosophical analysis and criticism through a survey of the major branches of philosophy. Topics may include, but are not limited to: the mind/body problem, theory of knowledge, skepticism, ethics, political philosophy, aesthetics, and philosophy of religion. Fulfills the General Education Requirement.

**PHL 120 Critical Thinking 3 cr**

This course will examine complex types of reasoning, including statistical judgment, decision making, and causal and analogical thinking. Emphasis will be placed on the analysis of concrete examples of reasoning in various fields, including science, religion and theology, politics, law as well as alternative medicine and other non-traditional disciplines. Students will be encouraged to improve their own judgment and decision making by learning how to evaluate arguments and by learning about fallacies, common errors and biases in reasoning and decision making. There will also be extensive discussion on the relation between how people do reason and how they ought to reason. Fulfills the General Education Requirement.

**Cross-Listed:** ARG 120

**PHL 121 Introduction to Logic 3 cr**

Studies arguments: what they are, how to identify them, and how to judge their quality; and examines inductive and deductive arguments in both their informal and formal aspects. Fulfills the General Education Requirement. MA 110 or equivalent is recommended.

**PHL 131 Introduction to Ethics 3 cr**

Examines ideas about good and bad, right and wrong, and moral obligation through a survey of major ethical systems in western philosophy. The course includes consideration of how these ideas apply to moral problems and issues. Fulfills the General Education Requirement.

**PHL 220 Medical Reasoning 3 cr**

This course will examine complex types of reasoning, including statistical judgment, decision making and causal and analogical reasoning. Emphasis will be placed on the analysis of concrete examples of reasoning in the medical field. Students will learn how to evaluate arguments, fallacies, common errors, and biases in medical reasoning and decision making.

**PHL 231 Social Ethics 3 cr**

Readings and analyses of ethical issues in society. Topics may include euthanasia, sexual equality, sexual morality, censorship, world hunger, animal rights, the environment, and capital punishment. Fulfills the General Education Requirement.

**PHL 233 Phil of Love-Friendship - W 3 cr**

Love and friendship are investigated by a philosophical analysis of concepts embraced by the terms. Examples of the concepts are drawn from common life, religion, history, and literature.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**PHL 240 Western Philosophy: Classical 3 cr**

Survey of classical Greek philosophy. The philosophers surveyed may include Presocratic philosophers, Socrates, Plato, Aristotle, and Hellenistic philosophers. Fulfills the General Education Requirement. Identical with CLA 240. Credit cannot be received for both PHL 240 and CLA 240.

**Cross-Listed:** CLA 240

**PHL 242 Western Philosophy - Medieval 3 cr**

A survey of Medieval Western Latin, Jewish and Islamic philosophers. Identical with REL 242. Credit cannot be received for both REL 242 and PHL 242.

**Cross-Listed:** REL 242

**PHL 245 Renaissance-Enlightenment - W 3 cr**

Survey of Western philosophy from F. Bacon to Kant with emphasis on the empiricists, rationalists, and Kant.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**PHL 251 Philosophy and Cognitive Sci 3 cr**

A survey of central concepts and issues in cognitive science, including an informal introduction to automata theory, intelligent systems architecture, and the philosophical issues arising out of computational models of language and cognition.

**PHL 290 Special Topics - 1-3 cr**

Different themes and issues of philosophical significance will be studied as announced. May be repeated for a maximum of 9 hours.

**PHL 301 Skepticism in Media-Philosophy 3 cr**

This course examines some of the most fundamental questions about human knowledge, belief and rationality and compares the treatment of such issues in philosophical discussions and contemporary media, especially film. Identical with CA 301. Credit cannot be received for both CA 301 and PHL 301.

**Prerequisite:** EH 102 Minimum Grade of D or EH 105 Minimum Grade of D

**Cross-Listed:** CA 301

**PHL 310 Classical Mythology 3 cr**

Through the disciplines of English and Philosophy, this course will provide an introduction to myths and to the literature that recounts the myths, legends, and folktales of ancient Greece and Rome. This course will also look at how different writers treat the material and why their treatments vary. Credit cannot be received for both PHL 310 and either EH 310 or REL 310 or CLA 310.

**Prerequisite:** (A01 27 or S01 610 or USEH P or EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** CLA 310, EH 310, REL 310

**PHL 311 Classical Political Thought 3 cr**

The course examines the central themes of classical Western political philosophy through the reading and discussing of the primary works of such thinkers as Plato, Aristotle, Augustine, and Aquinas. (Cross-listed as CLA 311 and PSC 311)

**Cross-Listed:** CLA 311, PSC 311

**PHL 312 Renaissance Political Thought 3 cr**

The course examines central themes of Renaissance and modern Western political philosophy through the reading and discussing of the primary works of such thinkers as Machiavelli, Hobbes, Locke, and Rousseau. (Cross-listed as PSC 312)

**Prerequisite:** PSC 130 Minimum Grade of C

**Cross-Listed:** PSC 312

**PHL 313 Modern Political Thought - W 3 cr**

The course examines central themes of modern Western political philosophy through the reading and discussing of the primary works of such thinker as Hegel, Mill, Marx, and Nietzsche. (Cross-listed as PSC 313)

**Prerequisite:** PSC 130 Minimum Grade of C

**Cross-Listed:** PSC 313

**PHL 321 Symbolic Logic 3 cr**

A study of sentential and predicate logics and related topics.

**Cross-Listed:** ARG 321

**PHL 327 Philosophy of Science 3 cr**

Studies such topics as method and explanation in the sciences; the demarcation between science and pseudoscience; realist and anti-realist views about scientific theories; the logic of scientific change; confirmation; reduction; laws of nature; underdetermination; and society, science, values and also explores the intellectual, social and cultural history of science, mathematics and philosophy. This course is designed to meet needs of students in Philosophy, Biology, and Mathematics and students in pre-service education programs..

**PHL 331 Constitutional Law 3 cr**

The study of the principles of constitutional powers and liberties examined through an analysis of decisions and opinions by the U.S. supreme Court. (Cross-listed as CJ 331 and PSC 331)

**Cross-Listed:** CJ 331, PSC 331

**PHL 333 Biomedical Ethics - W 3 cr**

Ethical analyses of problems and issues in the biomedical and health-related fields. Topics may include genetic research and technology, abortion, health care, experimentation, and death and dying.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** BLY 333

**PHL 334 Man and Technology 3 cr**

Examines the most common impacts that technology is envisioned to have on both the spirit of the human person and the environment in which that person lives. Both the technologist and anti-technologist arguments will be explored.

**PHL 336 The Law and Legal Theory 3 cr**

Explores issues and problems in the area of law, including the nature and rule of law, the aims and roles of legal systems, morality, and law, obligations to obey the law, and systematic injustices related to race, ethnicity, gender. (Cross-listed as PSC 336 and CJ 336)

**Cross-Listed:** CJ 336, PSC 336

**PHL 337 Liability and Punishment 3 cr**

Explores theoretical issues and problems in the areas of law—especially criminal law—concerning liability and punishment. Topics to be examined include diminished capacity, theories of punishment, and capital punishment. (Cross-listed as PSC and CJ 337)

**Cross-Listed:** CJ 337, PSC 337

**PHL 339 Philosophy of Culture 3 cr**

Acquaints students with Cassirer's philosophy of culture, with emphasis on the unity of human experience as ramified into myth, language, religion, art, history, science, and politico-social life.

**PHL 345 Post-Kant Anglo-American 3 cr**

An examination of selected themes and issues in Anglo-American philosophy since 1800. Topics may include pragmatism, ideal language philosophy, and ordinary language philosophy.

**Prerequisite:** PHL 121 Minimum Grade of C or (PHL 321 Minimum Grade of C or PHL 324 Minimum Grade of C)

**PHL 348 19th C Contl Phl-Lit Theory 3 cr**

An examination of selected themes and issues in 19th Century Continental Philosophy and Literary Theory. Topics may include Idealism, Romanticism, Existentialism, Marxism, Freudianism. Identical with EG 348 and LG 348. Credit cannot be received for both PHL 348 and either EH 348 or LG 348. (For LG credit, students will be required to do some coursework in their language of concentration.)

**Cross-Listed:** EH 348, LG 348

**PHL 349 20th C Cntl Phl-Lit Theory 3 cr**

An examination of selected themes and issues in 20th Century Continental Philosophy and Literary theory. Topics may include Phenomenology, Existentialism, Hermeneutics, Structuralism, and Post-Structuralism. Identical with EH 349. Credit cannot be received for both PHL 349 and either EH 349 or LG 349. (For LG credit, students will be required to do some coursework in their language of concentration.)

**Cross-Listed:** EH 349, LG 349

**PHL 351 Philosophy of Religion - W 3 cr**

Investigates the nature of religion, including religious experience, religious language, arguments for the existence of God, and the problems of evil. Identical with REL 351. Credit cannot be received for both PHL 351 and REL 351.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**PHL 352 World Religions 3 cr**

This course is an introduction to the religions of the world. It is divided into three basic units: Indigenous Religions (of Africa, North America, and Oceania); Eastern Religions (Hinduism, Buddhism, Daoism, Confucianism, Jainism) and Western Religions (Judaism, Christianity, Islam). The emphasis is on grasping the core principles of each tradition, seeing the ways in which religion meets basic human needs, and religion as a cultural artifact that borrows, adapts, and changes over time. Course is identical with REL 352 and SY 352. Credit cannot be received for both PHL 352 and REL 352 or SY 352.

**Cross-Listed:** REL 352, SY 352

**PHL 354 Philosophies of India 3 cr**

Introduces the major religions and philosophies of India by way of the classical Realist/Anti-Realist debate in India. Study of the major religious doctrines of theistic and non-dualist Vedanta, Buddhism, and Jainism, and their philosophical articulation in the Nyaya, Advaita Vedanta, Madhyamaka, and other schools. Identical with REL 354. Credit cannot be received for both PHL 354 and REL 354.

**PHL 355 Chinese Philosophy 3 cr**

Introduces the major classical religious and philosophical systems of China by way of an examination of early Confucianism, Mohism, Yangism, Legalism, Taoism, and Chinese Buddhism. Particular emphasis will be placed upon the role of these schools in the development of Chinese religion, morality, and political organization. Identical with REL 355. Credit cannot be received for both PHL 355 and REL 355.

**PHL 361 Philosophy of Mind 3 cr**

A study of the concept of consciousness and related concepts (e.g., mind, self, thinking) as applied to man, other animals, non-terrestrials, and machines.

**PHL 370 Philosophy of Art 3 cr**

Acquaints students with main issues in aesthetics. Includes such issues as the nature and function of art and the criteria of aesthetic judgment. Identical with ARH 370. Credit cannot be received for both PHL 370 and ARH 370.

**Cross-Listed:** ARH 370

**PHL 390 Special Topics - 1-3 cr**

Different figures or topics of philosophical significance will be studied as announced. May be repeated for a maximum of 9 hours.

**PHL 418 American Political Thought-W 3 cr**

This course examines the central themes, issues, and evolution of American political thought, including how we understand our role and responsibilities in contemporary democracy. (Cross-listed as PSC 418)

**Prerequisite:** PSC 130 or PHL 110 or PHL 120 or PHL 121 or PHL 131

**Cross-Listed:** PSC 418

**PHL 421 Literary Criticism to 1900 - W 3 cr**

Classical, Neoclassical, Romantic, and Victorian literary theory. Identical with EH 421. Credit cannot be received for both PHL 421 and EH 421.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** EH 421

**PHL 422 Literary Criticism Sn 1900 - W 3 cr**

Modern and Contemporary Literary Theory. Identical with EH 422.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** EH 422

**PHL 431 Advanced Ethical Theory 3 cr**

Problems in traditional and recent value theory and ethics.

**PHL 441 Theory of Knowledge 3 cr**

Examines knowledge, its scope and limits. Topics may include the conditions, criteria, and grounds for knowledge, and theories of truth and meaning.

**Prerequisite:** PHL 110 Minimum Grade of C or PHL 121 Minimum Grade of C

**PHL 461 Metaphysics - W 3 cr**

Studies philosophical theories about the nature of reality, including such topics as what is real, change, the nature of things, universals, and such views as monism, materialism, realism, and idealism. Capstone course for all philosophy concentrations.

**Prerequisite:** (PHL 240 (may be taken concurrently) Minimum Grade of C or CLA 240 (may be taken concurrently) Minimum Grade of C or PHL 241 (may be taken concurrently) Minimum Grade of C) and (PHL 243 (may be taken concurrently) Minimum Grade of C or PHL 245 (may be taken concurrently) Minimum Grade of C) and (PHL 321 (may be taken concurrently) Minimum Grade of C or PHL 324 (may be taken concurrently) Minimum Grade of C)

**PHL 467 Mathematical Logic 3 cr**

An introduction to formal first-order logic, first-order metatheory, and its extensions. Topics include axiom systems and their models, completeness, compactness, and recursive sets and functions. Identical with MA 467. Credit cannot be received for both PHL 467 and MA 467.

**Prerequisite:** (PHL 321 Minimum Grade of C or MA 320 Minimum Grade of C)

**Cross-Listed:** MA 467

**PHL 490 Special Topics 3 cr**

An investigation of issues and concepts in philosophy for advanced undergraduates and graduate students. May be repeated, when content varies, for a total of six hours. Prerequisites: junior, senior, or graduate standing.

**PHL 492 Seminar - 1-3 cr**

An investigation of issues and concepts in philosophy for advanced undergraduates and graduate students. May be repeated, when content varies, for a total of 6 hours.

**PHL 494 Directed Studies 1-3 cr**

Directed research in philosophy under the guidance of a member of the department. Credit according to the magnitude of the individual project. May be repeated, if content varies, for a total of 6 hours. Prerequisites: Junior or senior standing and approval of directing professor and department chair. Prerequisites: Junior, senior, or graduate standing.

**PHL 499 Honors Thesis - H (W) 3-6 cr**

Extended research paper prepared under direction of thesis advisor plus two-person committee selected by advisor in consultation with student. Prerequisites: The student must have developed a proposal for the thesis in consultation with the advisor, and received permission for the work from the committee. In addition, the student must be a senior major or minor, have completed the logic and history of philosophy requirements, have at least two courses at the 300-level or higher, and have at least a 3.3 GPA in the Philosophy Concentration of the Philosophy major. Credit for this course is only given as an addition to the hours required for the major.

**PHL 590 Special Topics - 1-3 cr**

Study of individuals or topics of philosophical significance. May be repeated for credit when content varies. Enrollment is limited to students in disciplines other than philosophy. May be repeated, if content varies, for a total of 6 hours.

**PHL 594 Directed Studies 3 cr**

Directed research in philosophy under the guidance of a member of the department. May be repeated, if content varies, for a total of six hours. Prerequisite: Graduate Student in Department conferring a Graduate Degree (hence not open to Philosophy majors in any Concentration in Philosophy).

**Cross-Listed:** CLA 594, REL 594

**Religion (REL)****REL 100 Intro to the Study of Religion 3 cr**

As a general introduction to the academic study of religion, REL 100 examines the function of religion in relation to human beliefs, social practices, and culture in general. The course surveys a broad number of important debates in the history of religious studies, such as the definition of religion, the insider/outsider problem, theories on the origins of religion, the comparison of religions, religion's psychological, sociological, and political functions, and the manner in which human communities authorize systems of behavior.

**REL 200 Old Testament/Hebrew Bible 3 cr**

An introduction or survey of the literature and social world of the Old Testament/Hebrew Bible. As a way of further illuminating these materials, attention will also be given to the history and religion of Israel as well as the other peoples of the ancient Near East. Fulfills the General Education Requirement.

**REL 201 Survey of the New Testament 3 cr**

This course is an introductory survey of the New Testament, including the life and ministry of Jesus Christ, apostolic history, related Greco-Roman history and archeology, principal critical issues, and the unity and diversity of New Testament theology. Fulfills the General Education Requirement.

**REL 242 Western Philosophy: Medieval 3 cr**

A survey of Medieval Western Latin, Jewish, and Islamic philosophers. Identical with PHL 242. Credit cannot be received for both REL 242 and PHL 242.

**Cross-Listed:** PHL 242

**REL 290 Special Topics - 3 cr**

Different themes and issues of significance in religion will be studied as announced.

**REL 310 Classical Mythology 3 cr**

Through the disciplines of English and Philosophy, this course will provide an introduction to myths and to the literature that recounts the myths, legends, and folktales of ancient Greece and Rome. This course will also look at how different writers treat the material and why their treatments vary. Cross-listed with EH 310, PHL 310 and CLA 310. Credit cannot be received for both REL 310 and either EH 310 or PHL 310 or CLA 310.

**Prerequisite:** (A01 27 or S01 610 or USEH P or EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** CLA 310, EH 310, PHL 310

**REL 331 History of England to 1603 3 cr**

The history of England from the Roman occupation to the Age of Tudors. Identical with HY 331. Credit cannot be received for both REL 331 and HY 331.

**Cross-Listed:** HY 331

**REL 343 Witchcraft and Magic 3 cr**

The history of beliefs and practices concerning witches, magic, and witch-hunting in Medieval and Early Modern Europe. Identical with HY 343. Credit cannot be received for both REL 343 and HY 343.

**Cross-Listed:** HY 343

**REL 347 The Holocaust 3 cr**

The history of the systematic mass murder of Europe's Jews and other groups by Nazi Germany during World War II. Cross-listed with HY 347. Credit cannot be received for both REL 347 and HY 347.

**Cross-Listed:** HY 347

**REL 351 Philosophy of Religion - W 3 cr**

Investigates the nature of religion, including religious experience, religious language, arguments for the existence of God, and the problem of evil. Identical with PHL 351. Credit cannot be received for both REL 351 and PHL 351.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** PHL 351

**REL 352 World Religions 3 cr**

This course is an introduction to the religions of the world. It is divided into three basic units: Indigenous Religions (of Africa, North America, and Oceania); Eastern Religions (Hinduism, Buddhism, Daoism, Confucianism, Jainism) and Western Religions (Judaism, Christianity, Islam). The emphasis is on grasping the core principles of each tradition, seeing the ways in which religion meets basic human needs, and religion as a cultural artifact that borrows, adapts, and changes over time. Course is identical with PHL 352 and SY 352. Credit cannot be received for both REL 352 and PHL 352 or SY 352.

**Cross-Listed:** PHL 352, SY 352

**REL 353 Reformation Europe 1300-1520 3 cr**

The role of religious change in the 16th and 17th centuries. Identical with HY 353. Credit cannot be received for both REL 353 and HY 353.

**Cross-Listed:** HY 353

**REL 354 Philosophies of India 3 cr**

Introduces the major religions and philosophies of India by way of the classical Realist/Antirealist debate in India. Study of the major religious doctrines of theistic and non-dualist Vedanta, Buddhism, and Jainism, and their philosophical articulation in the Nyaya, Advaita Vedanta, Madhyamaka, and other schools. Identical with PHL 354. Credit cannot be received for both REL 354 and PHL 354.

**Cross-Listed:** PHL 354

**REL 355 Chinese Philosophy 3 cr**

Introduces the major classical religious and philosophical systems of China by way of an examination of early Confucianism, Mohism, Yangism, Legalism, Taoism, and Chinese Buddhism. Particular emphasis will be placed upon the role of these schools in the development of Chinese religion, morality, and political organization. Identical PHL 355. Credit cannot be received for both REL 355 and PHL 355.

**Cross-Listed:** PHL 355

**REL 364 Islamic Civilization to 1453 3 cr**

This course will cover the political, economic, social, and cultural history of Islamic Civilization from its beginnings in the Arabian Peninsula in the sixth century to the Ottoman conquest of Constantinople in 1453. Cross-listed with HY 364. Credit cannot be received for both REL 364 and HY 364.

**Cross-Listed:** HY 364

**REL 365 Islamic Civilization 1465 - W 3 cr**

This course will cover specific topics in the history of Islamic civilization. Prerequisite: Junior or Senior status. Cross-listed with REL 365. Credit cannot be received for both HY 365 and REL 365.

**Cross-Listed:** HY 365

**REL 373 Religion in American History 3 cr**

Examines the role of religion in United States history from the colonial era to the present. Identical with HY 373. Credit cannot be received for both REL 373 and HY 373.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** HY 373

**REL 390 Special Topics - 3 cr**

Different figures or topics of significance in religion will be studied as announced. May be repeated, when content varies, for a total of six hours.

**REL 420 Sociology of Religions 3 cr**

An analysis of religion as a social institution with emphasis on modern western societies. Topics include the functions of religion for society and individuals, changing patterns of religious belief and practice and the relationship between religion and other social institutions. Identical with SY 420. Credit cannot be received for both REL 420 and SY 420.

**Prerequisite:** SY 109 Minimum Grade of C

**REL 465 Studies of HY of Islamic Civ 3 cr**

This course will cover specific topics in the history of Islamic civilization. May be repeated for credit when content varies. Prerequisite: Junior or Senior status. Cross-listed with HY 465. Credit cannot be received for both REL 465 and HY 465.

**Cross-Listed:** HY 465

**REL 492 Seminar - 3 cr**

An investigation of issues and concepts in religion for advanced undergraduates and graduate students. May be repeated, when content varies, for a total of six hours.

**REL 494 Directed Studies - 1-3 cr**

Directed research in religion under the guidance of a member of the department. Credit according to the magnitude of the individual project. May be repeated, if content varies, for a total of three hours. Prerequisites: Junior or senior standing and approval of directing professor and department chair.

**REL 499 Honors Thesis - H - W 3-6 cr**

Extended research paper prepared under the direction of thesis advisor plus two-person committee selected by advisor in consultation with student. Prerequisites: The student must have developed a proposal for the thesis in consultation with the advisor, and received permission for the work from the committee. In addition, the student must be a senior major or minor, have completed the Common Core, and have at least a 3.3 GPA in the Religion Concentration of the Philosophy major. Credit for this course is only given as an addition to the hours required for the major.

**Prerequisite:** (PHL 120 Minimum Grade of D and PHL 240 Minimum Grade of D and PHL 245 Minimum Grade of D and PHL 321 Minimum Grade of D and PHL 461 Minimum Grade of D) and (PHL 310 Minimum Grade of D or REL 310 or CLA 310 Minimum Grade of D)

**REL 594 Directed Studies 3 cr**

Directed research in philosophy under the guidance of a member of the department. May be repeated, if content varies, for a total of six hours. Prerequisite: Graduate Student in Department conferring a Graduate Degree (hence not open to Philosophy majors in any Concentration in Philosophy.)

**Cross-Listed:** CLA 594, PHL 594

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
BAKER, SAMUEL H (samuelbaker@southalabama.edu)	Philosophy	Associate Professor	BA, Yale University MPHIL, University of Cambridge UK PHD, Princeton University
HILLMAN, TIMOTHY A. (hillman@southalabama.edu)	Philosophy	Associate Professor	BA, Millsaps College MA, University of Mississippi PHD, Purdue University-Main Campus
LOOMIS, ERIC J. (ejloomis@southalabama.edu)	Philosophy	Associate Professor	BA, University of Wyoming PHD, University of Texas- Austin
MEEKER, KEVIN M. (kmeeker@southalabama.edu)	Philosophy	Professor	BA, Wheaton College MA, University of Notre Dame PHD, University of Notre Dame
WHALEN, ALEXANDER CRUTCHFIELD (whalen@southalabama.edu)	Philosophy	Part-Time Instructor	BA, University of South Alabama PHD, Univ of Edinburgh

## Classics Minor Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Minor in Classics

A minimum of 18 hours must be taken in approved Classics course listings. No more than two 100-level courses may count towards the Classics minor. The minor is interdisciplinary in nature and cross-listed course offerings may be used outside of Classics (CLA) discipline. Students minoring in Classics must fulfill the Foreign Language requirement by taking either 2 semesters of Latin or 2 semesters of Ancient Greek.

Code	Title	Hours
<b>Latin or Ancient Greek</b>		<b>6</b>
LG 101 & LG 102	Introductory Latin I and Introductory Latin II	
LG 141 & LG 142	Intro Classical Greek I and Intro Classical Greek II	
<b>Classics Electives (200+ level)</b>		<b>12</b>
<b>Total Hours</b>		<b>18</b>

Philosophy Majors can now fulfill the Minor requirement by taking one of the other concentrations offered. No more than 6 hours may cross-list between major and minor.

- Majors concentrating in Classic can fulfill the Minor requirement by using Philosophy or Religion concentration.
- Majors concentrating in Philosophy can fulfill the Minor requirement by using Religion or Classics concentration.
- Majors concentrating in Religion can fulfill the Minor requirement by using Philosophy or Classics concentration.

## Philosophy (BA) Classics Concentration

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		<b>30</b>
<i>Philosophy (BA) Classics Concentration</i>		
A. Complete the following:		
PHL 120 or PHL 220	Critical Thinking Medical Reasoning	3
CLA/PHLALL	Western Philosophy: Classical	3
REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)240		
PHL 245	Renaissance-Enlightnment - W	3
PHL 321 or CLA 310	Symbolic Logic Classical Mythology	3
PHL 461	Metaphysics - W	3
B. Classics Upper Division (300/400) Electives		9
C. Foreign Language Requirement		6
Choose one sequence		
LG 101 & LG 102	Introductory Latin I and Introductory Latin II	
LG 141 & LG 142	Intro Classical Greek I and Intro Classical Greek II	
<b>Minor Requirements</b>		

A minor is required for this degree program 18-24

**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses, at least one of which must be in the student's major or minor.

### Additional Information

PHL 240 and PHL 245 do not have to be taken in sequence and should be taken early in the major. Credit for PHL 499 is only given as an addition to the hours required for the major.

## Graduation Plan

(30 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
EH 101	English Composition I	3
PHL 120	Critical Thinking	3
Natural Science with Lab		4
Fine Arts Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EH 102	English Composition II (or Honors)	3
History	US or Western Civilization	3
Classics Elective		3
CA 110	Public Speaking	3
Natural Science with Lab		4
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
MA 110	Finite Mathematics (or higher)	3
Elective		3
English Literature		3
Social/Behavioral Elective		3
CLA 240	Western Philosophy: Classical	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Social/Behavioral Elective		3
Social/Behavioral Elective		3
CLA 310	Classical Mythology	3
Minor course		3
PHL 245	Renaissance-Enlightnmt - W	3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
Natural Sci with Lab		4
Classics Elective		3
LG 101 or LG 141	Introductory Latin I (First course in Latin or Ancient Greek) or Intro Classical Greek I	3
Elective		3
Minor course		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Classic Elective	300 level or higher	3
LG 102 or LG 142	Introductory Latin II (Second course in Latin or Ancient Greek) or Intro Classical Greek II	3
Elective		3
Minor course		3

Minor course		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
Classics Elective	300 level or higher	3
Classics Elective	300 level or higher	3
Elective		3
Minor course		3
Minor course		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
PHL 461	Metaphysics - W	3
Minor course		3
Elective		3
<b>Hours</b>		<b>18</b>
<b>Total Hours</b>		<b>125</b>

## Philosophy (BA) Philosophy Concentration

Code	Title	Hours
<b>General Education Requirements</b>		
<a href="https://bulletin.southalabama.edu/programs-az/arts-sciences/#generaleducationtext">https://bulletin.southalabama.edu/programs-az/arts-sciences/#generaleducationtext</a>		53-57
<b>Major Requirements</b>		<b>30</b>
<i>Philosophy (BA) Philosophy Concentration Core</i>		
A. Complete the following:		
PHL 120	Critical Thinking	3
or PHL 220	Medical Reasoning	
PHL 240	Western Philosophy: Classical	3
PHL 245	Renaissance-Enlightnmt - W	3
PHL 321	Symbolic Logic	3
PHL 461	Metaphysics - W	3
PHL 431	Advanced Ethical Theory	3
or PHL 441	Theory of Knowledge	
B. Philosophy Upper Division (300/400) Electives		6
C. Philosophy Electives, any level		6

<b>Minor Requirements</b>		
A minor is required for this degree program		18-24
<b>A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE</b>		<b>120</b>

All undergraduates must complete two designated writing credit (W) courses, at least one of which must be in the student's major or minor.

### Additional Information

PHL 240 and PHL 245 do not have to be taken in sequence and should be taken early in the major. Credit for PHL 499 is only given as an addition to the hours required for the major.

## Graduation Plan

(30 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
EH 101	English Composition I	3
PHL 120	Critical Thinking	3
Natural Sci with Lab		4
FA Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EH 102	English Composition II (or Honors)	3
History	US or Western Civilization	3
PHL Elective <sup>1</sup>		3
CA 110	Public Speaking	3
Natural Sci with Lab		4
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
MA 110	Finite Mathematics (or higher)	3
PHL 321	Symbolic Logic	3
English Literature		3
Social/Behavioral Elective		3
PHL 240	Western Philosophy: Classical	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Social/Behavioral Elective		3
Social/Behavioral Elective		3
PHL Elective		3
Minor Course		3
PHL 245	Renaissance-Enlightnmt - W	3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
Natural Sci with Lab		4
PHL Elective	300 level or higher	3
Foreign Language I		3
Elective		3
Minor course		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
PHL Elective	300 level or higher	3
Foreign Language II		3
Elective		3
Minor course		3
Minor course		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
PHL 431 or PHL 441	Advanced Ethical Theory or Theory of Knowledge	3
Elective		3
Elective		3
Minor course		3
Minor course		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
PHL 461	Metaphysics - W	3
Minor course		3
Elective		3
Elective		3

Elective	Hours
	3
<b>Hours</b>	<b>15</b>
<b>Total Hours</b>	<b>122</b>

<sup>1</sup> Recommended course PHL 121

## Philosophy (BA) Religion Concentration

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		<b>30</b>
<i>Religion Concentration Core</i>		
A. Complete the following:		
PHL 120 or PHL 220	Critical Thinking Medical Reasoning	3
PHL 240	Western Philosophy: Classical	3
PHL 245	Renaissance-Enlightnmt - W	3
PHL 321 or REL 310	Symbolic Logic Classical Mythology	3
PHL 461	Metaphysics - W	3
B. Religion Upper Division (300/400) Electives		9
C. Religion Electives, any level		6
<b>Minor Requirements</b>		
A minor is required for this degree program		18-24
<b>A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE</b>		<b>120</b>

All undergraduates must complete two designated writing credit (W) courses, at least one of which must be in the student's major or minor.

### Additional Information

PHL 240 and PHL 245 do not have to be taken in sequence and should be taken early in the major. Credit for PHL 499 is only given as an addition to the hours required for the major.

### Graduation Plan

(30 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
EH 101	English Composition I	3
PHL 120	Critical Thinking	3
Natural Sci with Lab		4
FA Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EH 102	English Composition II (or Honors)	3
History	US or Western Civilization	3
REL Elective		3
CA 110	Public Speaking	3
Natural Sci with Lab		4
<b>Hours</b>		<b>16</b>

Second Year		
<b>Fall</b>		
MA 110	Finite Mathematics (or higher)	3
REL Elective		3
English Literature		3
Social/Behavioral Elective		3
PHL 240	Western Philosophy: Classical	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Social/Behavioral Elective		3
Social/Behavioral Elective		3
REL 310	Classical Mythology	3
Minor Course		3
PHL 245	Renaissance-Enlightnmt - W	3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
Natural Sci with Lab		4
REL Elective		3
Foreign Language		3
Elective		3
Minor course		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
REL Elective	300 level or higher	3
Foreign Language		3
Elective		3
Minor course		3
Minor course		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
REL Elective	300 level or higher	3
REL Elective	300 level or higher	3
Elective		3
Minor course		3
Minor course		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
PHL 461	Metaphysics - W	3
Minor course		3
Elective		3
Elective		3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>122</b>

## Philosophy and Medicine Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

#### Minor in Philosophy and Medicine

All Philosophy and Medicine minors must take 18 credit hours, including the following three courses (9 credit hours), in no particular order:

Code	Title	Hours
PHL 220	Medical Reasoning	3
PHL 240	Western Philosophy: Classical	3
PHL/BLYALL	Biomedical Ethics - W	3
REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)333		
Philosophy and Medicine minors must take an additional 9 hours in Philosophy, with at least 2 courses at the 300/400 level. Students are especially recommended to take some of the following:		9
PHL 245	Renaissance-Enlightnmt - W	
PHL 321	Symbolic Logic	
PHL 327	Philosophy of Science	
PHL 431	Advanced Ethical Theory	
PHL 441	Theory of Knowledge	
<b>Total Hours</b>		<b>18</b>

## Philosophy Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

#### Minor in Philosophy

A minimum of 18 semester hours in Philosophy, to include a logic course (PHL 121 or PHL 321). At least nine hours must be taken in residence. No more than two 100-level courses may be counted toward the minor.

Code	Title	Hours
PHL 121	Introduction to Logic	3
or PHL 321	Symbolic Logic	
Philosophy Electives		15
No more than two 100-level courses may be counted toward the minor.		
<b>Total Hours</b>		<b>18</b>

Philosophy Majors can now fulfill the Minor requirement by taking one of the other concentrations offered. No more than 6 hours may cross-list between a major and minor.

- Majors concentrating in Classic can fulfill the Minor requirement by using Philosophy or Religion concentration.
- Majors concentrating in Philosophy can fulfill the Minor requirement by using Religion or Classics concentration.
- Majors concentrating in Religion can fulfill the Minor requirement by using Philosophy or Classics concentration.

# Religion Minor

## Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Minor in Religion

A minimum of 18 hours must be taken in approved course listings. No more than two 100-level courses may count towards the minor. The minor is interdisciplinary in nature and cross-listed course offerings may be used outside of Religion (REL) discipline, however, a minimum of 9 hours must be in the Religion (REL) discipline. A minimum of 9 hours of coursework must be taken at the 300 and/or 400 level at the University of South Alabama.

Code	Title	Hours
Religion Electives (300+)		9
Religion Electives (200+)		3
Religion Electives (100+)		6
<b>Total Hours</b>		<b>18</b>

Philosophy Majors can now fulfill the Minor requirement by taking one of the other concentrations offered. No more than 6 hours may cross-list between the major and minor.

- Majors concentrating in Classic can fulfill the Minor requirement by using Philosophy or Religion concentration.
- Majors concentrating in Philosophy can fulfill the Minor requirement by using Religion or Classics concentration.
- Majors concentrating in Religion can fulfill the Minor requirement by using Philosophy or Classics concentration.

# Physics

## Department Information

Department of Physics website  
<https://www.southalabama.edu/physics/>

The curriculum in the Department of Physics serves three groups of students: those preparing for careers in physics, those pursuing professional fields such as medicine and engineering, and those electing physics and astronomy as part of the natural science requirement for Bachelor of Arts or Bachelor of Science Degrees. The degree program in physics allows for flexibility to the extent that the serious student can select related courses in biology, chemistry, geology, computer science, and engineering to prepare for a career in such interdisciplinary areas as biophysics, geophysics, oceanography, and environmental science. Three options for a Bachelor of Science degree in Physics are offered. One option (the Premedical Option) is for those students pursuing medicine as a career. Links to sample programs and requirements for each option are given in the degree General Comments sections of each Area of Study. Students pursuing a degree in Physics also must have a minor in another discipline. In addition, the Department of Physics offers a double major with the Meteorology program within the Department of Earth Sciences.

All first-time freshmen must successfully complete CAS 100 as a degree requirement. Students must enroll during their first term at USA, except

for summer-entry students who must enroll in the fall semester following entry.

The Physics Pre-Medical Option requires a minimum of 129 hours, while the other Physics options require a minimum of 120 hours.

## Degrees, Programs, or Concentrations

- Physics (BS) - General Physics (p. 344)
- Physics (BS) - Graduate School Prep (p. 346)
- Physics (BS) - Meteorology Double Major (p. 347)
- Physics (BS) - Premedical Option (p. 349)
- Physics Minor (p. 350)

## Courses

### PH 101 Introduction to Astronomy 4 cr

This is a descriptive survey course of elementary astronomy with laboratory intended for both non-science and science majors. Topics covered include a description of the celestial sphere, a tour of the Solar System, techniques for measuring and classifying stars, stellar evolution, white dwarfs, black holes, neutron stars, galaxies, and Big Bang cosmology. Students must take PH 101L concurrently and pass the lab. The PH 101L grade is a component of the PH 101 course grade. Core course.

**Corequisite:** PH 101L

### PH 101L Introduction to Astronomy Lab 0 cr

Laboratory course for the Introduction to Astronomy course. Student must pass this laboratory course to receive a passing grade in the PH 101 course. Students must take PH 101L concurrently with PH 101 and pass the lab. The PH 101L grade is a component of the PH 101 course grade.

**Corequisite:** PH 101

### PH 104 Concepts of Physics 4 cr

A descriptive overview of the entire field of physics with laboratory, including the concepts of scalars and vectors. Newton's law, momentum and energy conservation, rotational motion, fluids, heat and thermodynamics, sound, electricity and magnetism, optics, atomic and nuclear physics, relativity, and elementary particle physics. This course is intended to provide the non-scientist with substantial insight into the physical behavior of matter and energy. Extensive demonstrations accompany the presentation of material to illustrate key concepts. Students must take PH 104L concurrently and pass the lab. The PH 104L grade is a component of the PH 104 course grade. Core course.

**Corequisite:** PH 104L

### PH 104L Concepts of Physics Laboratory 0 cr

Laboratory course for the Concepts of Physics course. Student must pass this laboratory course to receive a passing grade in the PH 104 course. Students must take PH 104L concurrently with PH 104 and pass the lab. The PH 104L grade is a component of the PH 104 course grade.

**Corequisite:** PH 104

### PH 107 Contemporary Topics in Physics 1 cr

Intended for physics majors in their first year or others interested in physics as a possible major. This course will survey current "hot topics" in physics, basic useful techniques in physics problem-solving, physics as a career, and research in physics at USA. This course is not intended to satisfy the science requirements within the College of Arts & Sciences.

**PH 114 Physics with Algebra-Trig I 5 cr**

First semester of a two-semester introductory course in algebra/trigonometry-based physics with laboratory and recitation. This course covers mechanics and thermodynamics: one- and two-dimensional motion, vectors, Newton's laws of motion, work and energy, momentum and collisions, circular motion, rotational motion, properties of solids and fluids, the laws of thermodynamics, kinetic theory of matter, simple harmonic motion, and wave motion. The laboratory uses computerized data acquisition and analysis for most of the experiments. Students must take PH 114L concurrently and pass the lab. The PH 114L grade is a component of the PH 114 course grade. Core course.

**Prerequisite:** A02 25 or MA 113 Minimum Grade of D or MA 115 Minimum Grade of D or MA 125 Minimum Grade of D or MA 120 Minimum Grade of D

**Corequisite:** PH 114L

**PH 114L Alg-Trig Based Physics I Lab 0 cr**

Laboratory course for the first semester of a two-semester introductory sequence in algebra/trigonometry-based physics. Student must pass this laboratory course to receive a passing grade in the PH 114 course. Students must take PH 114L concurrently with PH 114 and pass the lab. The PH 114L grade is a component of the PH 114 course grade.

**Corequisite:** PH 114

**PH 115 Physics with Algebra -Trig II 5 cr**

Second semester of a two-semester introductory course in algebra/trigonometry-based physics with laboratory and recitation. This course covers electrostatics, DC circuits, RC circuits, magnetic fields and forces, Faraday's Law, AC circuits, geometrical optics, interference and diffraction of light, the special theory of relativity, quantum physics, and atomic and nuclear physics. The laboratory uses computerized data acquisition and analysis for most of the experiments. Students must take PH 115L concurrently and pass the lab. The PH 115L grade is a component of the PH 115 course grade. Core course.

**Prerequisite:** PH 114 Minimum Grade of D

**Corequisite:** PH 115L

**PH 115L Alg-Trig Based Physics II Lab 0 cr**

Laboratory course for the second semester of a two-semester introductory sequence in algebra/trigonometry-based physics. Student must pass this laboratory course to receive a passing grade in the PH 115 course. Students must take PH 115L concurrently with PH 115 and pass the lab. The PH 115L grade is a component of the PH 115 course grade.

**Corequisite:** PH 115

**PH 194 Dir St - Variable Content Lab 1 cr**

A directed studies course to substitute for a laboratory credit for students who have successfully completed an introduction to astronomy or concepts of physics course at another university without the laboratory. Students taking this course must get the approval of the Physics Department Chair. This course may be taken up to two times (once for each course).

**PH 201 Calculus-Based Physics I 4 cr**

First semester of a two-semester introductory course in calculus-based physics with recitation and laboratory. This course covers: one and two-dimensional motion, vectors, Newton's laws of motion and their applications, work and energy, momentum and collisions, circular motion, rotational motion, properties of materials, simple harmonic motion, wave motion and topics in thermodynamics. The laboratory uses computerized data and analysis for most of the experiments. Core course.

**Prerequisite:** MA 125 Minimum Grade of C and (EH 101 Minimum Grade of C or A01 27 or S01 610 or S13 33)

**Corequisite:** MA 126, PH 201L

**PH 201L Calculus-Based Physics I Lab 0 cr**

Laboratory course for the first semester of a two-semester introductory sequence in calculus-based physics. Student must pass this laboratory course to receive a passing grade in the PH 201 course. Students must take PH 201L concurrently with PH 201 and pass the lab. The PH 201L grade is a component of the PH 201 course grade.

**Corequisite:** PH 201

**PH 202 Calculus-Based Physics II 4 cr**

Second semester of a two-semester introductory course in calculus-based physics with laboratory. This course covers electrostatic fields and Gauss' law, electric potential, electric circuits, magnetic fields, Ampere's law, Faraday's law, inductance, Maxwell's equations, electromagnetic waves and optics. The laboratory uses computerized data acquisition and analysis for most of the experiments. Students must take PH 202L concurrently and pass the lab. The PH 202L grade is a component of the PH 202 course grade. Core course.

**Prerequisite:** PH 201 Minimum Grade of D and MA 126 Minimum Grade of C and (EH 101 Minimum Grade of C or A01 27 or S01 610)

**Corequisite:** PH 202L

**PH 202L Calculus-Based Physics II Lab 0 cr**

Laboratory course for the second semester of a two-semester introductory sequence in calculus-based physics. Student must pass this laboratory course to receive a passing grade in the PH 202 course. Students must take PH 202L concurrently with PH 202 and pass the lab. The PH 202L grade is a component of the PH 202 course grade.

**Corequisite:** PH 202

**PH 290 Special Topics- 1-4 cr**

Topics of current interest but not available in regularly scheduled sophomore level courses. This course may be repeated once for credit when the content varies and may be taken twice for up to eight hours.

**PH 294 Dir St - Variable Content Lab 1 cr**

A directed studies course to substitute for a laboratory credit for students who have successfully completed a calculus or algebra-based physics lecture course at another university without the laboratory. Students taking this course must get the approval of the Physics Department Chair. This course may be taken up to two times (once for each of the missing laboratories). Prerequisite: Permission of the Department Chair

**Prerequisite:** EH 101 Minimum Grade of C

**PH 301 Introductory Astrophysics 3 cr**

Application of the principles of physics to the study of astronomical phenomena. Topics include celestial mechanics, stars and stellar evolution, the Milky Way and other galaxies, and cosmological models. Prior knowledge of astronomy is not required.

**Prerequisite:** PH 115 Minimum Grade of D or PH 202 Minimum Grade of D and MA 125 Minimum Grade of C

**PH 303 Modern Physics 4 cr**

This course, with laboratory, surveys physics of the twentieth century. Topics covered include special relativity, wave-particle concepts, the Schrodinger equation and quantum theory of the hydrogen atom, atomic spectra and structure, molecular spectra, the solid state, nuclear structure, radioactivity, and elementary particles. The accompanying laboratory includes experimental investigations of important topics in the subject of Modern Physics. Computerized numerical and graphical analysis of data is extensively used in the laboratory. Laboratory reports are written with word processors and submitted in a format consistent with articles submitted to student research journals. Students must take PH 303L concurrently and pass the lab. The PH 303L grade is a component of the PH 303 course grade.

**Prerequisite:** PH 303L (may be taken concurrently) and MA 125 Minimum Grade of C and PH 202 Minimum Grade of D or PH 115 Minimum Grade of D

**Corequisite:** PH 303L

**PH 303L Modern Physics Lab 0 cr**

Laboratory course for the Modern Physics Course. Students must take PH 303L concurrently with PH 303 and pass the lab. The PH 303L grade is a component of the PH 303 course grade.

**Corequisite:** PH 303

**PH 311 Condensed Matter Physics 3 cr**

This is an introductory course which covers modern condensed matter physics. Topics include crystal structure and properties; electronic structure of insulators, semiconductors and metals; and phenomena of current research interest and technological relevance. Methods used to measure and analyze these phenomena will also be discussed.

**Prerequisite:** PH 303 Minimum Grade of D

**PH 346 Classical and Modern Optics 3 cr**

Wave motion, reflection, refraction, dispersion, diffraction, interference phenomena, Fourier spectroscopy, lasers and other modern applications of optics.

**Prerequisite:** PH 202 Minimum Grade of D and MA 125 Minimum Grade of C

**PH 348 Electricity and Magnetism I 3 cr**

First of two-semester sequence in electromagnetism. Topics include a review of vector analysis, Coulomb's law, Gauss' law, calculation of the scalar potential, electric fields in matter, the Biot-Savart law, Ampere's law, the vector potential, magnetostatics in matter, electrodynamics, Faraday's law, inductance, Maxwell's correction to Ampere's law and Maxwell's equations.

**Prerequisite:** MA 227 Minimum Grade of C and PH 202 Minimum Grade of D or PH 115 Minimum Grade of D

**PH 349 Electricity and Magnetism II 3 cr**

Second of two-semester sequence in electromagnetism. Topics include electromagnetic wave propagation in free space, electromagnetic wave propagation in materials, reflection and transmission at interfaces, wave guides, electromagnetic radiation, optical dispersion, and electrodynamics extended to the special theory of relativity

**Prerequisite:** PH 348 Minimum Grade of D

**PH 354 Electronics 3 cr**

This course is intended to provide a theoretical and practical background in electronics. Topics include AC circuits, diode circuits, single-stage amplifiers, op-amps and feedback, and digital electronics. This course is not intended to satisfy the technical elective requirements for Electrical Engineering. The course will include periodic laboratory work.

**Prerequisite:** MA 126 Minimum Grade of C and PH 202 Minimum Grade of D or PH 115 Minimum Grade of D

**PH 366 Physical Mechanics I 3 cr**

First course in a two-semester sequence in classical mechanics. Topics include motion of particles in one-dimension, one-dimensional motion theorems, harmonic oscillations, damped oscillations, forced oscillations, kinematics in multiple dimensions, momentum and energy theorems, the central force problem, motion under inverse square law forces, planetary orbital motion, Rutherford scattering, conservation theorems for multi-particle systems and their applications, collisions, coupled-harmonic oscillators, and rigid body rotation about a fixed axis.

**Prerequisite:** MA 227 Minimum Grade of D and PH 202 Minimum Grade of D

**PH 367 Physical Mechanics II 3 cr**

Second course in a two-semester sequence in classical mechanics. Topics include: moving and rotating coordinate systems. Lagrange's equation and applications, Hamiltonian formulation, inertia and stress tensors, rotations of rigid bodies and the theory of small oscillations.

**Prerequisite:** PH 366 Minimum Grade of D

**PH 385 Experimental Physics - W 3 cr**

A course in the methods and techniques of experimental physics. A number of experiments in the area of classical mechanics, atomic physics, molecular physics, and nuclear physics will be performed and analysis is required. Computerized numerical and graphical analysis of data is extensively used in the laboratory. Laboratory reports are written with word processors and submitted in a format consistent with articles submitted to a student research journal.

**Prerequisite:** PH 385L (may be taken concurrently) and PH 303 (may be taken concurrently) Minimum Grade of D

**Corequisite:** PH 385L

**PH 385L Experimental Physics Lab 0 cr**

Laboratory course for the Experimental Physics course. Students must take PH 385L concurrently with PH 385 and pass the lab. The PH 385L grade is a component of the PH 385 course grade.

**Corequisite:** PH 385

**PH 390 Special Topics - 1-3 cr**

Topics of current interest not available in a regularly scheduled course. This course may be repeated once for credit and may be taken for up to six hours credit.

**PH 411 Computational Methods in Phys 3 cr**

Use of computers in physics research (industrial, applied, or basic) is now common. This course will introduce advanced undergraduate physics students to computer solutions of physics problems. Particular attention will be paid to problems that have no analytic solutions and may only be solved numerically. This course will introduce several numeric methods and apply them to specific problems from quantum mechanics, electrodynamics, and mechanics. Students will write a series of programs in the Fortran or the C programming language and use them to solve undergraduate level physics problems.

**Prerequisite:** (PH 303 Minimum Grade of D and MA 238 Minimum Grade of C and CPE 260 Minimum Grade of D)

**PH 448 Elementary Quantum Mechanics I 3 cr**

The first course of a two-semester sequence in Quantum Mechanics.

Topics include an introduction to Hilbert space and operators, the quantum state and observables, the Heisenberg uncertainty principle, time evolution of the quantum state, application of the Schrodinger equation to one-dimensional systems, and the solution of the hydrogen atom.

**Prerequisite:** MA 238 Minimum Grade of C and PH 303 Minimum Grade of D or CH 302 Minimum Grade of D

**PH 449 Elementary Quantum Mechanic II 3 cr**

The second course of two-semester sequence in Quantum Mechanics. Topics include a continuation in the mathematical formulation of quantum mechanics, angular momentum, perturbation theory, identical particles and spin, collision theory, and the semi-classical treatment of radiation. This course is recommended for students anticipating graduate study in physics.

**Prerequisite:** PH 448 Minimum Grade of D

**PH 463 Thermodynamics-Stat Mechanics 3 cr**

An in-depth course in thermodynamics and statistical mechanics. Topics include simple thermodynamics systems, work, heat and the first law of thermodynamics, ideal gases, the second law of thermodynamics, entropy, enthalpy, Helmholtz and Gibbs functions, TdS equations, heat capacity, partition function, equipartition of energy, statistical distribution of molecular speeds, thermal properties of solids, higher order phase transitions, chemical equilibrium, Thomson effect, Bose-Einstein statistics, Nuclear Magnetism, and the third law of thermodynamics.

**Prerequisite:** PH 202 Minimum Grade of D and MA 227 Minimum Grade of C

**PH 494 Directed Studies - 1-3 cr**

PH 494 Directed Studies 1-3 cr Directed research under the supervision of a faculty member. Topics generally coincide with the research interest of the supervising faculty member. Pre-requisite: Permission of the Physics department chair. May be taken three times for up to 9 hours.

**PH 499 Senior Thesis-Honors - H 3 cr**

A written thesis that is part of the Honors Senior Project which is submitted to partially satisfy the requirements for a Degree in Physics with distinction. The Senior Thesis will be written on research done in collaboration with an Honors Physics Faculty member in the Junior/Senior year. The Senior Thesis will be reviewed by a committee of Honors Physics Faculty. Upon approval by the committee the Senior Honors candidate will present the Senior Thesis at Honors Student Colloquium.

This course may be repeated once for credit. Prerequisite: The Honors candidate must have developed in the last semester of the previous year a prospectus with the Physics Faculty Mentor and presented this prospectus at the Annual Honors Student Colloquium, also permission of the Department Chair.

**Prerequisite:** EH 102 Minimum Grade of C

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
BOLEMAN, MICHAEL W (mboleman@southalabama.edu)	Physics	Senior Instructor	BS, University of West Georgia MS, University of Kentucky
COCHRAN, MELANIE ROSE BRADY (melaniebrady@southalabama.edu)	Physics	Senior Instructor	BS, University of Southern Miss MS, University of Southern Miss EDD, University of South Alabama
DAHAL, ARJUN P (adahal@southalabama.edu)	Physics	Assistant Professor	MS, University of Minnesota-Duluth PHD, University of South Florida
FRANK, MARTIN JOHANNES (mfrank@southalabama.edu)	Physics	Associate Professor	BS, Emory University BS, Emory University PHD, Baylor University
GAPUD, ALBERT AGCAOILI (gapud@southalabama.edu)	Physics	Associate Professor	BS, University of Kansas PHD, University of Kansas
GODANG, ROMULUS (godang@southalabama.edu)	Physics	Professor	BS, University of North Sumatra MS, Virginia Polytechnic Inst and PHD, Virginia Polytechnic Inst and
HAN, JIANING (jhan@southalabama.edu)	Physics	Professor	BS, Hebei University MS, Hebei University PHD, University of Virginia
JENKINS, CHARLES M. (mjenkins@southalabama.edu)	Physics	Professor	BS, Georgia Inst of Tech - Main MS, Florida State University PHD, Florida State University
NOVOVIC, MARIJA (mnovovic@southalabama.edu)	Physics	Senior Instructor	BS, University of NIS MS, Louisiana Tech University
SANDERS, JUSTIN MARSHALL (jsanders@southalabama.edu)	Physics	Associate Professor	BS, Texas A & M University PHD, Kansas State University

## Physics (BS) - General Physics

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		56-60
<b>Major Requirements</b>		
<b>43</b>		
<i>Physics (BS) - General Physics Core</i>		

A. Complete the following:

PH 107	Contemporary Topics in Physics	1
PH 201	Calculus-Based Physics I	4
PH 202	Calculus-Based Physics II	4
PH 303	Modern Physics	4
PH 348	Electricity and Magnetism I	3
PH 354	Electronics	3
PH 366	Physical Mechanics I	3

PH 385	Experimental Physics - W	3
PH 411	Computational Methods in Phys	3
PH 448	Elementary Quantum Mechanics I	3
PH 463	Thermodynamics-Stat Mechanics	3
B. Select three of the following Physics electives:		9
PH 301	Introductory Astrophysics	
PH 311	Condensed Matter Physics	
PH 346	Classical and Modern Optics	
PH 349	Electricity and Magnetism II	
PH 367	Physical Mechanics II	
PH 390	Special Topics -	
PH 449	Elementary Quantum Mechanic II	
PH 494	Directed Studies -	
PH 499	Senior Thesis-Honors - H	
C. Complete the following Technical/Pre-requisite courses:		26
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	
MA 125	Calculus I (Prerequisite to upper division Physics courses)	
MA 126	Calculus II (Prerequisite to upper division Physics courses)	
MA 227	Calculus III (Prerequisite to upper division Physics courses)	
MA 238	Differential Equations I (Prerequisite to upper division Physics courses)	
CPE 260	Intro to C++ Programming	

**Minor Requirements**

A minor is required for this degree program 18-24

**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

**Notes:**

With the exception of PH 303 and PH 448, which are offered every year, all upper division Physics courses are offered every other year.

All Physics majors will be required to take an assessment exit exam, at no cost to the student, and an exit interview before graduation as directed by the department.

**General Comments:**

- PH 114 and PH 115 with either PH 201 or PH 202 may be substituted for PH 201 and PH 202 with the prior approval of the physics department chair.
- The sequences PH 114/PH 115 and PH 201/PH 202 may not both be taken for credit.

**Graduation Plan**

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
PH 107	Contemporary Topics in Physics	1
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
MA 125	Calculus I	4
EH 101	English Composition I	3
		<b>Hours 14</b>
<b>Spring</b>		
EH 102	English Composition II	3
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	4
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
MA 126	Calculus II	4
		<b>Hours 15</b>
<b>Second Year</b>		
<b>Fall</b>		
History	Area IV, A <sup>1</sup>	3
MA 227	Calculus III	4
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	4
CPE 260	Intro to C++ Programming	3
		<b>Hours 14</b>
<b>Spring</b>		
English Literature	Area II, B <sup>1</sup>	3
Fine Arts	Area II, C <sup>1</sup>	3
CA 110	Public Speaking	3
PH 303 & 303L	Modern Physics and Modern Physics Lab	4
MA 238	Differential Equations I	3
		<b>Hours 16</b>
<b>Third Year</b>		
<b>Fall</b>		
Social/Behavioral Science	Area IV <sup>1</sup>	3
Humanities/Fine Arts	Area II <sup>1</sup>	3
PH 354	Electronics	3
PH 366	Physical Mechanics I	3
PH 385	Experimental Physics - W	3
		<b>Hours 15</b>
<b>Spring</b>		
Humanities/Fine Arts	Area II <sup>1</sup>	3
Social/Behavioral Science	Area IV <sup>1</sup>	3
PH 411	Computational Methods in Phys	3
Select two of the following Physics Electives:		6
PH 301	Introductory Astrophysics	
PH 311	Condensed Matter Physics	
PH 346	Classical and Modern Optics	
PH 349	Electricity and Magnetism II	
PH 367	Physical Mechanics II	
PH 390	Special Topics -	
PH 449	Elementary Quantum Mechanic II	
PH 494	Directed Studies -	
PH 499	Senior Thesis-Honors - H	
		<b>Hours 15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
Foreign Language	Area V, A <sup>1</sup>	3
Elective		3
PH 348	Electricity and Magnetism I	3

PH 448	Elementary Quantum Mechanics I	3
Select one of the following Physics Electives:		3
PH 301	Introductory Astrophysics	
PH 311	Condensed Matter Physics	
PH 346	Classical and Modern Optics	
PH 367	Physical Mechanics II	
PH 390	Special Topics -	
PH 449	Elementary Quantum Mechanic II	
PH 349	Electricity and Magnetism II	
PH 494	Directed Studies -	
PH 499	Senior Thesis-Honors - H	
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Foreign Language	Area V, A <sup>1</sup>	3
HY/Social/Behavioral	Area IV <sup>1</sup>	3
Elective		3
Elective		4
PH 463	Thermodynamics-Stat Mechanics	3
<b>Hours</b>		<b>16</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> See General Education Requirements

## Physics (BS) - Graduate School Prep Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		
<i>Physics (BS) - Grad School Prep Core</i>		
A. Complete the following:		
PH 107	Contemporary Topics in Physics	1
PH 201	Calculus-Based Physics I	4
PH 202	Calculus-Based Physics II	4
PH 303	Modern Physics	4
PH 348	Electricity and Magnetism I	3
PH 349	Electricity and Magnetism II	3
PH 366	Physical Mechanics I	3
PH 367	Physical Mechanics II	3
PH 385	Experimental Physics - W	3
PH 411	Computational Methods in Phys	3
PH 448	Elementary Quantum Mechanics I	3
PH 449	Elementary Quantum Mechanic II	3
PH 463	Thermodynamics-Stat Mechanics	3
B. Select two Physics electives from the following:		
PH 301	Introductory Astrophysics	
PH 311	Condensed Matter Physics	
PH 346	Classical and Modern Optics	
PH 354	Electronics	
PH 390	Special Topics -	
PH 494	Directed Studies -	
PH 499	Senior Thesis-Honors - H	
C. Complete the following STEM courses:		
		26

CH 131 & 131L	General Chemistry I and General Chemistry I Lab	
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	
CPE 260	Intro to C++ Programming	
MA 125	Calculus I (Prerequisite to upper division Physics courses)	
MA 126	Calculus II (Prerequisite to upper division Physics courses)	
MA 227	Calculus III (Prerequisite to upper division Physics courses)	
MA 238	Differential Equations I (Prerequisite to upper division Physics courses)	

### Minor Requirements

A minor is required for this degree program	18-24
<b>A MINIMUM OF 120 HRS IS REQUIRED FOR A DEGREE</b>	<b>120</b>

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

### Notes:

With the exception of PH 303 and PH 448, which are offered every year, all upper division Physics courses are offered every other year.

All Physics majors will be required to take an assessment exit exam, at no cost to the student, and an exit interview before graduation as directed by the department.

### General Comments:

- PH 114 and PH 115 with either PH 201 or PH 202 may be substituted for PH 201 and PH 202 with the prior approval of the physics department chair.
- The sequences PH 114/PH 115 and PH 201/PH 202 may not both be taken for credit.

## Graduation Plan

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
PH 107	Contemporary Topics in Physics	1
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
MA 125	Calculus I	4
EH 101	English Composition I	3
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
EH 102	English Composition II	3
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	4
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
MA 126	Calculus II	4
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
History	Area IV, A <sup>1</sup>	3
MA 227	Calculus III	4

PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	4
CPE 260	Intro to C++ Programming	3
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
English Literature	Area II, B <sup>1</sup>	3
Fine Arts	Area II, C <sup>1</sup>	3
CA 110	Public Speaking	3
PH 303 & 303L	Modern Physics and Modern Physics Lab	4
MA 238	Differential Equations I	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
Social/Behavioral	Area IV <sup>1</sup>	3
Humanities/Fine Art	Area II <sup>1</sup>	3
PH 366	Physical Mechanics I	3
PH 385	Experimental Physics - W	3
Select one of the following Physics Electives:		3
PH 301	Introductory Astrophysics	
PH 311	Condensed Matter Physics	
PH 346	Classical and Modern Optics	
PH 354	Electronics	
PH 390	Special Topics -	
PH 494	Directed Studies -	
PH 499	Senior Thesis-Honors - H	
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Humanities/Fine Arts	Area II <sup>1</sup>	3
Social/Behavioral	Area IV <sup>1</sup>	3
PH 367	Physical Mechanics II	3
PH 411	Computational Methods in Phys	3
Elective		4
<b>Hours</b>		<b>16</b>
<b>Fourth Year</b>		
<b>Fall</b>		
Foreign Language	Area V, A <sup>1</sup>	3
HY/Social/Behavioral	Area IV <sup>1</sup>	3
PH 348	Electricity and Magnetism I	3
PH 448	Elementary Quantum Mechanics I	3
Select one of the following Physics Electives:		3
PH 301	Introductory Astrophysics	
PH 311	Condensed Matter Physics	
PH 346	Classical and Modern Optics	
PH 354	Electronics	
PH 390	Special Topics -	
PH 494	Directed Studies -	
PH 499	Senior Thesis-Honors - H	
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Foreign Language	Area V, A <sup>1</sup>	3
Elective		3
PH 349	Electricity and Magnetism II	3
PH 463	Thermodynamics-Stat Mechanics	3
PH 449	Elementary Quantum Mechanic II	3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> See General Education Requirements

## Physics (BS) - Meteorology Double Major

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		
<i>Physics (BS) - Meteorology Double Major Core</i>		<b>34</b>
A. Complete the following:		
PH 107	Contemporary Topics in Physics	1
PH 201	Calculus-Based Physics I	4
PH 202	Calculus-Based Physics II	4
PH 303	Modern Physics	4
PH 348	Electricity and Magnetism I	3
PH 366	Physical Mechanics I	3
PH 367	Physical Mechanics II	3
PH 385	Experimental Physics - W	3
PH 411	Computational Methods in Phys	3
PH 448	Elementary Quantum Mechanics I	3
PH 463	Thermodynamics-Stat Mechanics	3
B. Complete the following Meteorology courses:		<b>33</b>
MET 140	Introduction to Meteorology	
MET 140L	Intro to Meteorology Lab	
MET 353	General Meteorology	
MET 354	Dynamic Meteorology I	
MET 355	Dynamic Meteorology II	
MET 356	Physical Meteorology	
MET 357	Meteorological Instrumentation	
MET 443	Climatology - W	
MET 454	Synoptic Meteorology I	
MET 455	Synoptic Meteorology II	
MET 456	Applied Climatology - W	
C. Complete the following STEM courses:		
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
CPE 260	Intro to C++ Programming	3
MA 125	Calculus I	4
MA 126	Calculus II	4
MA 227	Calculus III	4
MA 238	Differential Equations I	3
ST 315	Applied Probability-Statistics	3
D. This course is highly recommended as electives for students planning to find employment with the National Weather Service:		
MET 492	Seminar - (see footnote table below (p. 348)) <sup>1</sup>	
<b>Minor Requirements</b>		
A minor is not required for this degree program		0
<b>A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE</b>		<b>120</b>

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

## Footnote

<sup>1</sup> Recommended Courses

### Notes:

MET 456 (W) and MET 356 are only offered in the summer.

With the exception of PH 303 and PH 448, which are offered every year, all upper division Physics courses are offered every other year.

All Physics majors will be required to take an assessment exit exam, at no cost to the student, and an exit interview before graduation as directed by the department.

### General Comments:

- PH 114 and PH 115 with either PH 201 or PH 202 may be substituted for PH 201 and PH 202 with the prior approval of the physics department chair.
- The sequences PH 114/PH 115 and PH 201/PH 202 may not both be taken for credit.

## Additional Information

The Meteorology program, with the Department of Earth Sciences, and the Department of Physics jointly offer a double major in Meteorology and Physics. This curriculum is intended for students who anticipate graduate study in Atmospheric Science, yet wish a very strong background in Physics. As constructed, this curriculum will require the student to complete an extra seventeen (17) hours over the maximum 120 hours required for either major alone. The changes from the current Option B: General Physics curriculum for a student intending to pursue graduate study in Meteorology include: removal of six (6) Physics Elective hours, two courses, and the addition of PH 367. Requirements removed from the regular Meteorology curriculum are the completion of Meteorology electives and the satisfaction of one of the four Meteorology Tracks; the Physics Major will replace the normal requirements for a Meteorology track and the electives. Only Meteorology-Physics double majors may have these track and elective requirements waived. The double major satisfies the minor requirement for the College of Arts and Sciences.

## Graduation Plan

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
PH 107	Contemporary Topics in Physics	1
CA 110	Public Speaking	3
MA 125	Calculus I	4
EH 101	English Composition I	3
Arts/Humanities	Area II <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
EH 102	English Composition II	3
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	4
MA 126	Calculus II	4

MET 140	Introduction to Meteorology	3
MET 140L	Intro to Meteorology Lab	1
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
History	Area IV, A <sup>1</sup>	3
MA 227	Calculus III	4
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	4
MET 353	General Meteorology	4
Language	Area V, A <sup>1</sup>	3
<b>Hours</b>		<b>18</b>
<b>Spring</b>		
Social/Behavioral	Area V <sup>1</sup>	3
Language	Area, A <sup>1</sup>	3
PH 303 & 303L	Modern Physics and Modern Physics Lab	4
MET 443	Climatology - W	3
MA 238	Differential Equations I	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
PH 366	Physical Mechanics I	3
MET 354	Dynamic Meteorology I	3
ST 315	Applied Probability-Statistics	3
CPE 260	Intro to C++ Programming	3
Arts/Humanities	Area II <sup>1</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Humanities/Fine Arts	Area II <sup>1</sup>	3
MET 355	Dynamic Meteorology II	3
MET 357	Meteorological Instrumentation	2
PH 367	Physical Mechanics II	3
PH 411	Computational Methods in Phys	3
<b>Hours</b>		<b>14</b>
<b>Fourth Year</b>		
<b>Fall</b>		
PH 348	Electricity and Magnetism I	3
MET 454	Synoptic Meteorology I	6
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
Social/Behavioral	Area IV <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
PH 463	Thermodynamics-Stat Mechanics	3
MET 455	Synoptic Meteorology II	6
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
Social/Behavioral	Area IV <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Fifth Year</b>		
<b>Fall</b>		
PH 348	Electricity and Magnetism I	3
PH 385	Experimental Physics - W	3
Art/Humanities	Area II <sup>1</sup>	3
<b>Hours</b>		<b>9</b>
<b>Summer</b>		
<b>Before 4th or 5th Year</b>		
MET 356	Physical Meteorology	3

MET 456	Applied Climatology - W	3
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>141</b>

<sup>1</sup> See General Education Requirements

## Physics (BS) - Premedical Option Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		
<i>Physic (BS) - Premedical</i>		
A. Complete the following:		
PH 107	Contemporary Topics in Physics	1
PH 201	Calculus-Based Physics I	4
PH 202	Calculus-Based Physics II	4
PH 303	Modern Physics	4
PH 348	Electricity and Magnetism I	3
PH 366	Physical Mechanics I	3
PH 385	Experimental Physics - W	3
PH 448	Elementary Quantum Mechanics I	3
PH 463	Thermodynamics-Stat Mechanics	3
B. Select one of the following Physics electives:		
PH 311	Condensed Matter Physics	
PH 346	Classical and Modern Optics	
PH 349	Electricity and Magnetism II	
PH 354	Electronics	
PH 367	Physical Mechanics II	
PH 390	Special Topics -	
PH 411	Computational Methods in Phys	
PH 449	Elementary Quantum Mechanic II	
PH 494	Directed Studies -	
PH 499	Senior Thesis-Honors - H	
C. Complete the following:		
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
CH 201 & 201L	Organic Chemistry I and Organic Chemistry I Lab	4
CH 202 & 202L	Organic Chemistry II and Organic Chemistry II Lab	4
BLY 121 & 121L	General Biology I and General Biology I Lab	4
BLY 122 & 122L	General Biology II and General Biology II Laboratory	4
BLY 302	Genetics	3
or BMD 350	Human Genetics and Genomics	
CH 441	Biochemistry II	3
or BMD 321	Biochemistry I-Molecular Biol	
CH 441	Biochemistry II	3

or BMD 322	Biochemistry II-Metabolism	
D. Complete the following:		
PSY 120	Introduction to Psychology	3
SY 109	Introductory Sociology	3
or SY 112	Social Problems	

E. Complete the following:		
MA 125	Calculus I (Prerequisite to upper division Physics courses)	4
MA 126	Calculus II (Prerequisite to upper division Physics courses)	4
MA 227	Calculus III (Prerequisite to upper division Physics courses)	4
MA 238	Differential Equations I (Prerequisite to upper division Physics courses)	3

F. Complete the following:		
ST 210	Stat Reason and Application	3

<b>Minor Requirements</b>		
A minor is required for this degree program		18-24
Students will automatically complete a Related Science Minor		
<b>A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE</b>		<b>120</b>

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

### Notes:

With the exception of PH 303 and PH 448, which are offered every year, all upper division Physics courses are offered every other year.

All Physics majors will be required to take an assessment exit exam, at no cost to the student, and an exit interview before graduation as directed by the department.

### General Comments:

- PH 114 and PH 115 with either PH 201 or PH 202 may be substituted for PH 201 and PH 202 with the prior approval of the physics department chair.
- The sequences PH 114/PH 115 and PH 201/PH 202 may not both be taken for credit.

## Additional Information

Major in Physics (Premedical Option) is designed for a student intending a career in a health professional field such as Medicine. Besides Physics, the Curriculum includes extra courses in Chemistry and recommended courses in Biology, Psychology and the Social Sciences to prepare the student for the MCAT exam. Because of these additional requirements there are relative few elective hours in this program and the overall hours total is 129 hours instead of the nominal 120 hours.

## Graduation Plan

(129 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
PH 107	Contemporary Topics in Physics	1
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4

MA 125	Calculus I	4
EH 101	English Composition I	3
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
EH 102	English Composition II	3
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	4
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
MA 126	Calculus II	4
CA 110	Public Speaking	3
<b>Hours</b>		<b>18</b>
<b>Second Year</b>		
<b>Fall</b>		
History	Area IV, A <sup>1</sup>	3
Foreign Language	Area V <sup>1</sup>	3
MA 227	Calculus III	4
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	4
CH 201 & 201L	Organic Chemistry I and Organic Chemistry I Lab	4
<b>Hours</b>		<b>18</b>
<b>Spring</b>		
Foreign Language	Area V <sup>1</sup>	3
CH 202 & 202L	Organic Chemistry II and Organic Chemistry II Lab	4
ST 210	Stat Reason and Application	3
PH 303 & 303L	Modern Physics and Modern Physics Lab	4
MA 238	Differential Equations I	3
<b>Hours</b>		<b>17</b>
<b>Third Year</b>		
<b>Fall</b>		
English Literature	Area II, B <sup>1</sup>	3
BLY 121 & 121L	General Biology I and General Biology I Lab	4
PSY 120	Introduction to Psychology	3
PH 366	Physical Mechanics I	3
PH 385	Experimental Physics - W	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Humanities/Fine Arts	Area II <sup>1</sup>	3
Social/Behavioral	Area IV <sup>1</sup>	3
BLY 122 & 122L	General Biology II and General Biology II Laboratory	4
SY 109 or SY 112	Introductory Sociology or Social Problems	3
Select one of the following Physics Electives:		3
PH 311	Condensed Matter Physics	
PH 346	Classical and Modern Optics	
PH 349	Electricity and Magnetism II	
PH 354	Electronics	
PH 367	Physical Mechanics II	
PH 390	Special Topics -	
PH 411	Computational Methods in Phys	
PH 494	Directed Studies -	
PH 499	Senior Thesis-Honors - H	
<b>Hours</b>		<b>16</b>
<b>Fourth Year</b>		
<b>Fall</b>		
Humanities/Fine Art	Area II <sup>1</sup>	3
HY/Social/Behavioral	Area IV <sup>1</sup>	3
PH 348	Electricity and Magnetism I	3

PH 448	Elementary Quantum Mechanics I	3
CH 440 or BMD 321	Biochemistry I or Biochemistry I-Molecular Biol	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Elective		3
Elective		3
CH 441 or BMD 322	Biochemistry II or Biochemistry II-Metabolism	3
BLY 302 or BMD 350	Genetics or Human Genetics and Genomics	3
PH 463	Thermodynamics-Stat Mechanics	3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>129</b>

<sup>1</sup> See General Education Requirements

## Physics Minor Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

Code	Title	Hours
Select a minimum of 20 semester hours in Physics including the following:		20
PH 303	Modern Physics	4
PH Upper Division (300/400) Electives		6
PH Electives, any level		10

## Political Science and Criminal Justice

### Department Information

Department of Political Science and Criminal Justice website  
<https://www.southalabama.edu/colleges/artsandsci/pscj/>

### Undergraduate Studies

The courses offered in the Department of Political Science and Criminal Justice are designed to achieve three important objectives:

1. To provide a broad and comprehensive education with exceptional social science training—promoting critical thinking, analytic, oral communication, and writing skills.
2. To help students advance toward professional careers in a diversity of fields including law enforcement; education; government; law; corrections; public policy; business; journalism; NGOs and non-profits; and more.
3. To prepare students to be leaders in their communities and to seize meaningful opportunities to effect positive changes locally, nationally, and globally.

### Criminal Justice

The curriculum in Criminal Justice provides students interested in law enforcement, criminal law, corrections, and the criminal court system with a broad educational background emphasizing social science and the University's general education skills of critical thinking, writing, communication, and analysis. Students in the department acquire

knowledge of the criminal justice field. The program addresses issues relating to the entire criminal justice system, from the nature of crime and delinquency to society's varied responses to crime. Such a focus includes the organization and operation of each of the components in the field.

### Political Science

Political Science is a broad discipline that includes studies of governments, politics, and policies. Political scientists may focus on political behavior, decision making, processes, institutions, and public policies. Inquiry in political science addresses the domestic and international policies of the United States and all other countries and regions. Political scientists study the political values, attachments, and activities of people, individually and in groups. Political science examines both what preferences people share and how they differ according to their personal attributes and positions in the economy and society. Political science also studies how people regard and trust each other as well as their leaders and governments.

### First Year Experience Requirement

All first-time freshmen must successfully complete CAS 100 as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry.

### Technological Competency Requirement

Research Methods (PSC 310 (W)/CJ 310 (W)) will satisfy the technology competency requirement for both political science and criminal justice majors. Enrollment in PSC 310 (W) or CJ 310 (W) is required for both political science and criminal justice majors.

### Departmental Honors

The Department of Political Science and Criminal Justice offers an opportunity for students in Political Science or Criminal Justice who are not in the University's Honors College to graduate with departmental honors. In order to graduate with departmental honors, the student needs to have at least a 3.50 grade point average (overall and in the major) and maintain that average upon graduation. In addition, the student must complete a two-semester departmental honors thesis project with a faculty mentor and a committee.

### Graduate Studies In Public Administration

The Master of Public Administration degree (MPA) curriculum in the Department of Political Science and Criminal Justice is a professional degree program designed principally for present and future administrators, officers in government, other public related organizations, not for profit agencies, and agencies that interact with governmental institutions and funding. It is a broad discipline, open to qualified students after completion of their undergraduate degree.

Students entering the program come from varied academic and vocational backgrounds. Accordingly, no specific undergraduate major is required for admission to the MPA Program. However, certain course prerequisites must be satisfied prior to enrollment in any of the required core courses of the curriculum.

We also offer an Accelerated Bachelors to Masters (ABM) opportunity for current undergraduates. ABM students may begin taking graduate courses after completing at least 90 hours of undergraduate credit. During their senior undergraduate year, students can take 6 graduate credits in courses that count as electives toward the MPA degree. In order to receive graduate credit, students must earn at least a B. Students doing the ABM option will have 30 credit hours remaining toward their graduate degree.

### Requirements for Admission to the MPA Program

Students are admitted each semester. The following criteria supplement the Graduate School criteria (see Categories of Admission).

#### Regular Admission to the MPA Program

1. Students must have a minimum undergraduate GPA of 2.5 on all undergraduate work (on a 4-point scale) or a GPA of 2.75 over the last 60 hours of undergraduate work.
2. Students must have taken PSC 130, Introduction to US Government, or its equivalent, with a minimum grade of C; or have received a score of 50 or higher in the "American Government" exam through the College Level Examination Program (CLEP). Students must satisfy this requirement no later than the end of their third semester in the program, including summer semesters. Failure to complete the requirement of PSC 130/its equivalent/satisfactory CLEP credit by the end of the third semester will prohibit registration for remaining core curriculum MPA courses.
3. Students are encouraged to apply in the fall semester, but are admitted each semester.
4. Admission may be granted by the MPA Graduate Coordinator, when supported by a vote of the MPA Graduate Faculty, in special cases where a holistic evaluation of the applicant's credentials is appropriate.

### Degrees, Programs, or Concentrations

- Criminal Justice (BA) (p. 359)
- Criminal Justice Minor (p. 361)
- Political Science (BA) (p. 362)
- Political Science Minor (p. 364)
- Public Administration (MPA) - Criminal Justice Concentration (<http://bulletin.southalabama.edu/programs-az/arts-sciences/political-science-criminal-justice/public-administration-mpa-criminal-justice-concentration/>)
- Public Administration (MPA) - GEIS Technology Concentration (<http://bulletin.southalabama.edu/programs-az/arts-sciences/political-science-criminal-justice/public-administration-geis-technology-concentration/>)
- Public Administration (MPA) - Healthcare Administration Concentration (<http://bulletin.southalabama.edu/programs-az/arts-sciences/political-science-criminal-justice/public-administration-mpa-healthcare-admin-concentration/>)
- Public Administration (MPA) - Non-Thesis Concentration (<http://bulletin.southalabama.edu/programs-az/arts-sciences/political-science-criminal-justice/public-administration-mpa-nonthesis-concentration/>)
- Public Administration (MPA) - Thesis Concentration (p. 364)

### Courses

#### Criminal Justice (CJ)

##### CJ 105 Introduction to Criminal Justice 3 cr

An overview of crime in the U.S. and the three major criminal justice agencies: law enforcement, courts, and corrections. CJ majors must pass with a grade of "C" or better.

**Cross-Listed:** CJ 205

**CJ 210 Policing and Society 3 cr**

An overview of the police functions in U.S. society, including law enforcement, maintenance of order, and public service-and of police responsibilities, including organizational and managerial aspects of policing in our democracy,

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C

**Cross-Listed:** CJ 320

**CJ 215 Correctional Policies and Proc 3 cr**

An overview of the policies and procedures of U.S. correctional systems, and the methods of treatment of offenders.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C

**Cross-Listed:** CJ 340

**CJ 223 Intro to Forensic Science 3 cr**

Survey of scientific crime detection methods; crime scene search, identification and preservation of evidence; uses of the laboratory for criminal investigation.

**Cross-Listed:** CJ 423

**CJ 310 Research Methods-W 3 cr**

This course examines research methodologies in the social sciences, covering the tools and techniques for designing and conducting research, including collecting and analyzing data, and presenting findings. (Cross-listed as PSC 310).

**Prerequisite:** (CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or PSC 130 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** PSC 310

**CJ 321 Public and Private Security 3 cr**

An overview of security in modern society, including public and private security, covering the role and administration of security and security personnel.

**Prerequisite:** (CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C)

**CJ 330 Judicial Process 3 cr**

The study of U.S. judicial process at both the federal and state court levels. (Cross-listed as PSC 330)

**Prerequisite:** (CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or PSC 130 Minimum Grade of C)

**Cross-Listed:** PSC 330

**CJ 331 Constitutional Law 3 cr**

The study of the principles of constitutional powers and liberties examined through a analysis of decisions and opinions by the U.S. Supreme Court. (Cross-listed as PSC 331 and PHL 331)

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or PSC 130 Minimum Grade of C

**Cross-Listed:** PHL 331, PSC 331

**CJ 332 Criminal Law 3 cr**

An overview of what constitutes crime and of the body of law governing the punishment of crime. (Cross-listed as PSC 332)

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or PSC 130 Minimum Grade of C

**Cross-Listed:** PSC 332

**CJ 336 The Law and Legal Theory 3 cr**

Explores issues and problems in the area of law, including the nature and rule of law, the aims and roles of legal systems, morality and law, obligations to obey the law, and systematic injustices related to race, ethnicity, and gender. (Cross-listed as PSC 336 and PHL 336)

**Prerequisite:** (CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or PSC 130 Minimum Grade of C)

**Cross-Listed:** PHL 336, PSC 336

**CJ 337 Liability and Punishment 3 cr**

Explores theoretical issues and problems in the areas of law—especially criminal law—concerning liability and punishment. Topics to be examined include diminished capacity, theories of punishment, and capital punishment. (Cross-listed as PSC 337 and PHL 337)

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or PSC 130 Minimum Grade of C

**Cross-Listed:** PHL 337, PSC 337

**CJ 360 Theories of Offending 3 cr**

A study of theories of criminal behavior and delinquent behavior.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C

**CJ 363 Crime and Politics in Latin Am 3 cr**

An examination of the violent crime epidemic affecting many parts of Latin America, with specific focus on the themes of democratic transition, political economy, and foreign relations with the United States. Same as PSC 363 and IS 363.

**Prerequisite:** (PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or IS 100 Minimum Grade of C)

**Cross-Listed:** IS 363, PSC 363

**CJ 372 Gender and Criminal Justice 3 cr**

This course examines the experiences of women in the criminal justice system—as criminals, as crime victims, and as criminal justice professionals—together with social values and institutions that shape perceptions and outcomes.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or GS 101 Minimum Grade of C

**CJ 374 Race, Ethnicity, and Crim Just 3 cr**

The study of the role and impact of race and ethnicity in the development and evolution of the criminal justice system. Topics include criminal victimization, the treatment of criminal offenders, and the impact of race and ethnicity on those in the criminal justice system.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or AFR 101 Minimum Grade of C

**CJ 380 Drugs and Crime 3 cr**

An examination of different types of illegal and legal drugs, their effects on the human body including addiction, and the relationship of drug abuse and crime.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C

**CJ 390 Special Topics - 3 cr**

Study of a significant topic or problem in criminal justice. May be repeated up to two time when content varies.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C

**CJ 403 Sexual Violence 3 cr**

This course focuses on the perpetration and experience of sexual violence in the United States and incorporates perspectives from criminal justice, gender studies, sociology, and psychology.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or GS 101 Minimum Grade of C

**CJ 411 Criminal Justice Admin 3 cr**

This course applies classical and modern management and organization theories to broad range of institutions, actors, and agencies, including police, courts and corrections, as well as drug traffickers, sexual offender treatment centers, and homeland security agencies.

**Prerequisite:** (CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or PSC 130 Minimum Grade of C)

**Cross-Listed:** PSC 411

**CJ 422 Criminal Investigations 3 cr**

Explores criminal investigations procedures including theory of investigations, case presentation, interrogation, and special problems in criminal investigations.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C

**CJ 423 Criminalistics 3 cr**

Survey of scientific crime detection methods; crime scene search, identification, and preservation of evidence; use of the laboratory for criminal investigation.

**Prerequisite:** (CJ 205 Minimum Grade of C or PSC 205 Minimum Grade of C)

**CJ 430 Criminal Procedure 3 cr**

An overview of the processes used by criminal investigators and the roles of those involved in the judicial process, as well as the interaction that occurs between the police, prosecutors, defense attorneys and the judiciary. (Cross-listed as PSC 430)

**Prerequisite:** (CJ 105 Minimum Grade of C or PSC 130 Minimum Grade of C)

**Cross-Listed:** PSC 430

**CJ 440 Community Based Corrections 3 cr**

Examine alternatives to incarceration in the community informed by current practice and research.

**Prerequisite:** CJ 105 Minimum Grade of C

**CJ 455 Juvenile Justice Administration and Policy 3 cr**

An examination of the policies, programs, and practices of crime involving youth and the administration of juvenile justice.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C

**Cross-Listed:** CJ 450

**CJ 469 Criminal Justice Policies 3 cr**

This course examines how public policy has shaped both the criminal justice system and its results, with particular emphasis on crime control.

**Prerequisite:** CJ 105 Minimum Grade of C or PSC 130 Minimum Grade of C or CJ 205 Minimum Grade of C

**Cross-Listed:** CJ 370, PSC 469

**CJ 471 Police Account and Community 3 cr**

This course examines the interaction of peace officers with the community and community oriented policing strategies. The class examines police accountability, which has increased since the inception of body cameras, social media and "cop watching" groups.

**Prerequisite:** (CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C)

**CJ 472 Comparative CJ Systems 3 cr**

An examination of differences and similarities in criminal justice systems globally, including criminal law, crime rates, crime control and law enforcement.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or IS 100 Minimum Grade of C

**Cross-Listed:** PSC 330

**CJ 473 International Law 3 cr**

The course covers major issues, cases and topics in public and private international law. Course coverage includes individuals and corporations, diplomatic relations, jurisdiction, human rights, economic relations, treaties, environmental law, and more.

**Prerequisite:** (CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or PSC 130 Minimum Grade of C or IS 100 Minimum Grade of C)

**Cross-Listed:** IS 473, PSC 473

**CJ 488 Armed Conflict 3 cr**

The study of armed conflict from an interdisciplinary perspective incorporating criminology, political science, security studies, conflict and peace studies, and international law.

**Prerequisite:** (CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or IS 100 Minimum Grade of C or PSC 130 Minimum Grade of C or PSC 270 Minimum Grade of D)

**Cross-Listed:** PSC 488

**CJ 490 Special Topics- 3 cr**

Study of a significant topic, problem, or issue in criminal justice. May be repeated up to two times when the content varies. Only 6 credit hours may be applied to the criminal justice major.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C

**CJ 491 Seminar on Terrorism 3 cr**

Study of a terrorism from a sociopolitical perspective with an emphasis on causes, policy, tactics and operational characteristics and counter-terrorism operations. Cross-listed with PSC 491 and IS 491.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or PSC 130 Minimum Grade of C or IS 100 Minimum Grade of C

**Cross-Listed:** IS 491, PSC 491

**CJ 492 Capstone Seminar CJ-W 3 cr**

The Capstone course brings together key components from across the criminal justice curriculum. As part of the course, students will write a research paper, present their research, and take a comprehensive exam. CJ majors must earn a grade of C or better for graduation.

**Prerequisite:** (CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C) and (PSC 130 Minimum Grade of D) and (CJ 210 Minimum Grade of D or CJ 320 Minimum Grade of D) and (CJ 215 Minimum Grade of D or CJ 340 Minimum Grade of D) and (CJ 310 Minimum Grade of D or PSC 310 Minimum Grade of D) and (CJ 330 Minimum Grade of D or PSC 330 Minimum Grade of D) and (CJ 360 Minimum Grade of D) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**CJ 493 Study Abroad - 3 cr**

Examines the principles of the United States Constitution and roles of Congress, the President, and the courts, the mass media, interest groups, and more in our U.S. political system. PSC majors and minors must pass with a grade of 'C' or better.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C

**CJ 494 Directed Studies - 1-3 cr**

Students will pursue directed research or readings on an approved topic in criminal justice.

**Prerequisite:** (CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C)

**CJ 496 Internship 3 cr**

An opportunity to gain experiential learning through a supervised internship offered by a variety of criminal related agencies.

**Prerequisite:** (CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C)

**CJ 497 Practicum in Polling 3 cr**

Supervised experience in all aspects of the survey research process including but not limited to literature review, research design, questionnaire development, sampling techniques, interviewing, data analysis, and interpretation and presentation of findings. Requires permission of instructor.

**Prerequisite:** (CJ 205 Minimum Grade of C or PSC 205 Minimum Grade of C) and PSC 130 Minimum Grade of C and (CJ 310 Minimum Grade of C or PSC 310 Minimum Grade of C)

**CJ 498 Practicum in Policy Studies 3 cr**

Students will be exposed to a variety of experiences associated with the operations of a fully operational research center, including in-service and management training, consulting, sponsored research, organizational assessments, strategic and programming planning, operations, program evaluation, intergovernmental fiscal processes including the search for funding, and grant writing. Research assignments will include basic research design, survey and focus group instrument development, administration of surveys, handling focus groups, curriculum preparation and administration data manipulation and analysis, and report writing. Requires permission of instructor.

**Prerequisite:** (CJ 205 Minimum Grade of C or PSC 205 Minimum Grade of C) and PSC 130 Minimum Grade of C and (CJ 310 Minimum Grade of C or PSC 310 Minimum Grade of C)

**CJ 499 Honors Thesis W 3-6 cr**

The research and writing of a major paper in the field of criminal justice. Registration is open to criminal justice majors in the Honors College or those pursuing Department Honors.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C

**Political Science (PSC)****PSC 130 Intro to US Government 3 cr**

Examines the principles of the United States Constitution and roles of Congress, the President, and the courts, the mass media, interest groups, and more in our U.S. political system. PSC majors and minors must pass with a grade of 'C' or better.

**PSC 250 Comparative Politics 3 cr**

This course examines government systems across the globe, including both democracies and authoritarian systems. It analyzes strategic interactions between political actors in a diverse set of contexts, as well as the key theories that helps us to understand politics.

**PSC 270 International Relations 3 cr**

This introductory course in the theory and practice of International Relations includes topics such as IR's importance and principal actors, as well as causes of conflict and war, conflict resolutions, international law, globalization, global events, issues, and problems.

**PSC 301 Public Policy 3 cr**

This course provides an overview of policy and the policymaking process in the United States. Topics include what issues rise to the public agenda; how politicians, groups, and citizens shape and implement policy; and how political scientists can analyze public policy.

**Prerequisite:** PSC 130 Minimum Grade of C

**PSC 310 Research Methods-W 3 cr**

This course examines research methodologies in the social sciences, covering the tools and techniques for designing and conducting research, including collecting and analyzing data, and presenting findings. (Cross-listed as CJ 310).

**Prerequisite:** (PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** CJ 310

**PSC 311 Classical Political Thought 3 cr**

The course examines the central themes of classical Western political philosophy through the reading and discussing of the primary works of such thinkers as Plato, Aristotle, and Aquinas. (Cross-listed as PHL 311 and CLA 311)

**Prerequisite:** PSC 130 Minimum Grade of C

**Cross-Listed:** CLA 311, PHL 311

**PSC 312 Renaissance Political Thought 3 cr**

The course examines central themes of Renaissance and modern Western political philosophy through the reading and discussing of the primary works of such thinkers as Machiavelli, Hobbes, Locke, and Rousseau. (Cross-listed as PHL 312)

**Prerequisite:** PSC 130 Minimum Grade of C

**Cross-Listed:** PHL 312

**PSC 313 Modern Political Thought-W 3 cr**

The course examines central themes of modern Western political philosophy through the reading and discussing of the primary works of such thinkers as Hegel, Mill, Marx, and Nietzsche. (Cross-listed as PHL 313).

**Prerequisite:** PSC 130 Minimum Grade of C

**Cross-Listed:** PHL 313

**PSC 330 Judicial Process 3 cr**

The study of the U.S. judicial process at both federal and state court levels. (Cross-listed as CJ 330)

**Prerequisite:** (PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C)

**Cross-Listed:** CJ 330

**PSC 331 Constitutional Law 3 cr**

The study of the principles of constitutional powers and liberties examined through an analysis of decisions and opinions by the U.S. Supreme Court. (Cross-listed as CJ 331 and PHL 331)

**Prerequisite:** (PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C)

**Cross-Listed:** CJ 331, PHL 331

**PSC 332 U.S. State and Local Government and Politics 3 cr**

An overview of what constitutes crime and of the body of law governing the punishment of crime. (Cross-listed with CJ 332.)

**Prerequisite:** PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C

**Cross-Listed:** CJ 332

**PSC 336 The Law and Legal Theory 3 cr**

Explores issues and problems in the area of law, including the nature and rule of law, the aims and roles of legal systems, morality and law, obligations to obey the law, and systematic injustices related to race, ethnicity, and gender. (Cross-listed as CJ 336 and PHL 336)

**Prerequisite:** PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C

**Cross-Listed:** CJ 336, PHL 336

**PSC 337 Liability and Punishment 3 cr**

Explores theoretical issues and problems in the areas of law—especially criminal law—concerning liability and punishment. Topics to be examined include diminished capacity, theories of punishment, and capital punishment. (Cross-listed as CJ 337 and PHL 337)

**Prerequisite:** PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C

**Cross-Listed:** CJ 337, PHL 337

**PSC 340 Race, Gender, & Politics 3 cr**

This course examines the role of race and gender in shaping political outcomes, experiences, and institutions.

**Prerequisite:** PSC 130 Minimum Grade of C or GS 101 Minimum Grade of C or AFR 101 Minimum Grade of C

**PSC 345 Women and Politics 3 cr**

This course examines gender as a conceptual construct in the study of politics.

**Prerequisite:** PSC 130 Minimum Grade of C or GS 101 Minimum Grade of C

**PSC 347 Public Opinion and Polit Part 3 cr**

The formation, composition, distribution, and measurement of public opinions and its effect upon public policy.

**PSC 354 Media and Politics 3 cr**

Examining the role and influence of mass media in politics, exploring how and why the media contribute to and shape democracy.

**Prerequisite:** (PSC 130 Minimum Grade of C or CA 100 Minimum Grade of C or CA 101 Minimum Grade of C)

**Cross-Listed:** CA 354

**PSC 360 Politics of Europe 3 cr**

The course provides an overview of the political systems, institution, public policies, and actors in European Politics. Countries covered may include Germany France, Great Britain, and Russia.

**Prerequisite:** PSC 130 Minimum Grade of C or PSC 250 Minimum Grade of C or IS 100 Minimum Grade of C

**PSC 363 Crime and Politics in LatinAm 3 cr**

An examination of the violent crime epidemic affecting many parts of Latin America, with specific focus on the themes of democratic transition, political economy, and foreign relations with the United States. Same as CJ 363 and IS 363.

**Prerequisite:** (PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or IS 100 Minimum Grade of C)

**Cross-Listed:** CJ 363, IS 363

**PSC 365 Politics of the Middle East 3 cr**

The course focuses on the current politics, and the political history and political development, of several countries in the Middle East.

**Prerequisite:** (PSC 130 Minimum Grade of C or PSC 250 Minimum Grade of D or PSC 270 Minimum Grade of D or IS 100 Minimum Grade of C)

**PSC 368 Politics of South Asia 3 cr**

This course focuses on the political histories and current politics of India, Pakistan, Bangladesh, and Afghanistan.

**Prerequisite:** (PSC 130 Minimum Grade of C or PSC 250 Minimum Grade of D or PSC 270 Minimum Grade of D or IS 100 Minimum Grade of C)

**PSC 372 American Foreign Policy 3 cr**

This course examines the political development and theories of U.S. foreign policy, from the Cold War to the present. Topics include power; nationalism; trade; defense; security and terrorism and other threats; and prospects and challenges in today's global society.

**Prerequisite:** PSC 130 Minimum Grade of C or PSC 250 Minimum Grade of C or PSC 270 Minimum Grade of C or IS 100 Minimum Grade of C

**PSC 390 Special Topics - 3 cr**

Study of a significant topic or problem in political science. May be repeated up to two times when content varies.

**Prerequisite:** PSC 130 Minimum Grade of C

**PSC 401 Public Administration 3 cr**

The study of the implementation of public policy at the national, state, and local levels, and the study of the planning, organization and coordination of government operations.

**Prerequisite:** PSC 130 Minimum Grade of C

**Cross-Listed:** PSC 501

**PSC 411 Criminal Justice Admin 3 cr**

This course applies management and organization theories to a broad range of criminal justice institutions, actors, and agencies—including police, courts, and corrections, treatment centers, drug traffickers, and homeland security. (Cross-listed as CJ 411)

**Prerequisite:** PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C

**Cross-Listed:** CJ 411, PSC 511

**PSC 418 American Political Thought-W 3 cr**

The course examines the central themes, issues, and evolution of American political thought, including how we understand our role and responsibilities in contemporary democracy. (Cross-listed as PHL 418)

**Prerequisite:** PSC 130 Minimum Grade of C

**Cross-Listed:** PHL 418

**PSC 430 Criminal Procedure 3 cr**

An overview of the processes used by criminal investigators and the roles of those involved in the judicial process, as well as the interaction that occurs between the police, prosecutors, defense attorneys and the judiciary. (Cross-listed as CJ 430)

**Prerequisite:** (PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C)

**Cross-Listed:** CJ 430

**PSC 432 State and Local Government 3 cr**

An overview of U.S. state and local government systems, including an analysis of the politics, public policy, and administration within the U.S. states and localities.

**Prerequisite:** PSC 130 Minimum Grade of C

**Cross-Listed:** PSC 232, PSC 332

**PSC 436 Politics of Urban Govt 3 cr**

A study of urban growth with an analysis of the major problems facing large cities in this country. Political, administrative, social, and economic aspects will be covered

**PSC 437 US Congress and Policymaking 3 cr**

An inside view of the U.S. Congress centered on the process for passing laws and policymaking, including an examination of influential legislation.

**Prerequisite:** PSC 130 Minimum Grade of C

**Cross-Listed:** PSC 537

**PSC 438 US Presidency 3 cr**

A study of the U.S. presidency covering the political development and organization of the office; executive powers and responsibilities; elections and campaigns; and presidential communication.

**Prerequisite:** PSC 130 Minimum Grade of C

**PSC 440 Adv Studies in Pub Policy 3 cr**

Advanced study in the field of public policy.

**Prerequisite:** PSC 130 Minimum Grade of C

**PSC 450 Adv Study Comparative Pol 3 cr**

Advanced study in the field of comparative politics.

**Prerequisite:** PSC 250 Minimum Grade of C or PSC 130 Minimum Grade of C or IS 100 Minimum Grade of C

**PSC 453 Campaign and Election Comm. 3 cr**

Focuses on political communication in the context of U.S. campaigns and elections, Same as CA 453.

**Prerequisite:** (PSC 130 Minimum Grade of C or CA 100 Minimum Grade of C or CA 101 Minimum Grade of C)

**Cross-Listed:** CA 453

**PSC 456 Social Media and Politics 3 cr**

An examination of how and why digital information technologies are used by citizens, activists, journalists, and politicians to shape and influence individual's political participation and engagement and public policy and society.

**Prerequisite:** (PSC 130 or CA 100 or CA 101)

**Cross-Listed:** CA 456

**PSC 469 Criminal Justice Policies 3 cr**

This course examines how public policy has shaped both the criminal justice system and its results, with particular emphasis on crime control.

**Prerequisite:** CJ 105 Minimum Grade of C or PSC 130 Minimum Grade of C

**Cross-Listed:** CJ 370, CJ 469

**PSC 470 Adv Study Intl Relations 3 cr**

Advanced study in the field of international relations.

**Prerequisite:** PSC 270 Minimum Grade of C or PSC 130 Minimum Grade of C or IS 100 Minimum Grade of C

**PSC 473 International Law 3 cr**

The course covers major issues, cases and topics in public and private international law. Course coverage includes individuals and corporations, diplomatic relations, jurisdiction, human rights, economic relations, treaties, environmental law, and more.

**Prerequisite:** (PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of D or CJ 205 Minimum Grade of C or IS 100 Minimum Grade of C)

**Cross-Listed:** CJ 473, IS 473

**PSC 481 Public Policy and Aging 3 cr**

This course examines government responses to the growing number of older Americans. Topics include retirement and pensions, health care, housing, social services, intergenerational issues, and policy advocacy for the elderly.

**Prerequisite:** PSC 130 Minimum Grade of C

**Cross-Listed:** PSC 581

**PSC 484 Healthcare Around the World 3 cr**

This course examines global connections within healthcare. Objectives include understanding health, its impact on populations, and how policy shapes healthcare. These objectives are studied within a global framework with emphasis on improving health and health equity.

**Prerequisite:** PSC 130 Minimum Grade of C or PSC 250 Minimum Grade of D or IS 100 Minimum Grade of C

**Cross-Listed:** PSC 584

**PSC 488 Armed Conflict 3 cr**

The study of armed conflict from an interdisciplinary perspective incorporating criminology, political science, security studies, conflict and peace studies, and international law.

**Prerequisite:** (PSC 130 Minimum Grade of C or PSC 270 Minimum Grade of D or CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or IS 100 Minimum Grade of C)

**Cross-Listed:** CJ 488

**PSC 490 Special Topics 3 cr**

Study of a significant topic or problem in political science. May be repeated up to two times when the content varies.

**Prerequisite:** PSC 130 Minimum Grade of C

**PSC 491 Seminar on Terrorism 3 cr**

This course will introduce students to the meaning, characteristics, typology, history, and causes of terrorism. The course will also summarize the biographies of the most prominent terrorists, past and present, and conclude, with a discussion of counter-terrorism strategies. Cross-listed with IS 491.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or PSC 130 Minimum Grade of C or IS 100 Minimum Grade of C

**Cross-Listed:** CJ 491, IS 491

**PSC 492 PSC Capstone Seminar-W 3 cr**

The Capstone course brings together key components from across political science. As part of the course, students will write a research paper, present their research, and take a comprehensive exam. PSC majors must earn a grade of C or better for graduation.

**Prerequisite:** PSC 130 Minimum Grade of C and PSC 250 Minimum Grade of D and PSC 270 Minimum Grade of D and (PSC 310 Minimum Grade of D or CJ 310 Minimum Grade of D) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**PSC 493 Study Abroad 3 cr**

This course is an advanced Political Science course taught as part of a faculty-led study abroad program. Topics and credit hours vary. May be repeated when content varies. Up to 6 hours may be applied toward the PSC major or minor.

**Prerequisite:** PSC 130 Minimum Grade of C or PSC 250 Minimum Grade of D or PSC 270 Minimum Grade of D

**PSC 494 Directed Studies 1-3 cr**

Students will pursue directed research or readings on an approved topic in political science.

**Prerequisite:** PSC 130 Minimum Grade of C

**PSC 496 Internship 3 cr**

An opportunity to gain experiential learning through a supervised internship offered by a variety of political science and government related agencies.

**Prerequisite:** PSC 130 Minimum Grade of C

**PSC 497 Practicum in Polling 3-6 cr**

Supervised experience in all aspects of the survey research process including but not limited to literature review, research design, questionnaire development, sampling, techniques, interviewing, data analysis, & interpretation & presentation of findings. Prerequisite: Permission of professor

**PSC 498 Practicum Policy Studies 3-9 cr**

Students will be exposed to a variety of experiences associated with the operations of a fully operational research center, including in-service and management training, consulting, sponsored research, organizational assessments, strategic and programming planning, program evaluations, intergovernmental fiscal processes, including the research for funding, and grant writing. Research assignments will include basic research design, survey and focus group instrument development, administration of surveys, handling focus groups, curriculum preparation, data manipulation and analysis, and report writing. Only three hours apply to the political science curriculum at the University of South Alabama. Prerequisite: PSC 130, PSC 310, or permission of professor. Pass/Fail grading only.

**Prerequisite:** PSC 130 Minimum Grade of C and PSC 310 Minimum Grade of C

**PSC 499 Honors Thesis - W 3-6 cr**

The research and writing of a major paper in the field of political science. Registration is open to political science majors in the Honors College or those pursuing Department Honors.

**Prerequisite:** PSC 130 Minimum Grade of C

**PSC 500 Organization Theory Public Mgt 3 cr**

This course provides a comprehensive overview of the field of organization theory. The course exposes students to seminal works in the field as well as covering more recent developments.

**Prerequisite:** PSC 130 (may be taken concurrently) Minimum Grade of C or PSC 501 (may be taken concurrently) Minimum Grade of C or PSC 401 (may be taken concurrently) Minimum Grade of C

**PSC 501 Public Administration 3 cr**

The study of the implementation of public policy at the national, state and local levels, and the study of the planning, organization, and coordination of government operations.

**Prerequisite:** PSC 130 Minimum Grade of C

**Cross-Listed:** PSC 401

**PSC 510 Intergov-Interorg Relations 3 cr**

A review of the political, fiscal, and administrative relationships between various levels of government in America. In addition, the emerging nexus to 3d sector non-profit organization will be examined.

**PSC 511 Crim. Justice Admin. 3 cr**

This course applies classical and modern management and organization theories to a broad range of institutions, actors, and agencies, including police, courts, and corrections, as well as drug traffickers, sexual offender treatment centers, and homeland security agencies.

**PSC 520 Research Methods and Design 3 cr**

Social science research methodologies will be used to help students develop skills for policy analysis and decision making in the public service. Stresses the understanding of research methods and data collection in a Public Administration setting. Theoretical development and elaboration, and an overview of the variety of research designs used in social science research will be included.

**PSC 530 Quantitative Analysis 3 cr**

Focus is on application of statistical analysis techniques to Public Administration problems and issues. Computer analysis and interpretation of descriptive statistics will be emphasized. Topics will include fundamentals of probability, sampling, hypothesis testing, point estimation, association, correlation, and multi variate analysis.

**PSC 532 State and Local Government 3 cr**

An overview of U.S. state and local government systems, including an analysis of the politics, public policy, and administration within the U.S. states and localities.

**Prerequisite:** PSC 130 Minimum Grade of C

**PSC 537 Legislative Process in the US 3 cr**

Principles, procedures, and problems of law making, with special attention to the U.S. Congress.

**PSC 540 Human Resource Management 3 cr**

This course will cover contemporary topics in public administration, including public-employee unionization, relevance of the traditional civil-service approach, the challenge of employee productivity and motivation, equal opportunity, and public service ethics.

**PSC 541 Leadership Theory and Practice 3 cr**

The course will provide the analytical and intellectual thought, careful examination and reflection of the core issues in the practice of leadership. Models and influence on leadership will be critically examined.

**PSC 550 Public Budgeting 3 cr**

This course emphasizes the political management and public-policy implications of budget reform, maintenance, and development. It explores the conceptual framework for program and performance budgeting and the increasing congressional role of Congress in federal budget policy.

**PSC 560 Comparative Public Admin 3 cr**

A study of the operation of government systems throughout the world-their history, features, similarities, and differences.

**PSC 569 Criminal Justice Policies 3 cr**

This course examines how public policy has shaped both the criminal justice system and its results, with particular emphasis on crime control

**PSC 570 Administrative Law 3 cr**

Course teaches the fundamentals of administrative law.

**PSC 572 Environmental Law 3 cr**

This course will introduce the student to some of the fundamental concepts of environmental law. It will utilize the philosophy and history of environmental law as it has developed from the Common Law of England to provisions of a Municipal Code

**PSC 576 Adm Issues CJ Men Health 3 cr**

An overview of the relevant federal and state laws, federal regulations, and court rulings that address the issues of criminal justice for preserving the rights of those citizens who suffer from mental illness.

**PSC 580 Public Pol Analysis and Eval 3 cr**

This course is an introduction to policy and program evaluation incorporating various qualitative and quantitative techniques for analyzing.

**Prerequisite:** PSC 520 Minimum Grade of B and PSC 530 Minimum Grade of B

**PSC 581 Public Policy and Aging 3 cr**

This course examines government responses to the growing number of older Americans. Topics include retirements and pensions, health care, housing, social services, intergenerational issues, and policy advocacy of the elderly.

**Prerequisite:** PSC 130 Minimum Grade of C

**Cross-Listed:** PSC 481

**PSC 582 Crim. Just. Policy Evaluation 3 cr**

This course examines the most effective and commonly used forms of policy and program evaluation and applies them to criminal justice system. It explores policy and program evaluation related a number of subfields, including policing, drug policy, and gun control, recidivism, and police use of force.

**Prerequisite:** PSC 520 Minimum Grade of C and PSC 530 Minimum Grade of C

**PSC 583 Social Construction of Policy 3 cr**

This course examines the implications of the U.S. policy process through the lens of social construction theory as applied to the functionality of health care systems.

**PSC 584 Healthcare Around the World 3 cr**

This course examines global connections within healthcare. Objectives include understanding health, its impact on populations, and how policy shapes healthcare. These objectives are studied within a global framework with emphasis on improving health and health equity.

**Cross-Listed:** PSC 484

**PSC 585 Health Policy 3 cr**

This course focuses on two distinct aspects of American Health Policy. First, the policy making process is examined in the context of health care and the major decision making powers (Congress, presidency, bureaucracy, and special interests). Second, existing health care policies are examined with an emphasis on the implications for access, financing, and quality of care. Finally, existing U.S. health policies are compared and contrasted with those of similar and dissimilar political systems.

**PSC 586 Health Administration 3 cr**

Applications of management principles to health care organizations with a focus on governance and leadership, human resources, control systems, strategic planning, and accountability.

**PSC 587 Health Politics & The Elderly 3 cr**

This course focuses on the health policy process and issues impacting the elderly with particular attention given to the politics of legislation, financing mechanisms, and strategies for reform.

**PSC 590 Special Topics - 3 cr**

Study of a significant topic in Public Administration. May be repeated for credit when the content varies.

**PSC 594 Dir St - 1-6 cr**

Under the guidance of a faculty member, student will pursue directed study of approved topics in public administration. For non-thesis students.

**PSC 596 Prof St - Intern Publ Admin 3-6 cr**

Relates the participants' classroom studies to occupational and professional experiences in an approved public agency. Written reports required. May be taken for a total of nine hours. (For further details, see section on Internship.)

**PSC 597 Practicum in Polling 3-6 cr**

Supervised experience in all aspects of the survey research process including but not limited to literature review, research design, questionnaire development, sampling techniques, interviewing, data analysis, and interpretation and presentation of findings. Requires permission of graduate director or department chair.

**PSC 598 Practicum Policy Studies 3-9 cr**

Students will be exposed to a variety of experiences associated with the operation of a fully operational research center, including in-service and management training, consulting, sponsored research, organizational assessments, strategic and program planning, operations, program evaluation, intergovernmental fiscal processes, including research for funding and grant writing. Research assignments will include basic research design, survey and focus groups, curriculum preparation and administration, data manipulation and analysis, and report writing. Only three hours of PSC 598 can be applied toward the requirements for the MPA degree at the University of South Alabama. Requires permission of the professor.

**PSC 599 Thesis 3-6 cr**

Completion and oral defense of a master's thesis based upon original research. May be repeated for up to six hours credit. A minimum of six hours credit is required to meet degree requirements. Prerequisite: Approval of research prospectus including IRB or Animal Use and Care Committee approval if applicable.

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
BUNCH, JACLYN A. (jbunch@southalabama.edu)	Political Sci-Criminal Justice	Associate Professor	BA, Pace University-New York MS, Florida State University PHD, Florida State University
HABEL, PHILIP D. (habel@southalabama.edu)	Political Sci-Criminal Justice	Professor	AB, Washington University PHD, University of Illinois-Urbana
KOON-MAGNIN, SARAH LOUISE (koon-magnin@southalabama.edu)	Political Sci-Criminal Justice	Associate Professor	BA, University of Missouri-Columb BA, University of Missouri-Columb MA, Pennsylvania State University PHD, Pennsylvania State University
LIEBERTZ, SCOTT SINCLAIR (sliebertz@southalabama.edu)	Political Sci-Criminal Justice	Associate Professor	BA, University of Notre Dame MS, University of Bridgeport MS, Florida State University PHD, Florida State University

PETTAWAY, SHANITA L. (pettaway@southalabama.edu)	Political Sci-Criminal Justice	Part-Time Instructor	BS, Alabama A & M University JD, Southern University Law Center MPA, Southern U and A & M College MED, Auburn University PHD, Auburn University
ROCKWELL, ALEXIS RAIN (rockwell@southalabama.edu)	Political Sci-Criminal Justice	Assistant Professor	BS, Troy University-Main MS, Troy University-Main PHD, Sam Houston State University
SCHULZE, CORINA S. (cschulze@southalabama.edu)	Political Sci-Criminal Justice	Associate Professor	BCJ, New Mexico State U-Main Campus MA, University of New Orleans PHD, University of New Orleans
SHAW, THOMAS COLEMAN (tshaw@southalabama.edu)	Political Sci-Criminal Justice	Associate Professor	BS, University of Southern Miss MA, University of Southern Miss PHD, University of New Orleans
WU, KUAN-SHENG (wu@southalabama.edu)	Political Sci-Criminal Justice	Assistant Professor	BA, National Cheng Kung Univ MH, Columbia U in the City of NY PHD, Purdue University-Main Campus

## Criminal Justice (BA) Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		
<i>Criminal Justice Core</i>		
A. Complete the following:		
CJ 105	Introduction to Criminal Justice	3
PSC 130	Intro to US Government	3
CJ 210	Policing and Society	3
CJ 215	Correctional Policies and Proc	3
CJ/PSCALL	Research Methods-W	3
REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)310		
CJ/PSCALL	Judicial Process	3
REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)330		
CJ 360	Theories of Offending	3

CJ 492	Capstone Seminar CJ-W	3
<i>Criminal Justice Elective</i>		
A. Complete the following:		
CJ Upper Division (300/400) Electives		15
<b>Minor Requirements</b>		
A minor is required for this degree program		18-24
<b>A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE</b>		<b>120</b>

All undergraduates must complete two designated writing credit (W) courses, at least one of which must be in the student's major or minor.

### Additional Information

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

The major in criminal justice requires 39 semester hours, including CJ 105, PSC 130, CJ 210, CJ 215, CJ 310/PSC 310 (W), CJ 330/PSC 330, CJ 360, and CJ 492 (W)—plus 15 semester hours of criminal justice electives at the 300/400 level. CJ 105 is a prerequisite for most upper-level CJ courses. Criminal Justice majors must earn a grade of "C" or higher in CJ 105 and in the Capstone Seminar, CJ 492 (W). Students pursuing a degree in Criminal Justice also must have a minor in another discipline.

In addition, all Criminal Justice majors must take the ETS major field test in criminal justice as part of their Capstone Seminar, CJ 492 (W), and receive a satisfactory score. (The standards for passing are determined by the Department of Political Science and Criminal Justice.) Students with unsatisfactory scores on the ETS test can retake the test, or they may be required to repeat coursework in criminal justice. The ETS is administered in the Capstone Seminar, CJ 492 (W). All CJ core courses must be completed prior to enrolling in CJ 492 (W).

All criminal majors must demonstrate competency in oral and written communication. Students will be expected to deliver presentations,

particularly in the Capstone Seminar. The University of South Alabama requires two Writing-Intensive (W) courses for graduation. CJ 492 (W) fulfills one Writing-Intensive requirement, and CJ 310/PSC 310 (W) fulfills the second.

## Accelerated Bachelors to Masters Program

### Program Description

The USA accelerated bachelor's to master's (ABM) in Political Science and Criminal Justice provides exceptional undergraduate students the opportunity to earn a bachelor's and master's degree at an accelerated pace.

Strong undergraduate majors with an interest in graduate studies are encouraged to apply.

This program is designed to allow students to complete the Bachelor's degree in Political Science or Criminal Justice and the Master of Arts degree in Public Administration in six years (including one Summer term between their first and second year of graduate study).

### Admission Procedures

Admission will be a competitive process. The minimum standards are:

- Completed at least 90 credit hours
- Completed at least 30 credit hours at USA
- An overall GPA of 3.0 (Cumulative and Political Science/Criminal Justice)
- Two letters of recommendation.

Once admitted into the ABM program, students must maintain at least a 3.0 GPA and remain in good standing to stay in the program.

### Program Procedures

ABM students may begin taking graduate courses after completing at least 90 hours of undergraduate credit.

Completion of the ABM program requires students to complete at least 150 approved unique credit hours. To qualify for a baccalaureate degree, a student must complete at least 120 approved semester hours. To qualify for a master's degree a student must complete a minimum of 30 approved semester hours. A maximum of twelve hours of graduate coursework can be applied to satisfy the requirements for an undergraduate degree. To receive graduate credit, students must earn at least a 'B'.

There are currently four graduate courses that may count toward the Bachelor of Arts in Political Science or Master of Public Administration degree:

PSC 501 *Public Administration* (3 hours).

PSC 511 *Criminal Justice Administration* (3 hours).

PSC 584 *Health Care Policy around the World* (3 hours).

There are three courses that may count toward both the Bachelor of Arts in Criminal Justice or Master of Public Administration degree:

PSC 511 *Criminal Justice Administration* (3 hours).

PSC 582 *Criminal Justice Policy Evaluation* (3 hours)

PSC 590 *Criminal Justice Communications* (3 hours)

Upon completing the undergraduate degree, students will apply to the Master of Public Administration program. ABM students, who are in good standing, will be accepted.

Completion of the Master of Arts in Public Administration requires successful completion of all requirements, including at least 36 graduate credit hours. Graduate credit taken while an undergraduate that is completed with at least the grade of B will be transferred into the Master's program upon acceptance into the program and will apply toward the 36 hours required for the Master of Public Administration degree.

A student who withdraws or is dismissed from the ABM program may not count graduate coursework towards both degrees. Graduate courses for which an undergraduate student did not earn an "A" or "B" grade, may not be counted towards the graduate degree.

All students approved to be in an ABM program must complete at least 150 unique credit hours across the undergraduate and graduate degree programs, with a minimum of 120 approved semester hours for the undergraduate degree and a minimum of 30 approved hours for the graduate degree.

A student must have an approved ABM Declaration Form prior to participating in an ABM program (<https://www.southalabama.edu/colleges/graduateschool/resources/abmdeclarationform11.22.22.pdf>). This is how we insure that condition (1) above is met.

Undergraduate students must complete the Authorization to use Graduate Credit for an Undergraduate Degree form for any graduate courses applied to their undergraduate degree ([https://www.southalabama.edu/departments/eforms/registrar/graduate\\_level\\_course\\_for\\_undergraduate\\_degree.pdf](https://www.southalabama.edu/departments/eforms/registrar/graduate_level_course_for_undergraduate_degree.pdf)).

Students can take a maximum of 12 semester hours of graduate coursework as an undergraduate, but such credits can only be used to meet the requirements of the graduate degree if condition (1) above is met.

## Graduation Plan

(39 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
EH 101	English Composition I	3
Humanities/Fine Arts Elective	Area II	3
CJ 105	Introduction to Criminal Justice	3
Natural Science with Lab	Area III	4
		<b>Hours</b>
		<b>15</b>
<b>Spring</b>		
EH 102 or EH 105	English Composition II or Honors Composition - H	3
Humanities/Fine Arts Elective	Area II	3
Select one of the following:		3
CJ 210	Policing and Society	
CJ 215	Correctional Policies and Proc	
PSC 130	Intro to US Government (Area IV)	
CA 110	Public Speaking	3

Select one of the following:	3
MA 110	Finite Mathematics
MA 112	Precalculus Algebra
MA 113	Precalculus Trigonometry
MA 115	Precal Algebra-Trigonometry
MA 120	Calculus and Its Applications
MA 227	Calculus III
MA 237	Linear Algebra I
MA 238	Differential Equations I
<b>Hours</b>	<b>15</b>

**Second Year**

<b>Fall</b>	
Select one of the following:	3
CJ 210	Policing and Society
CJ 215	Correctional Policies and Proc
PSC 130	Intro to US Government (Area IV)
Foreign Language	Area V - Foreign Language Sequence Semester 1
3	
Select one of the following	Humanities/Fine Arts Literature - Area II:
3	
EH 215	Brit Lit before 1785
EH 216	Brit Lit after 1785
EH 225	Am Lit before 1865
EH 226	Am Lit after 1865
EH 235	World Lit before 1650
EH 236	World Lit after 1650
Select one of the following	Humanities/Fine Arts Literature - Area IV:
3	
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
Natural Science with Lab	Area III
4	
<b>Hours</b>	<b>16</b>

**Spring**

Select one of the following:	3
CJ 210	Policing and Society
CJ 215	Correctional Policies and Proc
PSC 130	Intro to US Government (Area IV)
Foreign Language	Area V - Foreign Language Sequence Semester 2
3	
PSC/CJALL	Research Methods-W
3	
REGISTRATION	
SCHEDULES RELEASED	
IF 100% OF BALANCE[1]	
IS NOT PAID OR STUDENT	
IS NOT PARTICIPATING	
IN THE PAYMENT PLAN	
(AVOID THE VOID)310	
CJ/PSCALL	Judicial Process
3	or Theories of Offending
REGISTRATION	
SCHEDULES RELEASED	
IF 100% OF BALANCE[1]	
IS NOT PAID OR STUDENT	
IS NOT PARTICIPATING	
IN THE PAYMENT PLAN	
(AVOID THE VOID)330	
or CJ 360	
Literature or History	Area II or Area IV - Literature or History Sequence
3	
<b>Hours</b>	<b>15</b>

**Third Year**

<b>Fall</b>	
Natural Science with Lab	Area V
or Upper Level Math	3-4
Social/Behavioral Science	Area IV
Elective	3
CJ Elective	300-400 Level CJ Elective
3	

CJ/PSCALL	Judicial Process	3
REGISTRATION	or Theories of Offending	
SCHEDULES RELEASED		
IF 100% OF BALANCE[1]		
IS NOT PAID OR STUDENT		
IS NOT PARTICIPATING		
IN THE PAYMENT PLAN		
(AVOID THE VOID)330		
or CJ 360		
Minor	Minor course	3
<b>Hours</b>		<b>15-16</b>

**Spring**

CJ Elective	300-400 Level CJ Elective	3
CJ Elective	300-400 Level CJ Elective	3
CJ Elective	300-400 Level CJ Elective	3
Minor	Minor course	3
Minor	Minor course	3
<b>Hours</b>		<b>15</b>

**Fourth Year**

<b>Fall</b>	
CJ 492	Capstone Seminar CJ-W (or 300-400 Level CJ Elective)
3	
CJ Elective	300-400 Level CJ Elective
3	
Minor	Minor course
3	
Minor	Minor course
3	
Elective	Course in Major, Minor, or Elective
3	
<b>Hours</b>	<b>15</b>
<b>Spring</b>	
CJ 492	Capstone Seminar CJ-W (or 300-400 Level CJ Elective)
3	
Minor	Minor course
3	
Minor	Minor course
3	
Elective	Course in Major, Minor, or Elective
3	
Elective	Course in Major, Minor, or Elective
2-3	
<b>Hours</b>	<b>14-15</b>
<b>Total Hours</b>	<b>120-122</b>

## Criminal Justice Minor Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Minor in Criminal Justice

The minor in Criminal Justice requires 18 semester hours, including CJ 105, plus 15 semester hours of criminal justice electives, including 6 hours at the 200-400 level, and 9 hours at the 300-400 level. CJ 105 is a prerequisite to most other CJ courses, and a minimum grade of C in CJ 105 is required for the CJ minor.

Code	Title	Hours
CJ 105	Introduction to Criminal Justice	3
CJ Electives, any level		6
CJ Upper Division (300/400) Electives		9
<b>Total Hours</b>		<b>18</b>

# Political Science (BA)

## Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		
<i>Political Science Core</i>		
A. Complete the following:		
PSC 130	Intro to US Government	3
PSC 250	Comparative Politics	3
PSC 270	International Relations	3
PSC/CJALL	Research Methods-W	3
REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)310		
PSC 492	PSC Capstone Seminar-W	3
<i>Political Science Electives</i>		
A. Select 21 hours of PSC Upper Division (300/400) Electives		21
<b>Minor Requirements</b>		
A minor is required for this degree program		18-24
<b>A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE</b>		<b>120</b>

All undergraduates must complete two designated writing credit (W) courses, at least one of which must be in the student's major or minor.

### Additional Information

Majors in Arts and Sciences may be completed with a minimum of 120 semester hours unless designated otherwise. At least 30 hours of course work, which represents 25% of the required 120 hours, must be at the upper division level in order to fulfill the University's residency requirement. At least 15 of the 30 upper-division hours must be in the major or concentration area. An overall grade-point-average (GPA) of 2.0 is required for graduation. In addition, a minimum GPA of 2.0 is required in the student's major or concentration area.

The major in political science requires 36 semester hours, including PSC 130, PSC 250, PSC 270, PSC 310/CJ 310, and PSC 492 (W)—plus 21 hours of PSC electives at the 300/400 level. PSC 130 is a prerequisite for most other PSC courses. Political Science majors must earn a grade of "C" or higher in PSC 130 and also in the Capstone Seminar, PSC 492 (W). Students pursuing a degree in Political Science must have a minor in another discipline.

In addition, all political science majors must take the ETS major field test in political science and receive a satisfactory score (The standards for passing are determined by the Department of Political Science and Criminal Justice). Students with unsatisfactory scores on the ETS test can retake the test, or they may be required to repeat coursework in political science. The ETS is administered in the Capstone Seminar,

PSC 492 (W), which is typically offered in the Fall Semester only. All PSC core courses must be completed prior to enrolling in PSC 492 (W).

All political science majors must demonstrate competency in oral and written communication. Students will be expected to deliver presentations, particularly in the Capstone Seminar. The University of South Alabama requires two Writing-Intensive (W) courses for graduation. PSC 492 (W) fulfills one Writing-Intensive requirement, and CJ 310/PSC 310 (W) fulfills the second.

## Accelerated Bachelors to Masters Program

### Program Description

The USA accelerated bachelor's to master's (ABM) in Political Science and Criminal Justice provides exceptional undergraduate students the opportunity to earn a bachelor's and master's degree at an accelerated pace.

Strong undergraduate majors with an interest in graduate studies are encouraged to apply.

This program is designed to allow students to complete the Bachelor's degree in Political Science or Criminal Justice and the Master of Arts degree in Public Administration in six years (including one Summer term between their first and second year of graduate study).

### Admission Procedures

Admission will be a competitive process. The minimum standards are:

- Completed at least 90 credit hours
- Completed at least 30 credit hours at USA
- An overall GPA of 3.0 (Cumulative and Political Science/Criminal Justice)
- Two letters of recommendation.

Once admitted into the ABM program, students must maintain at least a 3.0 GPA and remain in good standing to stay in the program.

### Program Procedures

ABM students may begin taking graduate courses after completing at least 90 hours of undergraduate credit.

Completion of the ABM program requires students to complete at least 150 approved unique credit hours. To qualify for a baccalaureate degree, a student must complete at least 120 approved semester hours. To qualify for a master's degree a student must complete a minimum of 30 approved semester hours. A maximum of twelve hours of graduate coursework can be applied to satisfy the requirements for an undergraduate degree. To receive graduate credit, students must earn at least a 'B'.

There are currently four graduate courses that may count toward the Bachelor of Arts in Political Science or Master of Public Administration degree:

PSC 501 *Public Administration* (3 hours).

PSC 511 *Criminal Justice Administration* (3 hours).

PSC 584 *Health Care Policy Around the World* (3 hours).

There are three courses that may count toward the Bachelor of Arts in Criminal Justice or Master of Public Administration degree:

PSC 511 *Criminal Justice Administration* (3 hours).

PSC 582 *Criminal Justice Policy Evaluation* (3 hours)

PSC 590 *Criminal Justice Communications* (3 hours)

Upon completing the undergraduate degree, students will apply to the Master of Public Administration program. ABM students, who are in good standing, will be accepted.

Completion of the Master of Arts in Public Administration requires successful completion of all requirements, including at least 36 graduate credit hours. Graduate credit taken while an undergraduate that is completed with at least the grade of B will be transferred into the Master’s program upon acceptance into the program and will apply toward the 36 hours required for the Master of Public Administration degree.

A student who withdraws or is dismissed from the ABM program may not count graduate coursework towards both degrees. Graduate courses for which an undergraduate student did not earn an “A” or “B” grade, may not be counted towards the graduate degree.

All students approved to be in an ABM program must complete at least 150 unique credit hours across the undergraduate and graduate degree programs, with a minimum of 120 approved semester hours for the undergraduate degree and a minimum of 30 approved hours for the graduate degree.

A student must have an approved ABM Declaration Form prior to participating in an ABM program (<https://www.southalabama.edu/colleges/graduateschool/resources/abmdeclarationform11.22.22.pdf>). This is how we insure that condition (1) above is met.

Undergraduate students must complete the Authorization to use Graduate Credit for an Undergraduate Degree form for any graduate courses applied to their undergraduate degree ([https://www.southalabama.edu/departments/eforms/registrar/graduate\\_level\\_course\\_for\\_undergraduate\\_degree.pdf](https://www.southalabama.edu/departments/eforms/registrar/graduate_level_course_for_undergraduate_degree.pdf)).

Students can take a maximum of 12 semester hours of graduate coursework as an undergraduate, but such credits can only be used to meet the requirements of the graduate degree if condition (1) above is met.

## Graduation Plan

(36 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
EH 101	English Composition I	3
Humanities/Fine Arts Elective	Area II	3
PSC 130	Intro to US Government (Area IV)	3
Natural Science with Lab	Area III	4
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EH 102 or EH 105	English Composition II or Honors Composition - H	3

Humanities/Fine Arts Elective	Area II	3
PSC 250 or PSC 270	Comparative Politics or International Relations	3
CA 110	Public Speaking	3
Select one of the following (Area III):		3
MA 110	Finite Mathematics	
MA 112	Precalculus Algebra	
MA 113	Precalculus Trigonometry	
MA 115	Precal Algebra-Trigonometry	
MA 120	Calculus and Its Applications	
MA 125	Calculus I	
MA 227	Calculus III	
MA 237	Linear Algebra I	
MA 238	Differential Equations I	
<b>Hours</b>		<b>15</b>

<b>Second Year</b>		
<b>Fall</b>		
PSC 250 or PSC 270	Comparative Politics or International Relations	3
Natural Science with Lab	Area III	4
Foreign Language	Area V - Foreign Language Sequence Semester 1	3
Select one of the following HY/Humanities/Behavioral Science - Area IV:		3
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
Social/Behavioral Science Elective	Area IV <sup>1</sup>	3
<b>Hours</b>		<b>16</b>

<b>Spring</b>		
Select one of the following Humanities/Fine Arts: Literature - Area II:		3
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
Foreign Language	Area V - Foreign Language Sequence Semester 2	3
PSC/CJALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)310	Research Methods-W	3
PSC Elective	300-400 Level Elective	3
Minor	Minor course	3
<b>Hours</b>		<b>15</b>

<b>Third Year</b>		
<b>Fall</b>		
Natural Science with Lab or Upper Level Math	Area V	3-4
Literature or History Sequence	Area II or Area IV - Literature or History Sequence	3
Social/Behavioral Science Elective	Area IV	3
Political Science Elective	300-400 Level PSC Elective	3
Minor	Minor course	3
<b>Hours</b>		<b>15-16</b>
<b>Spring</b>		
Political Science Elective	300-400 Level PSC Elective	3
Political Science Elective	300-400 Level PSC Elective	3

Political Science Elective	300-400 Level PSC Elective	3
Political Science Elective	300-400 Level PSC Elective	3
Minor	Minor course	3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
PSC 492	PSC Capstone Seminar-W	3
Political Science Elective	300-400 Level PSC Elective	3
Minor	Minor course	3
Minor	Minor course	3
Minor	Minor course	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Minor	Minor course	3
Elective	Course in Major, Minor, or Elective	3
Elective	Course in Major, Minor, or Elective	3
Elective	Course in Major, Minor, or Elective	3
Elective	Course in Major, Minor, or Elective	2-3
<b>Hours</b>		<b>14-15</b>
<b>Total Hours</b>		<b>120-122</b>

<sup>1</sup> CJ 105 recommended

## Political Science Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

#### Minor in Political Science

For a minor in political science a student must take a minimum of 18 semester hours in political science, of which 6 hours are required including PSC 130, and either d or PSC 270, and 12 hours of 300/400 level PSC electives. PSC 130 is a prerequisite to most upper-level PSC courses, and a minimum grade of C is required in PSC 130 for the PSC minor.

Code	Title	Hours
<b>Requirements</b>		
PSC 130	Intro to US Government	3
PSC 250	Comparative Politics	3
or PSC 270	International Relations	
Select 12 hours from PSC Upper Division (300/400) Electives		12
<b>Total Hours</b>		<b>18</b>

## Public Administration (MPA) - Thesis Concentration

### Degree Requirements

To qualify for the degree of Master of Public Administration, all candidates must satisfactorily complete 36 hours.

Code	Title	Hours
<b>Prerequisite</b>		
PSC 130	Intro to US Government (or its equivalent) <sup>1</sup>	
<b>Core Courses in the Core Curriculum</b> <sup>2</sup>		
PSC 500	Organization Theory Public Mgt	3

PSC 510	Intergov-Interorg Relations	3
PSC 520	Research Methods and Design	3
PSC 530	Quantitative Analysis	3
PSC 540	Human Resource Management	3
PSC 550	Public Budgeting	3
PSC 570	Administrative Law	3
PSC 580	Public Pol Analysis and Eval	3
Students must take an additional twelve hours of graduate electives as approved by the Director of the MPA program		
<i>Thesis Concentration</i> <sup>3</sup>		
Select 6 to 9 hours of graduate elective courses as approved by the Director of the MPA program		6
PSC 599	Thesis	6
<b>Total Hours</b>		<b>36</b>

<sup>1</sup> A minimum grade of C is required; or a score of 50 or higher in the "American Government" exam through the College Level Examination Program (CLEP). Students must satisfy this requirement no later than the end of their third semester in the program, including summer semesters. Failure to complete the requirement of PSC 130/its equivalent /satisfactory CLEP credit by the end of the third semester will prohibit registration for remaining core curriculum courses. Note that the course does not contribute credit to the required 36 graduate credit hours.

<sup>2</sup> Note: The core curriculum cycle should ideally commence in the Fall Semester.

<sup>3</sup> Students must have a minimum of 12 hours of graduate elective and thesis credit combined. They must also complete a thesis in compliance with Graduate School requirements.

Any substitutions for the above requirements must be approved in writing by the Director of the MPA Program.

A candidate for the MPA degree must complete successfully a comprehensive written examination covering the eight core courses listed previously. To be eligible to take this examination, a student must have achieved at least a 3.00 (B) grade- point average on the core curriculum course work. Normally, the examination will be administered during the Fall and Spring Semesters. The comprehensive examination may be attempted no more than twice.

Admission may be granted by the MPA Graduate Coordinator, when supported by a vote of the MPA Graduate Faculty, in special cases where a holistic evaluation of the applicant's credentials is appropriate.

### Internship

Students in the MPA Program may be allowed to enroll in PSC 596, Graduate Internship in Public Administration, for a maximum of six semester hours.

Normally, admission to the Internship Program will be dependent upon the following prerequisites:

1. Satisfactory completion of at least six of the required core courses;
2. Approval by the internship professor of the prospective intern's qualifications and proposed project; and
3. Placement of the student in an appropriate agency of the government or other public service institution.

The length of the internship and corresponding credit (at the rate of three to six hours per semester), not to exceed a total of six hours, will be determined for each student on the basis of the student's particular needs and opportunities.

Each intern will be required, in consultation with the intern professor, to develop a research design for the project to be undertaken during the internship. Each intern will also be required to write a paper showing how that research design has been carried out. Particular emphasis will be placed in the paper upon the relationship between the internship experience and academic course work. Close and continuing supervision of each intern's progress will be provided by the intern professor.

## Psychology Department Information

Department of Psychology website  
<http://www.southalabama.edu/psychology> (<http://www.southalabama.edu/psychology/>)

### Undergraduate Studies

The objective of psychology, as a science, is to understand, explain, and predict the behavior of organisms. The Department of Psychology has developed and organized its course offerings to meet three major goals:

1. To provide a strong foundation for those students who plan to enter a graduate school of psychology after completing their undergraduate degree requirements.
2. To assist those students who are planning careers in psychology or in related fields by providing a flexible curriculum that can be designed to meet the career goals of individual students.
3. To meet the needs of those students who are taking psychology courses as part of their liberal arts education.

All first-time freshmen must successfully complete CAS 100: First Year Experience as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry.

### Accelerated Bachelor's To Master's Program In Psychology (ABM)

The USA accelerated bachelor's to master's (ABM) in Psychology provides exceptional undergraduate students the opportunity to earn a bachelor's and master's degree at an accelerated pace in Psychology. While still an undergraduate, ABM students may count up to 12 credit hours of graduate course work towards their undergraduate degree. ABM students typically complete the master's degree within one academic year after completing the undergraduate degree.

Psychology majors are encouraged to apply for the Accelerated Bachelor's to Master's (ABM) Program in Psychology. This program is designed to allow the student to complete the Bachelor's degree in Psychology and the Master's degree in Psychology (Behavior and Brain Sciences program only) in five years.

Program details can be found here (p. 374). Rules for all Accelerated Bachelor's to Master's Programs can be found here (<https://bulletin.southalabama.edu/programs-az/graduate/#admissionrequirementstext>) .

### Graduate Study In Psychology

The Department of Psychology accepts applicants to the Behavioral and Brain Sciences Master of Science program (BBS) and to the Doctor of Philosophy program in Clinical/Counseling Psychology (CCP).

The Master of Science degree program in Psychology (BBS) is designed to provide individuals with knowledge of current theories, principles, and methods of psychology in preparation for future work toward a doctoral degree, employment in a research setting or employment in a college teaching position. The Department of Psychology currently accepts applicants to the Master of Science degree program, with an interest in one or more areas of concentration in the Behavioral and Brain Sciences. The available areas of concentration include: Behavioral Statistics/ Computational Modeling, Personality and Measurement, Cognitive and Perceptual Processing, Psychophysiology, Social/Developmental Psychology, and Scholarship of Teaching and Learning. Students interested in the BBS Masters in Psychology program are encouraged to see the full program description here (p. 374). The program webpage can be found at <https://www.southalabama.edu/colleges/artsandsoci/psychology/bbs.html>.

Students enrolled in the Doctor of Philosophy in Clinical and Counseling Psychology have the opportunity to earn a Master's of Science in Psychology as they progress towards completion of the doctoral degree. Students interested in a graduate degree in Clinical and Counseling Psychology are encouraged to see the full program description of the doctoral program in Clinical and Counseling Psychology here (p. 735). The program webpage can be found at <https://www.southalabama.edu/colleges/graduateschool/ccp/>.

### Non-degree Students

Applicants for non-degree status in psychology are considered only in exceptional cases and will normally be admitted only if they meet regular admission standards. Following admission, non-degree students must have permission of the department chair and director of graduate studies of the college for each course they wish to enroll in. Enrollment will be approved on a space-available basis with preference being given to degree students. Non-degree students must satisfy the same prerequisites and corequisites as degree students.

### Progress Toward Degree

All graduate students will be evaluated each semester to determine if they are making satisfactory progress toward completion of degree requirements. Students will be given written reports, including specific deficits, if they are not making satisfactory progress. Such students will have one semester to remedy the specific deficits listed or will be subject to dismissal from the program.

### Graduate Assistantships

Each year the Psychology Department recommends qualified applicants to the Dean of the Graduate School for graduate assistantships. Application forms for graduate assistantships may be obtained from the Graduate School. The deadline for receipt of completed doctoral assistantship applications is December 15.

## Degrees, Programs, or Concentrations

- Psychology (BA) (p. 372)
- Psychology (MS) - Non-Thesis Concentration (<http://bulletin.southalabama.edu/programs-az/arts-sciences/psychology/psychology-ms-nonthesis-concentration/>)
- Psychology (MS) - Thesis Concentration (p. 374)
- Psychology Minor (p. 376)

## Courses

### Clinical Counseling Psy (CCP)

#### CCP 742 Advanced Psych Assessment 3 cr

This course will offer an in-depth understanding of the assessment of complex cases, which includes both mental illness and physical disorders, as well as the impact of complex social issues, such as culture, ethnicity, and economic issues. The course covers topics pertaining to adults and children. The emphasis will be on the integration of nomothetic and empirical perspectives with idiographic approaches in an evidence-based assessment model. Topics covered will be assessing special populations (e.g., severely mentally ill, trauma, forensic, parents), therapeutic assessment, person-centered report writing, providing feedback, theoretical and scientific issues in assessment, and current controversies.

**Prerequisite:** CCP 706 (may be taken concurrently) Minimum Grade of B

#### CCP 745 Teaching of Psychology 3 cr

This course will offer an in-depth understanding of the teaching of psychology at the post secondary level.

#### CCP 750 Applied Psychophys Biofeedback 3 cr

This course will survey theory, research, and applications of psychophysiology and biofeedback in the prevention and treatment of illness and the enhancement and maintenance of health.

**Prerequisite:** CCP 706 Minimum Grade of B

#### CCP 752 Clinical Neuropsychology 3 cr

This course will offer an in-depth understanding of the different theories of brain function in humans. Assessment methods for detecting abnormal functioning and the localization of functioning by behavioral methods will also be examined. The possible etiologies of abnormal functioning as well as their treatment will be reviewed.

**Prerequisite:** CCP 706 Minimum Grade of B and CCP 742 Minimum Grade of B

#### CCP 756 Practicum Therapy 1-3 cr

Supervised experience with child and/or adult populations; includes case conference and seminars. This course may include supervised placement in an applied setting.

**Prerequisite:** CCP 706 (may be taken concurrently) Minimum Grade of B or PSY 506 (may be taken concurrently) Minimum Grade of B

#### CCP 758 Psychology Resilience & Trauma 3 cr

This course will offer an in-depth understanding of resilience, as it manifests across the lifespan in response to various types of traumas (natural vs. manmade; community-wide versus family- or individually-specific). Prevention and reduction of psychological impact related to trauma and the development, enhancement, and maintenance of resilience in the face of adversity will be emphasized.

**Prerequisite:** CCP 706 (may be taken concurrently) Minimum Grade of B

#### CCP 759 Group and Systems Theory 3 cr

This course will survey group and systems theories and the interventions that have been derived from this perspective. The dynamics of group processes will be delineated.

**Prerequisite:** CCP 706 Minimum Grade of B

#### CCP 763 Prevention Treat Public Health 3 cr

This course will survey the basic theory and techniques underlying the study of public health problems. Research related to the prevention and treatment of several specific public health problems (e.g. suicide, HIV/AIDS, youth violence) will be covered in depth.

#### CCP 764 Consult Psych Program Develop 3 cr

This course provides an overview of approaches to psychological consulting and program development in individual, small group and large organization contexts. Specific aspects of psychological consulting in mental health, business, and educational settings will be reviewed

#### CCP 766 Clinical Supervision 3 cr

This course provides an overview of the various theoretical approaches to supervision of professional psychological services, particularly psychotherapy services. In addition, relevant research findings in the area of supervision are reviewed. Students also have the opportunity to receive feedback on audio/video tapes of their supervision sessions with a junior graduate student clinician

**Prerequisite:** CCP 706 Minimum Grade of B and CCP 756 Minimum Grade of S

#### CCP 772 Child Family Psychopath Interv 3 cr

This course provides an overview of current theory and research findings relevant to psychological disorders typically occurring in childhood and adolescence. In addition, evidence-based interventions for various childhood disorders are reviewed. A focus will be upon an ecological and developmental view of childhood psychopathology that integrates family, community, and societal forces in a comprehensive view of such disorders.

**Prerequisite:** CCP 706 Minimum Grade of B

#### CCP 777 Seminar on Suicide 3 cr

This graduate seminar will examine the topic of suicide and self-harm in depth. Theoretical and empirical perspectives from sociology, psychology, and genetics/neuroscience will be considered. Additionally, we will examine suicide as both a clinical phenomenon and as a public health issue. Accordingly, cultural, political, and policy issues related to suicide will be explored alongside risk factors, mental health, and individual patient-level factors. This course will utilize focused readings, group discussions, and writing assignments to achieve the course objectives.

#### CCP 780 Applied Health Psychology 3 cr

This course will survey theory, research, and applications of health psychology in the prevention and treatment of illness and the enhancement and maintenance of health.

**Prerequisite:** CCP 706 (may be taken concurrently) Minimum Grade of B

**CCP 782 Advanced Practicum 1-3 cr**

Supervised experience with child and/or adult populations in a variety of settings; includes case conferences and advanced psychological assessment and interventions and supervision of lower level graduate students.

**Prerequisite:** CCP 756 Minimum Grade of B

**CCP 790 Special Topics- 3 cr**

Selected topics in psychology and may be repeated or credit when course varies.

**CCP 795 Multicultural Counseling 3 cr**

CCP 795 Multicultural Counseling in Professional Psychology. Provides a foundation in multicultural awareness, knowledge, and skills from a clinical and counseling psychology perspective.

**CCP 796 Directed Studies 1-3 cr**

Directed study and research.

**CCP 797 Psychology Internship 3 cr**

The predoctoral internship is a supervised learning experience in a work setting similar to that in which students will eventually be employed. The internship provides students with an opportunity to apply the theories and concepts learned during their graduate program. Not more than 18 hours may be taken.

**CCP 799 Dissertation Research 1-6 cr**

Completion and oral defense of a dissertation based upon original research. May be repeated for up to 12 hours credit. A minimum of nine hours is required to meet degree requirements.

**Psychology (PSY)****PSY 120 Introduction to Psychology 3 cr**

A survey of the basic theories, concepts, principles, and research findings in the field of Psychology. Core course.

**Cross-Listed:** PSY 121

**PSY 121 Honors Gen Psychology - H 3 cr**

This course will provide a survey of the basic theories, concepts, principles, and research findings in the field of Psychology. Along with the broad overview provided by the course, students will participate in a more in-depth examination of selected special topics (e.g. those topics generating controversy in the research community and in our society) as selected by the instructor. By contrast with the PSY 120 Introduction to Psychology course already being taught, the Honors General Psychology course will provide a more thorough coverage of selected topics. **Prerequisite:** Special permission.

**Cross-Listed:** PSY 120

**PSY 220 Res Design and Analysis I 3 cr**

Research methods in psychology with an emphasis on the experimental method.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (EH 102 Minimum Grade of D or EH 105 Minimum Grade of D)

**PSY 221 Research Design/Analysis I-Apps 1 cr**

Laboratory in research methods in psychology with an emphasis on the experimental method.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 210 Minimum Grade of D) or PSY 121 Minimum Grade of D and (EH 102 Minimum Grade of D or EH 105 Minimum Grade of D)

**Corequisite:** PSY 220

**PSY 250 Life Span Development 3 cr**

An overview of human development from conception to death. Special emphasis will be placed on cognitive and social development. Core course.

**PSY 270 Psy of Black Experience 3 cr**

Theories and principles of psychology pertaining to the experience of black Americans. Includes the development of the black psychological perspective, African-American historical developments and philosophy, identity development and the determinants of the black personality, and contemporary issues in the black community.

**PSY 280 Professions & Careers in Psychology 2 cr**

A survey of subfields and professions in psychology. Students will also practice active learning related to obtaining a career with a bachelor's and/or graduate level degree in Psychology.

**Prerequisite:** (PSY 120 Minimum Grade of D)

**PSY 290 Special Topics - 1-3 cr**

Selected topics in psychology. May be repeated for credit when course content varies for a total of 12 credit hours.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 310 Biological Psychology I 3 cr**

An introductory survey of research and theory in neuroscience as it applies to the understanding of behavior. Focus will be on understanding basic mechanisms of neuron function and general coverage of topics such as sensory and motor systems, motivation and emotion, learning and memory, language and thinking, and mental disorders.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 317 Applied Behavior Analysis I 3 cr**

An introduction to the principles of behavior intended as a prerequisite to the specific strategies and procedures practiced by behavior analysts. This course will present the historical and scientific foundations of behavior analysis as applied in educational and other human service settings.

**Prerequisite:** (PSY 120 Minimum Grade of C or PSY 121 Minimum Grade of C or PSY 210 Minimum Grade of C) and (PSY 220 Minimum Grade of C or PSY 222 Minimum Grade of C)

**PSY 320 Res Design-Analysis II-W 3 cr**

Experience in applying methodological and statistical concepts introduced in PSY 220 and ST 210, as well as instruction in additional topics such as research and analysis. The course will emphasize the use of computers in conducting behavioral research (e.g. literature searches, collecting data, analyzing data, writing reports).

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**PSY 321 Research Design/Analysis II-App 1 cr**

Laboratory in research methods in psychology with an emphasis on applying methodological and statistical concepts introduced in PSY 220 and PSY 320.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 210 Minimum Grade of D) or PSY 121 Minimum Grade of D and (PSY 220 Minimum Grade of D and PSY 222 Minimum Grade of D) and (EH 102 Minimum Grade of D and EH 105 Minimum Grade of D)

**Corequisite:** PSY 320

**PSY 340 Abnormal Psychology 3 cr**

Nature and development of deviant behavior.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 350 Child and Adolescent Dev 3 cr**

The development and psychosocial aspects of childhood and adolescence.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 394 Directed Study 1-3 cr**

Specific topics and research findings introduced through the reading of appropriate professional and scientific literature. Requires special permission. May be repeated for a total of 8 credit hours.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 395 Psychology Practicum 1-6 cr**

Supervised experience in an area of psychology. May include supervised placement in an applied setting. May be repeated for a total of 12 credit hours.

**Prerequisite:** (PSY 120 Minimum Grade of C or PSY 121 Minimum Grade of C or PSY 210 Minimum Grade of C)

**PSY 412 History-Systems Psy - W 3 cr**

The historical foundations of modern psychology and the development of major theories in psychology.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**PSY 414 Introduction to Clin Psych 3 cr**

This course serves as a practical capstone for Psychology students interested in careers in professional Psychology. Through a series of lectures, readings, exercises, films, and demonstrations, this course will introduce student to the ways that clinical psychologists approach the conceptualization, assessment, diagnosis, and treatment of health problems. The course will focus on the scientific basis for the practice of clinical psychology.

**Prerequisite:** PSY 120 Minimum Grade of D or EH 102 Minimum Grade of D or EH 105 Minimum Grade of D

**PSY 416 Cognition 3 cr**

An overview of psychological research and theory in cognitive psychology. The course will emphasize how people gather, process, represent, and use information to guide thought and action. This course is an approved elective for students seeking gerontology certification.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D)

**PSY 417 Applied Behav Analysis I-Intro 3 cr**

An introduction to the principles of behavior intended as a prerequisite to the specific strategies and procedures practiced by behavior analysts. This course will present the historical and scientific foundations of behavior analysis as applied in educational and other human service settings. Prerequisites: PSY 120 or PSY 121 and PSY 220 or Education Teacher candidacy.

**Prerequisite:** (PSY 120 Minimum Grade of C or PSY 121 Minimum Grade of C or PSY 210 Minimum Grade of C) and (PSY 220 Minimum Grade of C or PSY 222 Minimum Grade of C)

**PSY 418 Applied Behav Analysis II-Meth 3 cr**

Behavioral assessment techniques and operant and respondent methods for deceleration of inappropriate behavior will be covered. Operant methods for accelerating appropriate behaviors, teaching new behaviors, and maintaining behaviors will be covered. Data-based decision making strategies will be used in developing and altering individual programs.

**Prerequisite:** PSY 317 Minimum Grade of C

**PSY 419 App Behav Analysis III-Adv App 3 cr**

Behavioral assessment techniques and experimental designs for the evaluation of behavior change programs will be covered. Data-based decision making strategies for formative program evaluation and modification are also included.

**Prerequisite:** PSY 417 Minimum Grade of C

**PSY 420 Psychology of Learning 3 cr**

Theories, experimental findings, and methods of investigation in learning.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D)

**PSY 425 Mental Health and Law 3 cr**

Selected topics in psychology and criminal Justice. An overview of the relevant federal and state laws, federal regulations and court rulings which address the issues of justice for preserving the rights of individuals with mental illness.

**Prerequisite:** PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D

**PSY 428 Perception 3 cr**

A critical analysis of the main theories and research trends in sensation and perception. This course will include computer simulations and demonstrations, and will also emphasize computer applications for data collection, data analysis, and for reporting results. This course is an approved elective for students seeking gerontology certification.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D) and (PSY 310 Minimum Grade of D or PSY 380 Minimum Grade of D)

**PSY 435 Social Psychology 3 cr**

A survey and analysis of major theoretical and experimental topics of interest in social psychology, such as how we perceive others, attitude, interpersonal attraction, aggression, prejudice and altruism.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 440 Psychology of Personality 3 cr**

A survey and critical analysis of major historical and current theories about personality. The course will also examine research relevant to the different approaches and consider various techniques of personality assessment.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 450 Advanced Data Analysis and Visualization 3 cr**

A methods-focused course covering the exploration, transformation, visualization, and analysis of data in the psychological sciences using widely or freely available software (e.g. Excel, Jamovi, and JASP). The course builds upon the skills taught in PSY 220 (Research Design & Analysis I) and PSY 320 (Research Design & Analysis II).

**Prerequisite:** (PSY 120 Minimum Grade of D) and (PSY 220 Minimum Grade of D) and (PSY 320 Minimum Grade of C)

**PSY 456 Adult Development and Aging- 3 cr**

The development and psychosocial aspects of adulthood and late life. This course is an approved elective for gerontology certification.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of C or PSY 210 Minimum Grade of D)

**Cross-Listed:** PSY 356

**PSY 460 Industrial Psychology 3 cr**

Application of psychological principles and techniques to business, industry, and government.

**Prerequisite:** PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D

**PSY 465 Intro to Measurements-Tests 3 cr**

This course will provide a survey of the methodology of assessment, test design and construction, test administration and scoring, achievement and intelligence testing, personality observations and inventories, and issues in ethics and applications of testing.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or ST 210 Minimum Grade of D)

**PSY 470 Intellectual Disabilities 3 cr**

The study of theories and research in intellectual disabilities and related areas.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 475 Comparative Evolutionary Psy 3 cr**

A critical analysis of the main theories and research trends in comparative and evolutionary psychology. This course is an approved elective for students seeking gerontology certification.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D)

**PSY 480 Health Psychology - W 3 cr**

Current theories, research and applications in health psychology.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**PSY 485 Psychology of Gender 3 cr**

The study of psychological research on gender differences and theories regarding the origins of these differences.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or ST 210 Minimum Grade of D)

**PSY 490 Special Topics 1-3 cr**

Selected topics in psychology. May be repeated for a total of 12 credit hours when course content varies.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 492 Seminar - 1-3 cr**

A survey of basic theories, concepts, principles, and research findings in a particular focal topic in psychology. Students will study topics in depth by reading and presenting research reports, review papers and book chapters, and through active in-class discussion of the reading materials. Requires permission of department chair. May be repeated up to 2 times when content varies for a total of 6 credit hours.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D)

**PSY 494 Directed Studies - 1-3 cr**

Directed study and research. Requires special permission. May be repeated for a total of 8 hours.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 499 Honors Senior Thesis-H 3-6 cr**

Student conducts an independent research project under the supervision of a faculty sponsor. Recommended for psychology majors planning graduate school. Permission of department chair is required prior to registration. Requires GPA of 3.3 or higher. May be repeated for a total of 6 credit hours.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D)

**PSY 500 Proseminar in Psychology 1 cr**

Research presentations will be given by faculty and advanced graduate students. In addition, discussion of project and thesis requirements and procedures will take place. Required of all students registered for PSY 500, 502, and 503.

**PSY 501 Research Design and Stats I 3 cr**

Theories and principles of research design and elements of modern statistics. Introduction to computer programs for statistical analysis will be included.

**Corequisite:** PSY 500

**PSY 502 Research Design and Stats II 3 cr**

Theories and principles of advanced research design and elements of modern statistics. The use of computer applications such as SPSS to analyze empirical data sets will be covered.

**Prerequisite:** PSY 501 Minimum Grade of B or PSY 521 Minimum Grade of B

**Corequisite:** PSY 500

**PSY 503 Quantitative Methods II 3 cr**

Elements of modern statistics with emphasis on application to psychological research. Multivariate statistical techniques to include multiple regression, multivariate analysis of variance, discriminant, canonical, and factor analysis will be discussed.

**Prerequisite:** (PSY 502 Minimum Grade of B or PSY 522 Minimum Grade of B)

**Corequisite:** PSY 500

**PSY 506 Prof Ethics and Standards 3 cr**

An introduction to professional and ethical issues as they pertain to psychology. Focus is on the development of an ethical and professional awareness in the practice of psychology, including teaching and research.

**PSY 507 History of Psych & Prof Ethics 3 cr**

This course provides instruction through readings, lecture, and case studies in the application of ethics in the professional practice of psychology. In addition, the course focuses on the philosophical foundations, professional identity, and standards of practice found in both clinical psychology and counseling psychology.

**PSY 510 Physiological Psychology 3 cr**

This course provides a foundation in the techniques of advanced psychophysiological methods. The course covers the history of psychophysiology, including the electrical properties of cells, and major organ systems, with particular emphasis on the electroencephalogram (EEG) and neuroimaging techniques. Students are introduced to the principles of psychophysiological recording, common applications of psychophysiology, safety and ethics in psychophysiological research, instrumentation, and research design issues in psychophysiology. Relevant statistical treatment of psychophysiological data will be discussed, including multiple regression, complex ANOVA, scaling of data, and non-parametric alternatives such as boot-strapping.

**PSY 512 Adv History/Systems Psychology 3 cr**

An advanced course in the historical foundations of modern psychology and the development of major theories in psychology.

**PSY 514 Learning 3 cr**

A survey of research and theory in learning.

**PSY 516 Cognitive Psychology 3 cr**

An advanced survey of research and theory in cognitive psychology. Topics include pattern recognition, attention, memory, language processing, decision making, and problem solving. This course is an approved elective for students seeking gerontology certification.

**PSY 520 Personality Res and Theory 3 cr**

A critical analysis and evaluation of major theories and current research trends in personality.

**PSY 522 Soc & Personality Psychology 3 cr**

This course provides a foundation for conducting quantitative research in personality and social psychology. Topics covered will include (a) measurement of personality and individual differences (e.g., narcissism, self-esteem), (b) measurement of cognitive and behavioral outcomes in laboratory and non-laboratory settings (e.g. decision-making, implicit cognitions), and (c) data analytic techniques (e.g. testing for mediation/moderation, structural equation modeling).

**PSY 524 Lifespan Development 3 cr**

Analysis of theories, research methods, and major findings of sensory, perceptual, social, and cognitive changes across the lifespan, from infancy to late life. Research in social and cognitive development, including cognitive disabilities, the underlying mechanisms involved in thinking and learning processes, and age-related cognitive models are central to this course. \*\*This course is an approved elective for students seeking gerontology certification.

**PSY 528 Sensation and Perception 3 cr**

This course provides a multidisciplinary analysis of how the sensory systems analyze physical stimuli to support perception and successful actions. Consideration is given to how the anatomy and physiology of the major sensory systems extract information using low- and high-level mechanisms to create meaningful percepts. Other topics include psychophysics, comparative studies, communication, production and performance, face and object recognition, attention, and event perception.

**PSY 530 Applied Psy & Dx Interviewing 3 cr**

Theories, principles and techniques of interviewing, behavioral observation and classification of psychological disorders.

**PSY 532 Psychopathology 3 cr**

Current research and theoretical aspects of psychopathology in children and adults.

**PSY 534 Introduction to Family Therapy 3 cr**

This course is designed to introduce graduate students to major research-based models of family therapy. It covers the models of therapy that are most widely used by mental health professionals assisting families dealing with relationship difficulties.

**PSY 540 Psychometrics 3 cr**

Theories and methods of test construction and principles of measurement and evaluation in the behavioral sciences.

**PSY 542 Cognitive Assessment 3 cr**

Principals and methods of individual intelligence testing, including the administration of the Wechsler and the Stanford-Binet tests. Practical experience in the administration, interpretation and report writing of a psychological evaluation using intelligence tests.

**Prerequisite:** PSY 530 Minimum Grade of B and (PSY 540 Minimum Grade of B or PSY 571 Minimum Grade of B)

**PSY 544 Personality & Affective Assmt 3 cr**

Theory, development and interpretation of selected personality assessment instruments. Methods and procedures in administering and interpreting personality, aptitude and career interest tests.

**Prerequisite:** (PSY 540 Minimum Grade of B or PSY 571 Minimum Grade of B) and (PSY 542 Minimum Grade of B or PSY 575 Minimum Grade of B)

**PSY 550 Evidenced Based Clin/Coun Prac 3 cr**

Study of the theoretical and empirical foundations of the major systems of psychotherapeutic change.

**PSY 552 Multicultural Issues in Psy 3 cr**

This course will focus on theoretical models, research, techniques, and interventions for working with culturally diverse populations in various settings. Specific issues to be addressed include world views, acculturation and acculturative stress, prejudice and prejudice-reduction techniques, racial/ethnic identity, culture and assessment, and the nature of multicultural competence in Psychology. Issues related to ethnic and racial identity will form the primary focus; however, other types of diversity (e.g., religion, gender, sexual orientation, physically challenged) will also be considered.

**Prerequisite:** (PSY 550 Minimum Grade of B or PSY 589 Minimum Grade of B) and PSY 506 Minimum Grade of B and PSY 530 Minimum Grade of B and (PSY 532 Minimum Grade of B or PSY 561 Minimum Grade of B)

**PSY 554 Cognitive Behavior Therapy 3 cr**

A follow up course to PSY 550, this course will survey theory, research and application of cognitive behavior therapy. Focus will be on treatment strategies and application to a variety of psychological disorders of adults and children.

**Prerequisite:** PSY 530 Minimum Grade of B and (PSY 532 Minimum Grade of B or PSY 561 Minimum Grade of B) and (PSY 550 Minimum Grade of B or PSY 589 Minimum Grade of B)

**PSY 556 Practicum 1-3 cr**

Supervised experience with adult and children clients. Includes case conference and seminars. May include supervised placement in an applied setting. May be repeated up to five times for a total of 18 credit hours.

**Prerequisite:** (PSY 532 Minimum Grade of B or PSY 561 Minimum Grade of B) and (PSY 550 Minimum Grade of B or PSY 589 Minimum Grade of B)

**PSY 558 External Practicum 3-5 cr**

Supervised placement in an applied setting. May be repeated four times for a total of 15 credit hours.

**Prerequisite:** PSY 552 Minimum Grade of B and PSY 554 Minimum Grade of B

**PSY 570 Intel Disable/Autism Spec Dis 3 cr**

A study of theories and research related to Intellectual Disabilities and Autism Spectrum Disorders.

**PSY 572 Child Psychopathology 3 cr**

The description and etiology of deviant behavior patterns in children and adolescents.

**Prerequisite:** (PSY 532 Minimum Grade of B or PSY 561 Minimum Grade of B)

**PSY 575 Comparative Psychology 3 cr**

An in-depth analysis of the proximal and ultimate causes of animal and human behavior examined from the perspectives of comparative and evolutionary psychology, psychobiology and ethology. Relevant research in animal models of biological and cognitive systems, learning and motivation, lifespan development and related biopsychosocial factors will be included. \*\* This course is an approved elective for students seeking gerontology certification.

**PSY 586 Cognitive Neuroscience 3 cr**

This course includes an advanced and integrative study of the experimental study of cognition and neuroscience. Topics include sensation and perception, memory, learning, language, metacognition, intelligence, problem solving, decision making, mental imagery, consciousness, attention, and the development of cognition through the life span. Major theoretical perspectives and current research within the fields of cognition and neuroscience are discussed. This course also provides students with a basic understanding of the neural underpinnings of a variety of cognitive processes.

**PSY 590 Sp Top in Psychology - 1-3 cr**

Selected topics in psychology. May be requested for credit when course content varies for a total of 12 credit hours.

**PSY 594 Dir Individual Study 1-3 cr**

Individual study under the direction of a member of the graduate faculty. May be repeated for up to 9 hours credit.

**PSY 598 Project in Psychology 1-6 cr**

Completion of a research project, program proposal, program evaluation, major literature review or other comparable experience under the direction of a member of the graduate faculty. IRB or Animal Use and Care Committee approval may be required for some projects. May be repeated for up to 6 hours credit. A minimum of 3 hours is required to meet degree requirements.

**PSY 599 Thesis Research 1-6 cr**

Completion and oral defense of a master's thesis based upon original research. May be repeated for up to 9 hours credit. A minimum of 6 hours is required to meet degree requirements. Prerequisite: Approval of research prospectus including IRB or Animal Use and Care Committee approval if applicable.

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
AHLICH, ERICA MARIE (eahlich@southalabama.edu)	Psychology	Assistant Professor	BA, Albion College MA, University of South Florida PHD, University of South Florida
ALBRIGHT, JORDAN ASHLEY (jalbright@southalabama.edu)	Psychology	Assistant Professor	BS, Northwest Missouri State U MS, Southern Illinois U-Edwardsvi PHD, Virginia Polytechnic Inst and
CURRIER, JOSEPH MASON (jcurrier@southalabama.edu)	Psychology	Professor	BA, University of St Thomas MA, Wheaton College PHD, University of Memphis
FOSTER, JOSHUA D. (foster@southalabama.edu)	Psychology	Professor	BS, Old Dominion University MA, Towson University PHD, University of Georgia
HILL, BENJAMIN DAVID (bdhill@southalabama.edu)	Psychology	Professor	BS, Coastal Carolina University MA, Wake Forest University PHD, Louisiana State University
ISEN, JOSHUA D. (isen@southalabama.edu)	Psychology	Associate Professor	BA, University of California-Berk MA, University of Southern CA PHD, University of Southern CA
KELLEY, NANCY JO (nkelly@southalabama.edu)	Psychology	Professor	BSW, Moorhead State University MA, University of Chicago PHD, University of Utah
LINDSEY, DAKOTA ROY BAILEY (drlindsey@southalabama.edu)	Psychology	Assistant Professor	BS, Georgia Inst of Tech - Main PHD, Vanderbilt University

LYN, HEIDI (hlyn@southalabama.edu)	Psychology	Associate Professor	BA, University of Pennsylvania BSE, University of Pennsylvania MA, Georgia State University PHD, Georgia State University
POWELL, LAURA AZILEE (lpowell@southalabama.edu)	Psychology	Assistant Professor	BA, University of South Alabama MS, University of South Alabama PHD, University of Southern Miss
SHELLEY-TREMBLAY, JOHN FONTAINE (jstremblay@southalabama.edu)	Psychology	Professor	BS, Colorado State University MA, The New School-A University PHD, Cuny City College
SMITH, PHILLIP N. (pnsmith@southalabama.edu)	Psychology	Professor	BA, Gettysburg College MS, Villanova University MA, Texas Tech University PHD, Texas Tech University
SPIEGEL, JAMIE A. (jspiegel@southalabama.edu)	Psychology	Assistant Professor	BA, Adelphi University MA, SUNY at Stony Brook MS, Florida State University PHD, Florida State University
TURNER, LISA A. (laturner@southalabama.edu)	Psychology	Professor	BS, University of Alabama MA, University of Alabama PHD, University of Alabama
YATES, MARK CHRISTOPHER (myates@southalabama.edu)	Psychology	Associate Professor	BS, Louisiana State University MS, Univ of Louisiana at Monroe PHD, University of Kansas
ZLOMKE, KIMBERLY (zlomke@southalabama.edu)	Psychology	Professor	BA, Saint Louis U-Main Campus MS, Southern Illinois U-Carbondale PHD, Louisiana State University

## Psychology (BA)

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		50-54
<b>Major Requirements</b>		<b>38</b>
<i>Psychology Core Basic</i>		
A. Complete the following:		
PSY 120	Introduction to Psychology	3
PSY 220	Res Design and Analysis I	3
PSY 280	Professions & Careers in Psychology	2
PSY 310	Biological Psychology I	3
PSY 320	Res Design-Analysis II-W	3
<i>Psychology Experimental/Learning</i>		
A. Select two of the following:		6
PSY 416	Cognition	
PSY 420	Psychology of Learning (see footnote table below (p. 372)) <sup>1</sup>	
or PSY 317	Applied Behavior Analysis I	
PSY 428	Perception	
PSY 450	Advanced Data Analysis and Visualization	
PSY 475	Comparative Evolutionary Psy	
<i>Psychology Personality/Social And Abnormal</i>		
A. Select two of the following:		6
PSY 340	Abnormal Psychology	
PSY 435	Social Psychology	

PSY 440	Psychology of Personality	
<i>Psychology Developmental</i>		
A. Complete the following:		
PSY 350	Child and Adolescent Dev	3
or PSY 456	Adult Development and Aging-	
<i>Psychology Capstone</i>		
A. Complete the following:		
PSY 412	History-Systems Psy - W	3
or PSY 414	Introduction to Clin Psych	
<i>Psychology Elective</i>		
Select six hours of PSY electives, excluding PSY 250		6
<b>Minor Requirements</b>		<b>18-24</b>
A minor is required for this degree program		0
<b>A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE</b>		<b>120</b>

### Footnote

<sup>1</sup> You may take either PSY 420 or PSY 317 but not both.

All undergraduates must complete two designated writing credit (W) courses, at least one of which must be in the student's major or minor.

### Notes:

The remaining six hours of electives needed for a major may be taken from any courses not taken previously (excluding PSY 250).

Students who are preparing for graduate study are encouraged to take all courses listed in the undergraduate core and any additional courses recommended by their faculty advisor. Student research is encouraged by the faculty and students may obtain course credit for individual student

research projects in PSY 494. Students pursuing a degree in Psychology also must have a minor in another discipline.

## Undergraduate Studies

The objective of psychology, as a science, is to understand, explain, and predict the behavior of organisms. The Department of Psychology has developed and organized its course offerings to meet three major goals:

1. To provide a strong foundation for those students who plan to enter a graduate school of psychology after completing their undergraduate degree requirements.
2. To assist those students who are planning careers in psychology or in related fields by providing a flexible curriculum that can be designed to meet the career goals of individual students.
3. To meet the needs of those students who are taking psychology courses as part of their liberal arts education.

## Requirements for a Minor in Psychology

A minimum of 21 semester hours in Psychology, including PSY 120 or PSY 121, PSY 220 and 15 semester hours of electives (twelve of those must be in courses numbered 300 or above).

## Additional Information

### Accelerated Bachelor's to Master's Program in Psychology (ABM)

See Graduate School Bulletin for rules for all Accelerated Bachelor's to Master's Programs <https://www.southalabama.edu/bulletin/current/colleges-schools/graduate-school/index.html> (<https://www.southalabama.edu/bulletin/current/colleges-schools/graduate-school/>).

### Program Description

The USA accelerated bachelor's to master's (ABM) in Psychology provides exceptional undergraduate students the opportunity to earn a bachelor's and master's degree at an accelerated pace in Psychology. While still an undergraduate, ABM students may count up to 12 credit hours of graduate course work towards their graduate degree. ABM students typically complete the master's degree within one academic year after completing the undergraduate degree.

Psychology majors are encouraged to apply for the Accelerated Bachelor's to Master's (ABM) Program in Psychology. This program is designed to allow the student to complete the Bachelor's degree in Psychology and the Master's degree in Psychology (Behavior and Brain Sciences program only) in five years.

### Admission Procedures

Admission will be a competitive process. The minimum standards are:

- Have completed at least 90 credit hours
- Have completed at least 30 credit hours at USA
- Must have at least a 3.3 GPA (Cumulative and Psychology)
- Requires 2 letters of recommendation
- Must have a verifiable score on either the ACT, SAT, or GRE

Admission will be based on characteristics of the applicant and research match to the Psychology faculty. Applicants must transmit a personal statement and have two referees submit a letter of recommendation to the graduate program coordinator.

Once admitted into the ABM program, students must maintain at least a 3.0 GPA and remain in good standing to progress into the graduate program.

Completion of the ABM program requires students complete at least 150 approved unique credit hours. To qualify for a baccalaureate degree, a student must complete at least 120 approved semester hours. To qualify for a master's degree a student must complete a minimum of 30 approved semester hours. Generally, undergraduate students are not approved to take more than 12 credit hours of graduate coursework.

### Program Procedures

ABM students may begin taking graduate courses after completing at least 90 hours of undergraduate credit.

Typically, during their senior undergraduate year, students will take 7 graduate credits per semester for 2 semesters (14 hours) while they are also taking undergraduate courses. Of these 14 graduate hours, 6 hours can count toward both degrees (Bachelor's and Master's) if the courses are completed with grades of at least B. Courses with a grade of C can count toward the undergraduate degree but not the graduate degree. Courses with a grade below C cannot count toward the undergraduate or graduate degree.

Upon completing the undergraduate degree, students will apply to the Psychology (Behavioral and Brain Sciences) Master's program. ABM students who are in good standing will be accepted into the Psychology Master's program.

Completion of the Master of Science (Behavioral and Brain Sciences) requires successful completion of all requirements, including at least 36 graduate credit hours. Graduate credit taken while an undergraduate that is completed with at least the grade of B will be transferred into the Master's program upon acceptance and will apply toward the 36 hours required for the Master of Science degree.

A student who withdraws or is dismissed from the ABM program may not count graduate coursework towards both degrees. Graduate courses for which an undergraduate student did not earn an "A" or "B" grade, may not be counted towards the graduate degree.

An ABM student must be a full-time student and must complete all degree requirements for the master's within three semesters of the semester in which they were admitted to the Graduate School. An exception for a fourth semester may be granted where an additional semester is required for final revisions to and submission of a defended thesis. Exceptions to the ABM policy are at the discretion of the Dean of the Graduate School.

## Graduation Plan

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
EH 101	English Composition I	3
MA 110	Finite Mathematics (or higher, Area III, A) <sup>1</sup>	3
Natural Science with Lab	Area III, B	4
PSY 120	Introduction to Psychology <sup>2</sup>	3
		<b>Hours</b>
		<b>15</b>
<b>Spring</b>		
EH 102	English Composition II (or Honors)	3
History	US or Western Civilization: Area IV, A <sup>1</sup>	3
Social/Behavioral Science	Area IV, B <sup>1,2</sup>	3
Elective		
Fine Arts Elective	Area II, C <sup>1</sup>	3

CA 110	Public Speaking	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
Foreign Language I	Area V, A <sup>1</sup>	3
Minor Course	Choose a course from your minor	3
English Literature	Area II, B <sup>1</sup>	3
PSY 280	Professions & Careers in Psychology	2
ST 210	Stat Reason and Application <sup>2</sup>	3
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
Foreign Language II	Area V, A <sup>1</sup>	3
Minor Course	Choose a course from your minor	3
Humanities Elective	Area II, E <sup>1</sup>	3
PSY 220	Res Design and Analysis I	3
Natural Science with Lab	Area III, B <sup>1</sup>	3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
PSY 350 or PSY 456	Child and Adolescent Dev (Pick 1) or Adult Development and Aging-	3
PSY 320	Res Design-Analysis II-W	3
Minor Course	Choose a course from your minor	3
Elective	Choose a course	3
Social/Behavioral Science Elective	Area IV, B <sup>1</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
PSY 412 or PSY 414	History-Systems Psy - W or Introduction to Clin Psych	3
Select one of the following (Pick 2):		3
PSY 416	Cognition	
PSY 420 or PSY 317	Psychology of Learning <sup>3</sup> or Applied Behavior Analysis I	
PSY 428	Perception	
PSY 475	Comparative Evolutionary Psy	
Select one of the following (Pick 2):		3
PSY 340	Abnormal Psychology	
PSY 435	Social Psychology	
PSY 440	Psychology of Personality	
Minor Course	Choose a course from your minor	3
Minor Course	Choose a course from your minor	3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
PSY 310	Biological Psychology I	3
Select one of the following (Pick 2):		3
PSY 416	Cognition	
PSY 420 or PSY 317	Psychology of Learning <sup>3</sup> or Applied Behavior Analysis I	
PSY 428	Perception	
PSY 475	Comparative Evolutionary Psy	
Select one of the following (Pick 2):		3
PSY 340	Abnormal Psychology	
PSY 435	Social Psychology	
PSY 440	Psychology of Personality	
Minor Course	Choose a course from your minor	3
Minor Course	Choose a course from your minor	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Psychology Elective	Choose a course from your minor	3
Psychology Elective	Choose a course from your minor	3

Humanities Elective	3
Elective	3
Elective	3
<b>Hours</b>	
<b>Total Hours</b>	
	<b>119</b>

<sup>1</sup> See General Education Requirements

<sup>2</sup> Recommended Course

<sup>3</sup> You may take either PSY 420 or PSY 317 but not both.

## Psychology (MS) - Thesis Concentration

### Degree Requirements

#### Graduate Studies

The Master of Science degree program in Psychology (BBS) is designed to provide individuals with knowledge of current theories, principles, and methods of psychology in preparation for future work toward a doctoral degree, employment in a research setting or employment in a college teaching position. The Department of Psychology currently accepts applicants to the Master of Science degree program, with an interest in one or more areas of concentration in the Behavioral and Brain Sciences. The available areas of concentration include: Behavioral Statistics/Computational Modeling, Personality and Measurement, Cognitive and Perceptual Processing, Psychophysiology, Social/Developmental Psychology, and Scholarship of Teaching and Learning.

#### Requirements for Regular Admission

Students are typically only admitted for the Fall Semester. Students may be admitted during Spring semester if warranted due to special circumstances approved by all core program faculty. Applicants should submit their materials by **February 15**. The following criteria supplement the Graduate School criteria (see Categories of Admission):

- A bachelor's degree from an accredited institution of higher education
- A minimum grade point average of 3.00 on all undergraduate course work (A=4.0).
- Completion of at least 21 semester hours of psychology courses on the undergraduate level including at least one course in statistics and one in experimental methods.
- Official GRE scores are requested, but not required. Admitted students have traditionally had summed scores above 300 on the verbal and quantitative subtests of the GRE. However, each applicant will be evaluated individually and on a holistic basis. Importantly, strong GRE scores may be beneficial for students looking to offset weaknesses in their application (e.g., low GPA).
- A Statement of Purpose: Detailing the applicant's relevant experiences, career and future plans, and with which core program faculty mentors they would most like to work.
- Students should be prepared to provide the names and email addresses of three recommenders. The recommenders will then be contacted separately and submit their recommendations in a dedicated portal.
- TOEFL scores (for international students only).

#### Accelerated Bachelor's To Master's Program In Psychology (ABM)

The USA accelerated bachelor's to master's (ABM) in Psychology provides exceptional undergraduate students the opportunity to earn a bachelor's and master's degree at an accelerated pace in Psychology.

While still an undergraduate, ABM students may count up to 12 credit hours of graduate course work towards their undergraduate degree. ABM students typically complete the master's degree within one academic year after completing the undergraduate degree.

Psychology majors are encouraged to apply for the Accelerated Bachelor's to Master's (ABM) Program in Psychology. This program is designed to allow the student to complete the Bachelor's degree in Psychology and the Master's degree in Psychology (Behavior and Brain Sciences program only) in five years.

## Requirements for ABM Admission

Admission will be based on characteristics of the applicant and research match to the Psychology faculty. Applicants must transmit a personal statement and have two letters of recommendation sent to the graduate program coordinator. Application material are due by **February 15**. Once admitted into the ABM program, students must maintain at least a 3.0 GPA and remain in good standing to progress into the graduate program. Admission will be a competitive process. The minimum standards are:

- Have completed at least 90 credit hours
- Have completed at least 30 credit hours at USA
- Must complete PSY 220 prior to fall semester of junior year
- Must complete PSY 220 and PSY 320 with a minimum grade of B
- Must have at least a 3.3 GPA (Cumulative and Psychology). In exceptional cases, candidates with a lower GPA may be considered.
- Requires 2 letters of recommendation.
- A Statement of Purpose: Detailing the applicant's relevant experiences, career and future plans, and with which core program faculty mentors they would most like to work.
- Must have a verifiable score on either the ACT, SAT, or GRE
- Taking PSY 490- Research Design and Analysis III is recommended

## ABM Program Procedures

ABM students may begin taking graduate courses after completing at least 90 hours of undergraduate credit. Typically, during their senior undergraduate year, students will take 7 graduate credits per semester for 2 semesters (14 hours) while they are also taking undergraduate courses. Of these 14 graduate hours, 6 hours typically count toward the undergraduate degree. Graduate courses counting toward the graduate degree taken during the senior year must be completed with grades of at least B. Graduate courses with a grade of C can count toward the undergraduate degree but not the graduate degree. Graduate courses with a grade below C cannot count toward the undergraduate or graduate degree. Completion of the ABM program requires students complete at least 150 approved unique credit hours. To qualify for a baccalaureate degree, a student must complete at least 120 approved semester hours. To qualify for a master's degree a student must complete a minimum of 30 approved semester hours. Generally, undergraduate students are not approved to take more than 12 credit hours of graduate coursework.

Upon completing the undergraduate degree, students will apply to the Psychology (Behavioral and Brain Sciences) Master's program. ABM students who are in good standing will be accepted into the Psychology Master's program. A student who withdraws or is dismissed from the ABM program may not count graduate coursework towards both degrees.

An ABM student must be a full time student and must complete all degree requirements for the master's within three semesters of the semester in which they were admitted to the Graduate School. An exception for a fourth semester may be granted where an additional

semester is required for final revisions to and submission of a defended thesis. Exceptions to the ABM policy are at the discretion of the Dean of the Graduate School.

## Requirements for MS Degree for All Students

Behavioral and Brain Sciences students must complete a minimum of 36 semester hours with a minimum grade of B in each course (and a minimum GPA of 3.0) to obtain the Masters of Science degree in Psychology. There are 10 hours of required core courses for all Master's students in Psychology as shown below.

All degree requirements must be completed within seven years from the date of matriculation as a graduate student. If a student has not completed her or his degree requirements at the end of the seven years, the student will have to reapply for admission to the program. If the student is re-accepted, he or she will have to re-start their program upon re-admission.

## Graduate Curriculum

### Behavioral and Brain Sciences Thesis Concentration

Students admitted to the Master of Science in Psychology Behavioral and Brain Sciences thesis concentration must complete the curriculum described below and appropriate electives. A minimum of 36 hours of graduate courses are required.

Code	Title	Hours
<b>Research Methodology/Statistics</b>		
PSY 500	Proseminar in Psychology	4
PSY 501	Research Design and Stats I	3
PSY 502	Research Design and Stats II	3
<b>Comparative/Genetic</b>		
PSY 590 or PSY 575	Sp Top in Psychology - Comparative Psychology	3
<b>Social</b>		
PSY 520 or PSY 522	Personality Res and Theory Soc & Personality Psychology	3
<b>Cognition</b>		
PSY 514 or PSY 586	Learning Cognitive Neuroscience	3
<b>Developmental</b>		
PSY 524 or PSY 570	Lifespan Development Intel Disable/Autism Spec Dis	3
<b>Electives</b>		
Select eight hours of electives		8
<b>Thesis</b>		
PSY 599	Thesis Research (6 - 9 hours)	6
<b>Total Hours</b>		<b>36</b>

## Comprehensive Exam

All students must successfully complete a comprehensive written examination prior to graduation. The comprehensive exam entails a write-up of a research project that is submitted to the student's research mentor by the final week of the first spring semester. The manuscripts is evaluated by the comprehensive exam committee. If the student fails the exam, they will be required to retake it by the end of their second summer term. The comprehensive exam committee will meet regarding individuals who have failed the comprehensive examination two times to determine if remediation and/or a third attempt will be

recommended or if the student will be immediately dismissed from the program. Failure on the third attempt will result in automatic dismissal.

## Psychology Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

#### Minor in Psychology

A minimum of 18 semester hours in Psychology, including

Code	Title	Hours
PSY 120	Introduction to Psychology	3
or PSY 121	Honors Gen Psychology - H	
PSY 220	Res Design and Analysis I	3
PSY Upper Division (300/400) Electives		9
PSY Electives, any level		3
<b>Total Hours</b>		<b>18</b>

## Sociology, Anthropology, And Social Work

### Department Information

Department of Sociology, Anthropology and Social Work website  
<https://www.southalabama.edu/colleges/artsandsci/syansw/>

#### Departmental Mission Statement

The Department of Sociology, Anthropology and Social Work seeks to equip students with conceptual tools to enhance their social and cultural awareness and with methodological tools to obtain empirical knowledge to empower them to engage in improvement of social conditions. Acknowledging the inextricable link between teaching and scholarly research, we strive for excellence in both areas to unite students and faculty in a common experience of learning and discovery through pure and applied research to prepare students for service through careers and civic engagement.

### Degrees, Programs, or Concentrations

- Anthropology (BA) (p. 389)
- Anthropology Minor (p. 390)
- Social Work (BSW) (p. 390)
- Sociology (BA) (p. 392)
- Sociology Minor (p. 393)

## Courses

### Anthropology (AN)

#### AN 100 Intro to Cultural Anthropology 3 cr

Introduces culture as a set of integrated behaviors and meanings learned in a social environment. Explores the diversity of human cultural practices in terms of kinship, gender, religion, subsistence, and politics. Language is emphasized as the means by which culture is transmitted from one generation to the next.

#### AN 101 Intro Archaeology-Bio Anthro 3 cr

The place of people in nature; the origin, development, and differentiation of people as biological organisms; archaeological evidence of early human cultures; basic concepts and principles for understanding human cultures. Introduces students to the topics of evolution, genetics, and primates and integrates cultural aspects associated with early human development. The fundamental orientation and methods of archaeology are introduced and an overview of world prehistory presented.

#### AN 121 Biological Anthropology 3 cr

This course asks students to explore what it means to be human, focusing on humanity's biological roots and modern variation between populations. To understand our present condition, we must understand our evolutionary past. We reconstruct this past utilizing data from the fossil record, as well as comparative evidence from modern monkeys and apes. This course discussed the following topics: evolutionary theory, natural selection, population genetics, primate behavior, and human evolution.

**Corequisite:** AN 121L

#### AN 121L Biological Anthropology Lab 1 cr

The lab section of this course is designed to provide a more in-depth understanding of biological anthropology through a variety of exercises and hands-on learning opportunities. Topics covered parallel those in lecture (AN 121) and include evolutionary theory, living primates, primate origins, human evolution, and modern human variation.

**Corequisite:** AN 121

#### AN 190 Special Topics - 3 cr

Different topics of anthropological importance will be studied as announced. This course may be taken twice for credit when content varies, but not for more than six credits.

#### AN 200 Language and Culture 3 cr

Brief introduction to descriptive and structural linguistics, language universals, classification and processes of change in language, language and thought, social cultural factors as expressed in language, origin of language, child language and non-verbal communication.

**Prerequisite:** AN 100 Minimum Grade of D or AN 101 Minimum Grade of D

#### AN 250 Forensic Anthropology 3 cr

This course will introduce students to the field of forensic anthropology. Specifically, it will survey the basic methods employed by forensic anthropologists to recover and analyze human skeletal remains, including the construction of a biological profile and the analysis of skeletal trauma.

#### AN 256 Anthropology of Food 3 cr

Explores the complex ways that food and food-related activities are woven into the human experience. Considers "food and culture" at several critical junctions of human history, as well as contemporary issues relating to food systems, cuisine, identity, and food justice.

#### AN 265 Anthropology of Food 3 cr

Explores the complex ways that food and food-related activities are woven into the human experience. Considers "food and culture" at several critical junctions of human history, as well as contemporary issues relating to food, cuisine, identity, and food justice.

**AN 290 Special Topics - 1-3 cr**

Different topics of anthropological importance will be studied as announced. This course may be taken twice for credit when content varies, but not for more than 6 credits. Prerequisites: AN 100 or AN 101 or permission of instructor.

**Prerequisite:** AN 100 Minimum Grade of D or AN 101 Minimum Grade of D

**AN 300 Thinking Anthropologically 1 cr**

This one-credit hour course is designed to expose anthropology majors to important applied concepts in our field, with a particular emphasis on scientific literacy and professional development. Through short lectures, guided activities, facilitated discussions, and student presentations, this course will help our majors identify and engage in practical skills to enhance their success as students as well as in their chosen post-graduation career paths.

**Prerequisite:** AN 100 Minimum Grade of C and AN 101 Minimum Grade of C and AN 121 Minimum Grade of C and AN 121L Minimum Grade of C

**AN 305 Arch Method and Theory 3 cr**

The theoretical basis of archaeology, and the various methods used to discover and interpret the human past from material evidence.

**Prerequisite:** AN 100 Minimum Grade of D or AN 101 Minimum Grade of D

**AN 314 North American Archaeology 3 cr**

This course explores over 10,000 years of North American archaeological record, primarily investigating the unwritten histories of Native American people through archaeological remains including architecture, art, foodways, and the tools of everyday life.

**Prerequisite:** AN 100 Minimum Grade of D or AN 101 Minimum Grade of D

**AN 315 Maya, Aztec, & Inca 3 cr**

This course explores the human cultures of Mesoamerica and the Andes region of South America through archaeological remains including architecture, art, foodways, and the tools of everyday life.

**Prerequisite:** AN 100 Minimum Grade of D or AN 101 Minimum Grade of D

**AN 335 Field Work in Archaeology 4 cr**

Archaeological field and laboratory techniques include excavation, site survey, artifact processing and analysis.

**Prerequisite:** AN 101 Minimum Grade of D

**AN 340 Native American Cultures-W 3 cr**

An ethnographic and ethnohistorical survey of native cultures of North America, including historical and modern groups, with an emphasis on Indians of the Southeast.

**Prerequisite:** AN 100 Minimum Grade of D or AN 101 Minimum Grade of D

**AN 342 Applied Anthropology 3 cr**

Issues surrounding theory and method of applied anthropology. Presentation and analysis of case studies concerning problems in areas such as development, both domestic and in foreign settings, community health, homelessness, drug and alcohol abuse, and others. Prerequisites: AN 100 or permission of instructor.

**Prerequisite:** AN 100 Minimum Grade of D

**AN 345 Research Methods Anthropology 3 cr**

A survey course designed for students majoring in Anthropology and other social science disciplines. The course explores the logic of scientific inquiry with special emphasis on the measurement of theoretical concepts, data analysis, and data collection techniques. Qualitative and quantitative approaches to understanding are presented as both are essential elements of Anthropology's holistic approach to understanding human diversity. Prerequisite: AN 100.

**Prerequisite:** (AN 100 Minimum Grade of D or AN 105 Minimum Grade of D)

**AN 347 Latin Amer Cultures-Societies 3 cr**

A survey of Latin American society and culture from the pre-contract period to the present. Pre-Columbian antecedents, colonial use of land and labor, patterns of race, class and ethnicity, and problems of development are examined. Prerequisite: AN 100 or permission of instructor.

**Prerequisite:** AN 100 Minimum Grade of D

**AN 355 Gender and Anthropology 3 cr**

This course provides an introduction to anthropological themes and debates in gender theory, including an ethnographic survey of women and men in a variety of cultures. Prerequisites: AN 100 or permission of instructor.

**Prerequisite:** AN 100 Minimum Grade of D

**AN 357 Political Anthropology 3 cr**

Authority, power, and conflict are examined cross-culturally and in evolutionary perspective. Particular emphasis is placed on the origins of stratification and the state.

**Prerequisite:** AN 100 Minimum Grade of D

**AN 365 Human Osteology 3 cr**

This hands-on course focuses on the identification of the bones of the human skeleton and its application to specialties within biological anthropology, including bioarchaeology and forensic anthropology. Topics to be covered include human skeletal and dental anatomy, skeletal growth and development, skeletal pathology and anomalies, and the biological profile.

**Prerequisite:** AN 121 Minimum Grade of B or AN 250 Minimum Grade of B

**AN 370 Human Origins and Evolution 3 cr**

This lecture, discussion, and lab-based seminar will examine the fossil, genetic, and archaeological evidence for human evolution - from the origins of primates to anatomically modern humans - with particular attention given to our hominid ancestors. Students will learn about the nature and timing of these developments, current theoretical models used to explain such changes, and the implications of these evolutionary trends for understanding modern human adaptations. Important fossil sites and associated material culture will also be used to provide insight into hominid biocultural behavior. Students must take AN 121/L (formerly AN 210/L) as a prerequisite for this course, or receive permission of the instructor.

**Prerequisite:** AN 210 Minimum Grade of C and AN 210L Minimum Grade of C or AN 121 Minimum Grade of C and AN 121L Minimum Grade of C

**AN 390 Special Topics 1-3 cr**

Different topics of anthropological importance will be studied as announced. This course may be taken twice for credit when content varies, but not for more than 6 credits.

**Prerequisite:** AN 100 Minimum Grade of D or AN 101 Minimum Grade of D

**AN 394 Directed Studies - 1-3 cr**

Supervised readings or projects. No more than a total of six hours may be taken for credit. Requires prior approval of instructor.

**Prerequisite:** AN 100 Minimum Grade of D or AN 101 Minimum Grade of D

**AN 435 Museum Methods in Archaeology 3 cr**

Archaeology as practiced in museums, including the registration and curation of archaeological collections; artifact conservation; public interpretation of the past; and exhibit design, composition, construction, and evaluation.

**Prerequisite:** AN 100 Minimum Grade of D or AN 101 Minimum Grade of D

**AN 440 Adv Archaeological Field Meth 4 cr**

This course involves participant instruction in archaeological field and laboratory techniques, including advanced excavation and survey methods, soils analysis, site mapping with electronic instruments, sampling strategy, and site interpretation. Requires permission of instructor.

**AN 442 Cultural Resource Management 3 cr**

This course examines the interaction between archaeologists, architectural historians, historic preservationists, state and federal governments, and the public with regard to cultural resources. The focus of the course is identification, evaluation, and mitigation of cultural resources. Related topics discussed include public perceptions of the past, ethics, and being a professional in historical preservation.

**AN 454 Anthropological Theory - W 3 cr**

An advanced historical survey of anthropological ideas, with primary emphasis on contemporary theoretical orientations and debates. Examines anthropology's often contested status as a science or humanity.

**Prerequisite:** AN 100 Minimum Grade of D

**AN 456 Health and Culture - W 3 cr**

This course provides an overview of a broad range of subjects in the fields of medical anthropology and medical sociology. It analyzes the ways in which health, illness and healing are embedded in their cultural and social contexts. And it investigates healing practices and meanings attributed to health and illness in a variety of cultures and social settings.

**Prerequisite:** AN 100 or permission of instructor.  
**Prerequisite:** (AN 100 Minimum Grade of D or AN 105 Minimum Grade of D)

**AN 470 Bioarchaeology - W 3 cr**

This class introduces students to the field of bioarchaeology, the study of human remains in archaeological contexts. Through lectures, readings, activities, and discussions, students will examine how skeletal remains are used to reconstruct life in the past, including patterns of subsistence, diet, disease, demography, biological relatedness, and physical activity.

**Prerequisite:** AN 250 Minimum Grade of B or AN 365 Minimum Grade of B

**AN 490 Special Topics 3 cr**

Different topics of anthropological importance will be studied as announced. This 3 hour course may be repeated for credit as long as the content varies up to a maximum of 6 credit hours. Requires junior or senior standing; or permission of instructor.

**Prerequisite:** (AN 100 Minimum Grade of D or AN 101 Minimum Grade of D)

**AN 492 Senior Seminar - 3 cr**

Course specifically designed for majors in their senior year. Some topical aspect of the discipline will be analyzed.

**Prerequisite:** AN 100 Minimum Grade of D or AN 101 Minimum Grade of D

**AN 496 Anthropology Internship 3-6 cr**

Provides an opportunity to combine academic principles with practical experiences in an agency dealing with human relationships, cultural resources, or primate research. Specifics of the assignment result from mutual agreement among student, course director and agency. Course may be repeated for a maximum of six hours of credit. Requires advanced standing in Anthropology major and permission of course instructor.

**AN 498 Senior Thesis 3 cr**

With the guidance and advice of a faculty mentor, student will identify and carry out an in-depth, year-long, field research project in anthropology. The Senior Thesis will be judged and graded by a committee of three faculty, chaired by the faculty mentor. This course will be repeated to continue the thesis during a second semester. This is a 3 hour course that is expected to be repeated once for a total of six hours. Must be an Anthropology major; senior status; permission of a faculty mentor through an AN 394 Directed Studies course taken during the junior year.

**Prerequisite:** AN 394 Minimum Grade of D

**AN 499 Honors Senior Thesis - H 3 cr**

With the guidance and advice of a faculty mentor, honors students will identify and carry out an in-depth, year-long field research project in anthropology. The Honors Senior Thesis will be judged and graded by a committee of three faculty, chaired by the faculty mentor. This is a 3 hour course that can be repeated once for a total of six hours. Must be an Anthropology major; senior status; permission of a faculty mentor; grade point average of 3.5; and completion of a thesis prospectus prepared in consultation with the faculty mentor through an AN 394 Directed Studies course taken during the junior year.

**Prerequisite:** AN 394 Minimum Grade of D

**AN 535 Museum Methods in Archaeology 3 cr**

Archaeology as practiced in museums, including the registration and curation of archaeological collections; artifact conservation; public interpretation of the past; and exhibit design, composition, construction, and evaluation.

**AN 542 Adv. Cultural Resource Mgmt. 3 cr**

This course examines the interaction between archaeologists, architectural historians, historic preservationists, state and federal governments, and the public with regard to cultural resources. The focus of the course is identification, evaluation, and mitigation of cultural resources. Related topics discussed include public perceptions of the past, ethics, and being a professional in historical preservation.

**AN 594 Directed Studies - 1-3 cr**

Field or library projects through which special interests of the student may be pursued on a tutorial basis with a graduate faculty member. Arrangements must be made prior to registration. Permission of the Department Chair is required.

## Gerontology (GRN)

### GRN 272 Gender and Aging 3 cr

This course examines the dynamics of gender and aging within society from an interdisciplinary perspective. Students will be introduced to controversies in gender over the life course. These include, but are not limited to, definitions and cultural boundaries, gender in childhood, gender and relationships, gender in education and the workplace, gender and sexuality, as well as gender in late life.

### GRN 290 Special Topics - 3 cr

This designation is used for interdisciplinary courses on aging on a variety of subjects. This course does not replace any course in a single discipline. May be repeated as long as the topic changes, to maximum of six semester hours.

### GRN 435 Health Disparities Life Span 3 cr

This course examines differences in health status across the life span. The course will focus heavily on racial/ethnic and socioeconomic disparities in health applying a social determinants' of health framework. Issues that will be considered include how income, education, neighborhood conditions, access to health care, and other community factors shape opportunities to be healthy. The course is cross-listed as SY 435 and GRN 435 and has been approved as an elective for the Undergraduate Certificate in Gerontology and the interdisciplinary minor in Gerontology.

**Prerequisite:** SY 109 Minimum Grade of D

**Cross-Listed:** SY 435

### GRN 490 Special Topics 3 cr

This course is designated for upper division students and graduate students, particularly those pursuing studies for the Certificate of Gerontology. The course content focuses on interdisciplinary treatments on various topics on aging. This course does not replace any course in a single discipline. (Examples of special topics: Trends and Issues in Gerontology; Leadership and Advocacy in Gerontology; Housing and Lifestyle Changes over the Life Course). May be repeated as long as the topic changes, to maximum of six semester hours.

**Prerequisite:** SY 372 Minimum Grade of D

### GRN 494 Directed Studies 1-3 cr

Under the guidance of a faculty member, the student will pursue directed research on readings of an approved topic in Gerontology. May be repeated as long as the topic changes, to a maximum of six semester hours. Requires permission of Director of Gerontology.

**Prerequisite:** SY 372 Minimum Grade of D

### GRN 496 Internship - Gerontology 3,6 cr

This course is to provide a practicum experience in gerontology in a setting selected by the student and approved by the Program Director. The course emphasis is on the experiential learning process and outcomes. The undergraduate student will apply theoretical concepts in specific areas of interest related to aging and intergenerational relations. Interns will meet as a group three times during the semester for orientation, professional development, and evaluation activities. The 3-hour internship requires 100 contact hours; the 6-hour internship requires 200 hours. Permission of Director of Gerontology is required.

**Prerequisite:** SY 372 Minimum Grade of C

### GRN 535 Health Disparities Life Span 3 cr

The main purpose of this seminar is to provide students with an understanding of how social factors contribute to racial/ethnic, socioeconomic and gender disparities in health and health care. We will examine how dyadic relationships such as interpersonal forms of discrimination, marriage, and social ties may contribute to health disparities. We will also examine the ways in which neighborhood and community context, as well as inequalities in socioeconomic status materially shape health and access to health care services. The course is cross-listed as GRN 435/535 and SY 435/535 and has been approved as an elective for the Undergraduate/Graduate Certificate in Gerontology and the interdisciplinary minor in Gerontology.

**Cross-Listed:** SY 535

### GRN 594 Dir St in Gerontology - 1-3 cr

Under the guidance of a faculty member, the student will pursue directed research or readings of an approved topic in Gerontology. May be repeated as long as the topic changes, to maximum of six credit hours. Requires permission of the Director of Gerontology.

### GRN 596 Internship - Gerontology 3,6 cr

This course is to provide a practicum experience in gerontology in a setting selected by the student and approved by the Program Director. The course emphasis is on the experiential learning process and outcomes. The graduate student will apply theoretical concepts to leadership roles, conducting research and influencing social and health care policies related to aging and intergenerational relationships. Interns will meet as a group three times during the semester for orientation, professional development, and evaluation activities. The 3-hour internship requires 100 contact hours; the 6-hour internship requires 200 hours. Permission of Director of Gerontology is required.

**Prerequisite:** SY 523 Minimum Grade of B

### GRN 597 GRN Teaching Apprenticeship 1-3 cr

Directed Studies/Apprenticeship that focuses on teaching Gerontology. The student will work directly with a member of the Gerontology graduate faculty to learn pedagogy, innovation in teaching, and course content that will equip the student for future teaching assignments. Many PhD programs offer both Teaching Assistantships and Research Assistantships. Gerontology students need to show evidence that they have had some teaching-related experience to compete strongly for the TA position. This course is also appropriate for students who anticipate careers in teaching within the field of Gerontology (aging or intergenerational studies). Arrangements must be made prior to registration. Permission of the Program Director is required.

**Prerequisite:** SY 372 Minimum Grade of C

## Museum Studies (MUM)

### MUM 201 Intro to Museum Studies 3 cr

This course is designed to provide a general introduction to museum history, practice, and the role of museums in contemporary society. The class will explore a range of museum positions, curatorial practices, collection management, museum administration, and the academic and public roles museums play in society.

**Prerequisite:** EH 102 Minimum Grade of C

### MUM 290 Special Topics - 3 cr

Different subjects or themes in museum studies as announced. This course may be repeated twice when content varies, for a maximum of nine credit hours. Prerequisite: To be announced.

**MUM 390 Special Topics - 3 cr**

Different subjects or themes in museum studies as announced. This course may be repeated twice when content varies. for a maximum of nine credit hours. Prerequisite: To be announced.

**Native American Studies (NAS)****NAS 101 Intro Native American Studies 3 cr**

This course is designed to provide a general introduction to Native American Studies. The class will explore a range of topics covering historical and contemporary issues from the perspective of Native Americans.

**NAS 390 Directed Studies- 1-6 cr**

Directed Studies consists of readings or projects relating to Native American Studies chosen by the student and completed under direct supervision of the course director.

**NAS 490 Special Topics - 3 cr**

An investigation of issues and concepts in Native American Studies for advanced undergraduate students. May be repeated, when content varies, for a total of six hours.

**NAS 496 Internship Native Am Studies 3-6 cr**

Internship in Native American Studies allows the student to combine academic learning with practical experience as an intern with a position relevant to Native American Studies.

**Social Work (SW)****SW 200 Intro to SocWork-SocWelfare 3 cr**

Introduction to the profession of social work. Topics include historical development, nature of profession, professional associations, practice theory, values and ethics.

**SW 201 Human Behav/Social Environ I 3 cr**

The Person-In-Environment model of human behavior. Course examines individual, family and group behavior in the social context.

**Prerequisite:** (BLY 101 Minimum Grade of C and BLY 101L Minimum Grade of C) or (BLY 121 Minimum Grade of C and BLY 121L Minimum Grade of C) and SY 109 Minimum Grade of C and PSY 120 Minimum Grade of C

**Corequisite:** SW 401

**SW 214 Exploring Social Work Practice 3 cr**

Service learning experience in social work. Thirty hours of agency-based experience is required. Students must attend 2 1/2 hour weekly skills development lecture.

**SW 220 Power, Privilege & Oppression 3 cr**

This course is designed as an introduction to the field of social work with diverse populations. The purpose is to prepare students to work with diverse groups of people locally and globally. This course examines issues related to the creation of race in America, the oppression of people on the basis of their gender, ethnicity, race, culture, sexual orientation, physical or mental ability, age, religion and national origin.

**SW 300 Ethical Decision-Making-W 3 cr**

This course provides a more in-depth analysis of the Social Work Code of Ethics and overviews frameworks for ethical decision-making. The emphasis is on improving students' ability to more readily identify ethical problems and thoughtfully work through these issues through the use of case studies.

**Prerequisite:** EH 101 Minimum Grade of C or EH 102 Minimum Grade of C

**SW 301 Social Welfare Policy 3 cr**

Social Policy in relation to Social Work Practice. Course addresses social policy analysis, social advocacy, diversity and social and economic justice.

**SW 302 Human Behav/Social Environ II 3 cr**

The Person-In-Environment Model of human behavior. Course examines task groups, organizations, and community systems in the social context.

**Prerequisite:** SY 201 Minimum Grade of C

**Corequisite:** SW 402

**SW 310 Community Context 3 cr**

The rural and urban contexts of social work practice. Emphasis of the course is placed on how these contexts affect human behavior and the practice of social work.

**SW 340 Family Violence 3 cr**

Study of the social problems of family violence including domestic violence, intimate partner violence, child abuse, and elder abuse. The role of the social worker, social services, and social policy will be examined.

**SW 350 Child Welfare Services 3 cr**

General survey of the Social Work field of child welfare services with a focus on child protective services.

**SW 360 SW Practice in Mental Health 3 cr**

This course is designed to provide the student with an overview of the mental health system and focuses specifically on issues related to the role of a social worker in a mental health setting.

**SW 380 International SW Practice 3 cr**

This course explores social work as an international profession and the application of social work practice methods with various populations around the world. Students will learn cross-cultural practice methods and apply conceptual frameworks, such as those based on human rights, social development, and sustainable development, to a range of global social problems.

**SW 401 Generalist Practice I 3 cr**

The Generalist Model of social work applied to individuals, families, and groups. Emphasis is placed on diversity, social work values and ethics, and evidence based practice.

**Prerequisite:** SY 109 Minimum Grade of C and PSY 120 Minimum Grade of C and (BLY 101 Minimum Grade of C and BLY 102 Minimum Grade of C) or (BLY 121 Minimum Grade of C and BLY 122 Minimum Grade of C)

**Corequisite:** SW 201

**SW 402 Generalist Practice II 3 cr**

The Generalist Model of social work applied to organizations, communities and task groups. Emphasis is placed on diversity, social work values and ethics and social justice.

**Prerequisite:** SW 401 Minimum Grade of C

**Corequisite:** SW 302

**SW 412 Field Instruction 3-12 cr**

Field Instruction in social work. Four hundred five (405) hours of supervised experience in social work setting. SW 412 can be taken during a single semester or over multiple semesters.

**Prerequisite:** SW 402 Minimum Grade of C and SY 382 Minimum Grade of C

**Corequisite:** SW 414

**SW 414 Senior Seminar - W 3 cr**

This is the capstone senior level course in social work. Class discussion and assignments are designed to facilitate integration between field instruction experience and curriculum content. SW 412 must be taken concurrently.

**Prerequisite:** SW 401 Minimum Grade of C and SW 402 Minimum Grade of C and SY 382 Minimum Grade of C

**Corequisite:** SW 412

**SW 420 Social Work in Health Care 3 cr**

Study of the practice of social work in the health care field. Major social policy issues, service delivery systems, relationships with other health care professionals, and practice issues related to social work will be covered.

**SW 460 Rural Social Services 3 cr**

This elective course in rural social services provides a survey of professional services with rural and small communities. It is open to all majors. Included are topics related to services, social policy, rural culture and behavior, professional values and ethics, diversity, and services.

**SW 490 Special Topics 3 cr**

Advanced topics in Social Work. May be repeated twice for elective content when topic varies.

**Sociology (SY)****SY 109 Introductory Sociology 3 cr**

Sociology is the scientific study of social behavior and social phenomena. This course is a survey intended to introduce students to the major concepts, issues, theory, methods and substantive findings of the discipline. Topics may include the impact of social structures on behavior and opportunity, inequalities, socialization, culture, religion, crime and deviance, the family, modernity, and globalization. Core Course.

**SY 112 Social Problems 3 cr**

A study of persistent and recurring social conditions and individual and group behaviors that are contrary to the expressed norms of community members and that community members strive to control through collective action. Core Course.

**SY 200 Sex, Power, & Politics 3 cr**

An analysis of social patterns in sexual identities, behaviors, and desires, including an introduction to history of sexuality, contemporary theories of sexuality, and the politics of sexuality today.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 212 Field of Social Welfare 3 cr**

A survey of the field of social welfare and of social-work functions. Rise, development, and present organization of social welfare agencies and the social services. Brief introduction to the techniques of the social-work profession.

**SY 220 Marriage and the Family 3 cr**

The organization, function, and present status of the family, primarily in the United States. Problems of mate selection, marital adjustment, and parent-child relations treated on the basis of recent and current social change.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 241 Criminology 3 cr**

The nature and causation of criminal behavior. Evaluation of theories and research.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 242 Corrections 3 cr**

Administration of criminal justice in American society. Federal state and local prison systems; management and treatment of criminals; history of punishment; jail detention, probation and parole; prison activities; rehabilitation.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 290 Special Topics - 3 cr**

Selected topics in sociology. May be taken for a maximum of nine hours credit when the subject matter varies.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 305 Sociology of Sport 3 cr**

Addresses the issues of rise and development of Sport in North America and relates these developments to other societal structures and processes.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D

**SY 312 Social Work Applications 3 cr**

Focus is on the application of social-behavioral science orientations to the amelioration of social problems and public policy issues.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D and SY 212 (may be taken concurrently) Minimum Grade of D

**SY 315 African American Families 3 cr**

The study of family structure, mate selection, marital and other romantic interaction, parenting and kinship among African Americans.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 319 Sociology of Drugs 3 cr**

This course examines social, historical, cultural, and political factors that shape ideas about drugs and views on drug use, drug treatment, and drug policy.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 340 Juvenile Delinquency 3 cr**

A study of the nature, extent, treatment, and prevention of delinquent behavior among youth in the United States and other urban industrial societies.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 350 Evolutionary Sociology 3 cr**

This course considers social behavior and social phenomena as manifestations of the observable properties of the organisms that make up societies (i.e. 'human nature'). The core of the course will involve constructing a brief but sound model of human behavior and then seeing how well that model can help explain a spectrum of behavior and phenomena. In addition, we will consider different religious, cultural, and scientific views on human nature, as well as some of the classic philosophical debates (e.g. nature/nurture) that revolve around questions of human nature.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 352 World Religions 3 cr**

This course is an introduction to the religions of the world. It is divided into three basic units: Indigenous Religions (of Africa, North America, and Oceania); Eastern Religions (Hinduism, Buddhism, Daoism, Confucianism, Jainism) and Western Religions (Judaism, Christianity, Islam). The emphasis is on grasping the core principles of each tradition, seeing the ways in which religion meets basic human needs, and religion as a cultural artifact that borrows, adapts, and changes over time. Course is identical with PHL 352 and REL 352. Credit cannot be received for both SY 352 and PHL 352 or REL 352.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**Cross-Listed:** PHL 352, REL 352

**SY 360 Soc of Work and Occupations 3 cr**

Examines work, occupations and careers in modern societies. Course topics include: the evolution of work, the meaning of work, the demography of work, unions, jobs, occupations, professions, industries, classes, unions, technology and alienation, labor market segmentation, nonstandard and contingent work, work and the family, work and economic inequality, job satisfaction and organizational commitment.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 372 Social Gerontology - W 3 cr**

Sociological aspects of aging in contemporary American society. Within its parameters are related problems of economics, health, and social contacts.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 381 Research Methods 3 cr**

The goal of this course is to provide you with a foundation in social science research methods. The course will cover basic concepts used in social science research, sampling, survey instrument construction, observational and experimental research designs, and qualitative research. In addition to providing you with a foundation in research methods, SY 381 and SY 382 will give you the computing skills needed to create and analyze quantitative data using SPSS and EXCEL.

**Prerequisite:** SY 109 Minimum Grade of D

**SY 382 Research Analysis 3 cr**

This course, along with SY 381, provides a foundation in social research methods and statistics. In this course you will develop a mastery of descriptive and inferential statistics, basic probability theory, and significance testing. The computer lab portion of this course will continue to build upon the research and skills you acquired in SY 381.

**Prerequisite:** SY 109 Minimum Grade of D

**SY 390 Special Topics 1-6 cr**

Special topics courses are classes that are not part of the sociology curriculum, and so may be offered irregularly, or even only once, but for which students receive credit as a junior-level (upper division) elective.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 394 Directed Studies 1-3 cr**

Field or library pursuits through which special interests or needs of the student may be pursued on an individual, supervised, or tutorial basis. No more than six hours may be used in the degree. Arrangements must be made with the instructor prior to registration. Requires permission of Department Chair.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 401 Disasters and Society 3 cr**

The Sociological examination of natural, technological, and human-initiated disasters. The social impacts of disasters will be reviewed through case-studies of major twenty-first century catastrophes and issues of community vulnerability, resiliency and recovery will be addressed.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 406 Sociological Theory 3 cr**

An exploration of the role of theorizing, with introduction and application to major paradigms of social explanation from the 18th Century to today.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**Cross-Listed:** SY 376

**SY 407 Social Research Design 3 cr**

This course provides an introduction to sociological and social science methodology, including epistemology, research ethics, observational and experimental designs, survey and qualitative methods of data collection, comparative and historical research, and program evaluation.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 408 Industrial Sociology 3 cr**

Examines the historical development and contemporary structure of American industry as social choices shaped by contending forces; also explores alternative industrial futures.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D

**SY 409 Social Research Analysis 3 cr**

This course provides instruction in quantitative analysis in sociological and social science research. It provides instruction in basic and inferential statistics including, descriptive statistics, probability, confidence intervals, one and two sample significance tests, Chi Square tests of independence, and an introduction to bivariate linear models. The course also provides computer instruction in the use of SPSS software.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 411 Population - W 3 cr**

An introduction to the study of human populations: population growth and decline; fertility, mortality, and migration; characteristics of populations; population, food and economic development; demographic analysis; population policies.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 412 Applied Sociology - W 3 cr**

A survey of the specialties and techniques of professional sociologists, including the kinds of social problems and how these problems are addressed.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 413 Qualitative Inquiry 3 cr**

This course surveys forms of qualitative inquiry: ethnography and participant observation, focus groups, in-depth interviews, narrative inquiry, case study, historical research, and oral history.

**Prerequisite:** (SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D)

**SY 415 Soc of Mental Health-Illness 3 cr**

A sociological analysis of mental health and illness including social epidemiology, effects of social integration and support, labeling mechanisms, social evolution of treatment systems, and cultural factors in the recognition and diagnosis of disorders.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 418 Adv Family Studies 3 cr**

This course examines interaction patterns in different types of family structure, with emphasis on marital adjustment, parent-child interaction, and sibling interactions.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 420 Sociology of Religion 3 cr**

The study of religion is at or near the core of sociology. This course is an exploration of the sociological dimensions of religion within the classical theoretical traditions of Durkheim, Weber and Marx, augmented with more recent theory and research. We consider the definition, functions and origins of religion, the role of beliefs and rituals in it, the interaction of religion with other aspects of society, and secularization of the future of religion, among other topics.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 421 Social Stratification - W 3 cr**

This course introduces students to the patterns and processes of inequality in its major forms. It includes discussions of social class, sex, race, ethnicity, and policy. Additionally, this course satisfies the University's writing requirement. As such, students will acquire knowledge through writing assignments and will demonstrate mastery of new information in written form.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 425 Urban Sociology - W 3 cr**

The study of urbanization and urban ways of life. Emphasis is given to relationships between urbanization and changes in the social organization of urban areas. Urban problems and planning are analyzed in terms of social change at the structural level.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D

**SY 426 Social and Cultural Change 3 cr**

This course is designed to familiarize students with major theories and processes of social and cultural change, the factors influencing social and cultural change, diffusion of innovations, and adoption of new ideas and practices.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**Cross-Listed:** AN 426

**SY 428 Gender and Society 3 cr**

Description and analysis of gender roles and inequality in contemporary Western societies in cross-cultural and historical context.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 430 Sociology of Culture 3 cr**

Examines the major perspectives in the sociology of culture, with emphasis on the problems of culture in modern and post-modern societies.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 435 Health Disparities Life Span 3 cr**

This course examines differences in health status across the life span. The course will focus heavily on racial/ethnic and socioeconomic disparities in health applying a social determinants' of health framework. Issues that will be considered include how income, education, neighborhood conditions, access to health care, and other community factors shape opportunities to be healthy. The course is cross-listed as SY 435 and GRN 435 and has been approved as an elective for the Undergraduate Certificate in Gerontology and the interdisciplinary minor in Gerontology.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**Cross-Listed:** GRN 435

**SY 440 Deviance and Social Control 3 cr**

The study of societal norms and their violation. Focus on social construction, control, condemnation and accommodation of deviant behavior.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 445 Majority-Minority Relations-W 3 cr**

The study of relationships between 'majorities' and 'minorities' in society. This course will explore the macro- social forces that bring these relationships about and the institutional setting where different group members come into contact with each other. A variety of key concepts and theories surrounding majority and minority relations will be defined and analyzed. Historical and current case studies will be examined to illustrate the development of these relations.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 447 Sociology of Law 3 cr**

Overview of predominant theoretical approaches, classical and contemporary, in legal sociology, and their application. Undergraduates require permission of instructor.

**Prerequisite:** SY 109 Minimum Grade of D

**SY 455 Self and Certainty 3 cr**

This course explores the complex relationship between the individual and the groups they are a part of, with a special emphasis on the challenges of identity and knowledge in modern society. Draws primarily upon the work of classical social psychologists like Mead, Berger & Luckman, Foggman and Simmel, as well as modern extensions of their work.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 458 Crowds Riots Soc Movements - W 3 cr**

A survey of the theoretical and historical foundations of collective behavior, riots, and social movements. A variety of situations and behaviors will be analyzed including social movement participation; growth and organization; strategies, tactics, and consequences for participants and society.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 459 Medicine and Society 3 cr**

The sociological study of medical care, with topics ranging from the micropolitics of doctor-patient communication through macro-level investigation of comparative health care systems.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 460 Social Organization - W 3 cr**

This course provides the student with a comprehensive behavioral science approach to understanding modern social organizational trends.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 467 Environmental Sociology 3 cr**

This course will cover topics such as public awareness and the social construction of environmental issues, especially acid rain, biodiversity, biotechnology and technological disasters.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 472 Sociology of Aging and Family 3 cr**

The class focuses on sociological theories of family and aging and the linkages of families and their aging members with organizations that deliver services, including: government agencies, healthcare organizations, legal services, corporations/businesses, and religious organizations.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 475 Dev of Sociological Theory 3 cr**

The development of theories in sociology, as related to social thought, institutions, and theories of social progress.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 490 Special Topics 1-3 cr**

A sociological examination of advanced topics. This course may be taken for a maximum of 9 hours credit when the subject matter varies.

**Prerequisite:** Upper division status.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 492 Seminar - W - 3 cr**

Selected topics in sociology for students with junior or senior standing.

Note: SY 492 is not intended for graduate students.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 494 Directed Studies 1-3 cr**

Designing a study, carrying out the research, and writing the result of a thesis. No more than six hours credit may be applied to major.

**Prerequisites:** Requires upper division status and permission of department chair.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 496 Sociology Internship 3-6 cr**

Provides an opportunity to combine academic principles with practical experience in an agency dealing with human relationships. Specifics of the assignment result from a mutual agreement among student, faculty supervisor and agency. Course may be repeated for a maximum of six hours of credit. The 3-hour internship requires 100 contact hours: the 6-hour internship requires 200 contact hours. Requires permission of Faculty Supervisor and Department Chair.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 499 Honors Research Hours-H 1-3 cr**

This course awards hours of course credit within the SY department to University and/or Departmental Honors students who are working with a research mentor in the SY department on a thesis or capstone project of appropriate scope.

**SY 500 Orientation 1-3 cr**

Introduces students to graduate study in sociology by providing information about applicable academic degrees, career opportunities, and professional activities in the discipline.

**SY 501 Disasters and Society 3 cr**

The sociological examination of natural, technological, and human-initiated disasters. The social impacts of disasters will be reviewed through the case-studies of major twenty-first century catastrophes and issues of community vulnerability, resiliency, and recovery will be addressed.

**SY 505 Adv Principles of Sociology 3 cr**

Systematic review and integration of major propositions, concepts, and research data from various fields of sociology. Development of a comprehensive orientation for the description and explanation of social phenomena.

**SY 506 Sociological Theory 3 cr**

An exploration of the role of theorizing, with introduction and application to major paradigms of social explanation from the 18th Century to today.

**SY 507 Social Research Design 3 cr**

Advanced treatment of topics in sociological methodology, including: logic of scientific explanation; experimental, quasi-experimental, survey and qualitative research designs; and research ethics.

**SY 509 Social Research Analysis 3 cr**

This is an applied course in the application of data analysis and statistical methods in social research. The course covers basic regression models with limited and categorical independent variables. It assumes knowledge of basic and inferential statistics. The course includes weekly instruction in data analysis and statistical computer use. This course is usually taught in the Spring semester.

**SY 511 Introduction to Population 3 cr**

An introduction to the study of human populations: population growth and decline, fertility, mortality and migration: characteristics of populations: population, food and economic development: demographic analysis: population policies. Students will be able to substantively analyze in any discussion of past and future population problems and its related factors that affect different societies.

**SY 512 Applied Sociology 3 cr**

A survey of the specialties and techniques of professional sociologists and the conditions under which sociological knowledge is applied to social problems, the kinds of problems addressed, and the degree of effectiveness of applications. A variety of methods will be discussed including social impact analysis, program evaluation, needs assessment, and social indicators. Requires SY 508 and SY 509 or instructor's permission.

**Prerequisite:** SY 508 Minimum Grade of B and SY 509 Minimum Grade of B

**SY 513 Qualitative Inquiry 3 cr**

This course surveys forms of qualitative inquiry: ethnography and participant observation, focus groups, in-depth interviews, narrative inquiry, case study, historical research, and oral history.

**SY 515 Soc of Ment Health and Illness 3 cr**

A sociological analysis of mental health and illness including social epidemiology, effects of social integration and support, labeling mechanisms, social evolution of treatment systems, and cultural factors in the recognition and diagnosis of disorders.

**SY 518 Advanced Family Studies 3 cr**

This course examines interaction patterns in different types of family structure, with emphasis on marital adjustment, parent-child interaction, and sibling interactions.

**SY 520 Sociology of Religion 3 cr**

An analysis of religion as a social institution with emphasis on modern western societies. Topics include the function of religion for societies and individuals, changing patterns of religious belief and practice, and the relationship between religion and other social institutions.

**SY 521 Poverty, Inequal/Social Stat 3 cr**

A sociological approach to the study of class, status, power and poverty with a particular emphasis on American society. Students will present material in the classroom and conduct an advanced research project in the area of social inequality.

**SY 523 Aging in American Society 3 cr**

The role of the elderly in today's society, problems, adaptability, crises, functions. Comparisons with youth and working adults. Survey of social programs and resources in formal and informal support networks.

**SY 528 Gender and Society 3 cr**

Description and analysis of gender roles and inequality in contemporary Western societies in cross-cultural and historical context.

**SY 530 Sociology of Culture 3 cr**

This course will introduce students to the major perspectives in the field of the sociology of culture. Particular attention will be given to each perspective's diagnosis of the problems of culture in modern and postmodern capitalist societies.

**SY 535 Health Disparities Life Span 3 cr**

The main purpose of this seminar is to provide students with an understanding of how social factors contribute to racial/ethnic, socioeconomic and gender disparities in health and health care. We will examine how dyadic relationships such as interpersonal forms of discrimination, marriage, and social ties may contribute to health disparities. We will also examine the ways in which neighborhood and community context, as well as inequalities in socioeconomic status materially shape health and access to health care services. The course is cross-listed as SY 535 and GRN 435/535 and has been approved as an elective for the Undergraduate/Graduate Certificate in Gerontology and the interdisciplinary minor in Gerontology.

**Cross-Listed:** GRN 535

**SY 540 Deviance and Social Control- 3 cr**

Deviance includes acts that violate norms. Social control is the groups' efforts to induce people to conform to these norms. This course includes discussions of what actually is deviance, how things become deviant, and how sociologists explain deviance. Several weeks are devoted to talking about specific forms of deviance, ranging from alcohol and drugs to mental illness. The last part of the course is spent discussing elite deviance.

**SY 547 Sociology of Law 3 cr**

Overview of predominant theoretical approaches, classical and contemporary in legal sociology, and their application in empirical studies engaging legal phenomena.

**SY 550 The Community 3 cr**

An advanced consideration of the concept of community.

**SY 555 Self and Certainty 3 cr**

This course explores the complicated relationship between individuals and the groups they are part of, with a special emphasis on the challenges of identity and knowledge in modern society. Draws primarily upon the work of classical social psychologists like Mead, Berger, Luckmann, Foggman and Simmel as well as modern extensions of their work.

**SY 559 Medicine and Society 3 cr**

The sociological study of medical care, with topics ranging from the micropolitics of doctor-patient communication through macro-level investigation of comparative health care systems. Explores extant research methods and theories of medical sociology to prepare graduate students to do sociological research in health care settings.

**SY 565 Maritime Sociology 3 cr**

Provides a sociological assessment of the relationship between human communities, technology, and marine resources.

**SY 566 Soc Impact Assess Coast Enviro 3 cr**

This course will provide a general introduction to the various frameworks used in social impact analysis.

**SY 567 Environmental Sociology 3 cr**

This course will cover topics such as public awareness and the social construction of environmental issues, especially acid rain, biodiversity, biotechnology, and technological disasters.

**SY 572 Sociology of Aging-Family 3 cr**

The class focuses on sociological theories of family and aging, and the linkages of families and their aging members with organizations that deliver medical and social services, with government bureaucracies, the legal system, corporations and businesses, and religious organizations.

**SY 590 Sp Top - 3 cr**

Selected topics in graduate sociology. Course may be repeated for different topics.

**SY 591 Papers & Presentations Seminar 1-2 cr**

A self-directed studies course, guided by graduate faculty mentors, to develop and enhance the career and scholarly interests, and professional socialization, of advanced master's students through written work and presentation opportunities.

**Prerequisite:** ASSY P

**SY 592 MA Practicum Report Proposal 3 cr**

Based on student work in a local agency (in conjunction with course co-requisite SY 596, Sociology Internship) to generate a practicum report proposal (directed by a member of the sociology graduate faculty) that the student must formally defend.

**Prerequisite:** SY 596 (may be taken concurrently)

**SY 593 Master's Practicum Report 3 cr**

Course in which students prepare and defend a formal report based on work in course pre-requisite SY 596 and SY 592.

**Prerequisite:** SY 596 (may be taken concurrently) Minimum Grade of B and SY 592 Minimum Grade of B

**SY 594 Directed Studies - 1-3 cr**

Field or library projects through which special interests of the student may be pursued on a tutorial basis with a graduate faculty member. Arrangements must be made with the professor prior to registration. Permission of the Department Chair is required.

**SY 595 SY Research Apprenticeship 1-3 cr**

Students pursue research-related interests as directed by, and with prior approval from, a member of the graduate faculty.

**SY 596 Sociology Internship 3-6 cr**

Relates the student's classroom studies to occupational and professional experiences in an approved community agency that culminates with a written report. Requires permission of the Graduate Coordinator and Department Chair as well as proof of insurance. The 3 hour internship requires 100 contact hours; the 6 hour internship requires 200 contact hours.

**SY 597 Sociology Teaching Apprentice 1-3 cr**

The student will work directly with a member of the Sociology faculty to learn pedagogy, innovation in teaching, and course content that will equip the student for future teaching assignments.

**SY 598 Master's Thesis Proposal 3 cr**

Focused on a specialized subject area of research interest in sociology (directed by a member of the sociology graduate faculty) to generate a thesis proposal that the student must formally defend.

**SY 599 Master's Thesis 1-6 cr**

Focused on a specialized subject area of research interest in sociology to generate a master's-level thesis that the student must formally defend. (Pre-requisite: SY 598, Master's Thesis Proposal).

**Prerequisite:** SY 598 Minimum Grade of B

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
CARR, NICOLE THOMSON (ntcarr@southalabama.edu)	Socio, Anthro, and Social Work	Professor	BA, College of William and Mary MA, College of William and Mary PHD, Louisiana State University
CARR, PHILIP J. (pcarr@southalabama.edu)	Socio, Anthro, and Social Work	Professor	BA, University of Louisville MA, University of Tennessee-Knox PHD, University of Tennessee-Knox
GREGORICKA, LESLEY ANN (lgregoricka@southalabama.edu)	Socio, Anthro, and Social Work	Professor	BA, University of Notre Dame MA, Ohio State U-Main Campus PHD, Ohio State U-Main Campus
HAAS, LAURIE FRENCH (lhaas@southalabama.edu)	Socio, Anthro, and Social Work	Instructor	BA, Huntingdon College MSW, Tulane University
HANKS, ROMA (rhanks@southalabama.edu)	Socio, Anthro, and Social Work	Professor	BA, David Lipscomb University MA, Vanderbilt University PHD, University of Delaware
HUDSON, CHARLES KENNETH (ckhudson@southalabama.edu)	Socio, Anthro, and Social Work	Professor	BA, University of Mobile MS, University of Louisville MA, University of Louisville PHD, University of NC- Chapel Hill
LEONARD, MARIE (mleonard@southalabama.edu)	Socio, Anthro, and Social Work	Part-Time Instructor	PHD, Texas A&M Univ At Galveston
MARSHALL, DOUGLAS A. (dougmarschall@southalabama.edu)	Socio, Anthro, and Social Work	Professor	BS, Georgia Inst of Tech - Main MA, University of NC- Chapel Hill PHD, University of Virginia
MIN, HOSIK (hmin@southalabama.edu)	Socio, Anthro, and Social Work	Associate Professor	BA, Korea University MA, Korea University PHD, Texas A & M University
MUNDY, LEONARD ARTHUR (mundy@southalabama.edu)	Socio, Anthro, and Social Work	Assistant Professor	BS, Indiana U of Pennsylvania MA, Temple University PHD, Temple University
NELSON, ERIN LEIGH STEVENS (erinnelson@southalabama.edu)	Socio, Anthro, and Social Work	Associate Professor	BA, University of Missouri-Columb MA, University of Mississippi PHD, University of NC- Chapel Hill
PETTWAY, KIMBERLY MICHELLE (kpettway@southalabama.edu)	Socio, Anthro, and Social Work	Instructor	BS, University of Montevallo MS, University of Alabama MSW, University of Alabama
SANCHEZ, LINDA E (lindasanchez@southalabama.edu)	Socio, Anthro, and Social Work	Assistant Professor	BA, San Diego State University MA, San Diego State University MA, University of California-Irvin PHD, University of California-Irvin

## General Education Requirement

Code	Title	Hours
<b>Area I - Written Composition</b>		
A. Complete the following:		

EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II - Humanities &amp; Fine Arts</b>		

## A. Complete the following:

CA 110	Public Speaking	3
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B. Select one of the following: (<http://bulletin.southalabama.edu/programs-az/arts-sciences/footnote2/>)<sup>1</sup> 3

EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	

C. Select one of the following: 3

ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	

D. Select six hours from the following: 6

AFR 101	Intro to African Amer Studies	
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARH 203	Survey of Non-Western Art	
ARS 101	Art Appreciation	
CLA 110	Intro Anc Greek Roman Culture	
DRA 110	Introduction to Theatre	
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
LG 201	Intermediate Latin I	
LG 202	Intermediate Latin II	
LG 211	Intermediate French I	
LG 212	Intermediate French II	
LG 213	Accelerated Inter French - H	
LG 221	Intermediate Chinese I	
LG 222	Intermediate Chinese II	
LG 231	Intermediate Spanish I	
LG 232	Intermediate Spanish II	
LG 234	Inter Spanish Accel -H	
LG 241	Interm Classical Greek I	
LG 242	Interm Classical Greek II	
LG 251	Intermediate German I	
LG 252	Intermediate German II	
LG 271	Intermediate Russian I	
LG 272	Intermediate Russian II	
LG 273	Intensive Second Year Russian	
LGS 110	Intro American Sign Language I	
LGS 111	Intro American Sign Lang II	
LGS 201	Intermediate Japanese I	

LGS 202	Intermediate Japanese II	
LGS 206	Intermediate Arabic I	
LGS 207	Intermediate Arabic II	
LGS 210	Intermediate ASL I	
LGS 211	Intermediate ASL II	
MUL 101	Introduction to Music	
PHL 110	Introduction to Philosophy	
PHL 120	Critical Thinking	
PHL 121	Introduction to Logic	
PHL 131	Introduction to Ethics	
PHL 231	Social Ethics	
PHL 240	Western Philosophy: Classical	
REL 100	Intro to the Study of Religion	
REL 200	Old Testament/Hebrew Bible	
REL 201	Survey of the New Testament	

**Area III – Natural Sciences & Mathematics**

A. Select 3-4 hours from the following: 3-4

MA 110	Finite Mathematics	
MA 111	Math in Society	
MA 112	Precalculus Algebra	
MA 113	Precalculus Trigonometry	
MA 115	Precal Algebra-Trigonometry	
MA 120	Calculus and Its Applications	
MA 125	Calculus I	
MA 126	Calculus II	
MA 227	Calculus III	
MA 237	Linear Algebra I	
MA 238	Differential Equations I	

B. Complete the following:

BLY 101 & 101L	Life Science I and Life Science I Laboratory	4
or BLY 121 & 121L	General Biology I and General Biology I Lab	

C. Select 4-5 hours from the following: 4-5

AN 121 & 121L	Biological Anthropology and Biological Anthropology Lab	
BLY 102 & 102L	Life Science II and Life Science II Lab	
or BLY 122 & 122L	General Biology II and General Biology II Laboratory	
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab	
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab	
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab	
GY 111 & 111L	Physical Geology and Physical Geology Lab	
GY 112 & 112L	Earth History and Earth History Lab	

MAS 134 & 134L	Ocean Science and Ocean Science Lab
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab

**Area IV – History, Social & Behavioral Sciences (<http://bulletin.southalabama.edu/programs-az/arts-sciences/footnote2/>)<sup>1</sup>**

A. Select one of the following:	3
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
B. Complete the following:	3
SY 109	Introductory Sociology
C. Complete the following:	3
PSY 120	Introduction to Psychology
D. Select one additional from the following:	
AN 100	Intro to Cultural Anthropology
AN 101	Intro Archaeology-Bio Anthro
CA 100	Intro to Communication
CA 211	Interpersonal Comm
CJ 105	Introduction to Criminal Justice
ECO 215	Prin of Microeconomics
ECO 216	Prin of Macroeconomics
GEO 114	People, Places, Environment
GEO 115	World Regional Geography
GS 101	Intro to Gender Studies
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 121	World Civilization I
HY 122	World Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
IS 100	Global Issues
IST 201	Seasons of Life
NAS 101	Intro Native American Studies
PSC 130	Intro to US Government
PSY 250	Life Span Development
SY 112	Social Problems

**Area V**

A. Select six hours from any one group of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/footnote2/">http://bulletin.southalabama.edu/programs-az/arts-sciences/footnote2/</a> ) <sup>2</sup>	6
LG 101 & LG 102	Introductory Latin I and Introductory Latin II

LGS 106 & LGS 107	Introductory Arabic I and Introductory Arabic II
LGS 110 & LGS 111	Intro American Sign Language I and Intro American Sign Lang II
LG 111 & LG 112	Introductory French I and Introductory French II (or proficiency test)
LG 121 & LG 122	Introductory Chinese I and Introductory Chinese II
LG 131 & LG 132	Introductory Spanish I and Introductory Spanish II (or proficiency test)
LG 141 & LG 142	Intro Classical Greek I and Intro Classical Greek II
LG 151 & LG 152	Introductory German I and Introductory German II (or proficiency test)
or LG 153	Accelerated Intro German
LG 171 & LG 172	Introductory Russian I and Introductory Russian II
or LG 173	Accelerated Intro Russian
LGS 171 & LGS 172	Introductory Korean I and Introductory Korean II
B. Complete one of the following:	
MA 112	Precalculus Algebra (MA 112 or higher (Except MA 201 and MA 202))
STALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)210/ BUS 245	Stat Reason and Application
AN 121 & 121L	Biological Anthropology and Biological Anthropology Lab
BLY 101 & 101L	Life Science I and Life Science I Laboratory
BLY 102 & 102L	Life Science II and Life Science II Lab
BMD 110	Introduction to A & P I
BMD 111	Introduction to A & P II
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab
CH 131 & 131L	General Chemistry I and General Chemistry I Lab
CH 132 & 132L	General Chemistry II and General Chemistry II Lab
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab

GY 111 & 111L	Physical Geology and Physical Geology Lab
GY 112 & 112L	Earth History and Earth History Lab
MAS 134 & 134L	Ocean Science and Ocean Science Lab
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab
<b>Total Hours</b>	<b>47-49</b>

## Footnote

- <sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 135 & HY 136). Students should complete sequence in literature.
- <sup>2</sup> Students may fulfill the foreign language requirement by passing a proficiency test offered by the Department of Modern and Classical Languages at the level equivalent to the second semester of the foreign language sequence, or by passing another test (e.g., AP (Advanced Placement) or CLEP (College Level Examination Program) at the equivalent level). Students who pass a proficiency test at the level equivalent to first semester of the foreign language sequence are required to complete only the second semester and will fulfill the foreign language requirement with 3 credit hours of course work.

## Anthropology (BA)

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		<b>38</b>
<i>Anthropology (BA)</i>		
A. Complete the following:		
AN 100	Intro to Cultural Anthropology	3
AN 101	Intro Archaeology-Bio Anthro	3
AN 121	Biological Anthropology	3
AN 121L	Biological Anthropology Lab	1
AN 300	Thinking Anthropologically	1
AN 454	Anthropological Theory - W	3
B. Select at least one upper level course from each of the following three categories:		
Archaeology:		
AN 305	Arch Method and Theory	
AN 313		
AN 314	North American Archaeology	

AN 315	Maya, Aztec, & Inca	
AN 335	Field Work in Archaeology	
AN 435	Museum Methods in Archaeology	
AN 440	Adv Archaeological Field Meth	
Biological Anthropology:		
AN 365	Human Osteology	
AN 370	Human Origins and Evolution	
AN 470	Bioarchaeology - W	
AN 442	Cultural Resource Management	
Cultural Anthropology:		
AN 340	Native American Cultures-W	
AN 342	Applied Anthropology	
AN 344		
AN 347	Latin Amer Cultures-Societies	
AN 355	Gender and Anthropology	
AN 356		
AN 357	Political Anthropology	
AN 358		
AN 456		
SY 426	Social and Cultural Change	
C. Select twelve hours of 200 + level Anthropology Electives		12
Upon written departmental approval, up to 6 hours of AN 190 - Special Topics, may be used to satisfy a portion of the Anthropology electives required hours.		
SY 109	Introductory Sociology	3
<b>Minor Requirements</b>		
A minor is required for this degree program.		18-24
<b>A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE</b>		<b>120</b>

## Graduation Plan

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
EH 101	English Composition I	3
Math	Area III, A <sup>1</sup>	3
Natural Sci with Lab	Area III, B <sup>1</sup>	4
AN 100	Intro to Cultural Anthropology	3
		<b>Hours</b>
		<b>15</b>
<b>Spring</b>		
EH 102	English Composition II	3
AN 101	Intro Archaeology-Bio Anthro	3
CA 110	Public Speaking	3
Hum/Fine Arts	Area II, D <sup>1</sup>	3
SY 109	Introductory Sociology (Area IV, B) <sup>1</sup>	3
		<b>Hours</b>
		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
Literature	Area II, B <sup>1</sup>	3
History	Area IV, A <sup>1</sup>	3
Foreign Language I	Area V, A <sup>1</sup>	3
AN 121 & 121L	Biological Anthropology and Biological Anthropology Lab	4
AN Elective		3
		<b>Hours</b>
		<b>16</b>

<b>Spring</b>		
Natural Sci with Lab	Area III, B <sup>1</sup>	4
AN 200	Language and Culture (or higher - AN Elective)	3
AN 300	Thinking Anthropologically	1
Foreign Language II	Area V, A <sup>1</sup>	3
<b>Hours</b>		<b>11</b>
<b>Third Year</b>		
<b>Fall</b>		
Fine Arts Elective	Area III, C <sup>1</sup>	3
AN Elective	300 or 400 level Biological Anthropology	3
Hum/FA Elective	Area II, D <sup>1</sup>	3
Minor Course		3
Minor Course		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
AN Elective	Archaeology	3
AN Elective	300 or 400 level Cultural Anthropology	3
Elective		3
Minor Course		3
Minor Course		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
AN 454	Anthropological Theory - W	3
AN Elective	200 level or higher	3
Minor Course		3
Minor Course		3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
AN Elective	200 level or higher	3
AN Elective	200 level or higher	3
Minor Course		3
Elective		3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>117</b>

<sup>1</sup> See General Education Requirements

## Anthropology Minor Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

### Minor in Anthropology

Code	Title	Hours
AN 100	Intro to Cultural Anthropology	3
AN 101	Intro Archaeology-Bio Anthro	3
AN Upper Division (300/400) Electives		9
AN Electives, any level		3
<b>Total Hours</b>		<b>18</b>

## Social Work (BSW) Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 386)		53-55
<b>Major Requirements <sup>1</sup></b>		<b>54</b>
<i>Social Work (BSW) Core</i>		
A. Complete the following:		
SW 200	Intro to SocWork-SocWelfare	3
SW 201	Human Behav/Social Environ I	3
SW 214	Exploring Social Work Practice	3
SW 220	Power, Privilege & Oppression	3
SW 300	Ethical Decision-Making-W	3
SW 301	Social Welfare Policy	3
SW 302	Human Behav/Social Environ II	3
SW 401	Generalist Practice I	3
SW 402	Generalist Practice II	3
SW 412	Field Instruction	9
SW 414	Senior Seminar - W	3
Select two Field of Practice Electives of the following:		3
SW 310	Community Context	3
SW 340	Family Violence	3
SW 350	Child Welfare Services	3
SW 360	SW Practice in Mental Health	3
SW 380	International SW Practice	3
SW 420	Social Work in Health Care	3
SW 460	Rural Social Services	3
SW 490	Special Topics	3
SY 372	Social Gerontology - W	3
SY 494	Directed Studies	1-3
<b>Sociology Courses required for SW Major</b>		
SY 220	Marriage and the Family	3
SY 381	Research Methods	3
SY 382	Research Analysis	3
<b>Minor Requirements</b>		
A minor is required for this degree program ( <a href="http://bulletin.southalabama.edu/programs-az/arts-sciences/sociology-anthropology-social-work/footnote1/">http://bulletin.southalabama.edu/programs-az/arts-sciences/sociology-anthropology-social-work/footnote1/</a> ) <sup>2</sup>		18-24
<b>A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE</b>		<b>120</b>

### Footnote

<sup>1</sup> All social work courses must be completed with a grade of "C" or better.

<sup>2</sup> All majors in the College of Arts and Sciences are required to complete a minor of 18 to 24 credit hours. Students may choose any available minor offered at USA; many minors complement and supplement the BSW. For social work students who choose a Sociology minor (6 Courses, 18 Credit Hours), the following courses will count: SY 109, SY 220, SY 381, SY 382, and 2 Electives (at least 1 sociology elective must be 300-level or higher).

All undergraduates must complete two designated writing credit (W) courses, at least one of which must be in the student's major or minor.

## Additional Information

### Social Work Admission Policy and Procedures

The social work program has policies and procedures for admission that are consistent with the goals of our national accrediting agency, the Council on Social Work Education. The policies and procedures ensure that students have a liberal arts base, demonstrate a beginning knowledge of social work and identification with the profession, have content in diversity, populations-at-risk, social and economic justice, and can demonstrate effective communication skills prior to entry into the professional program.

### Admission Policy

Students who want to major in social work are admitted to the pre-professional social work major and remain in the pre-professional major until they meet requirements to be admitted into the social work major. Prior to entering the major, please consider consulting with a pre-professional social work advisor from Academic Advising and Transfer Services at the earliest opportunity. The admission policy is applicable to all students: new freshmen, transfer students, students seeking a second bachelor's degree, and students changing their major. In order to be admitted into the social work major, students must meet the following criteria:

- Have a 2.60 overall GPA in courses taken at USA.
- Have completed SW 200, SW 214, and SW 220 with a grade of "C" or better.
- Have completed the BLY 101/BLY 101L and a second natural science course with lab earning a grade of "C" or better in both courses and labs.
- Have completed SY 109 with a grade of "C" or better.
- Have completed PSY 120 with a grade of "C" or better.
- Have completed EH 101 and EH 102 with a grade of "C" or better.
- Have completed the Math requirement.
- Have completed a minimum of 56 credit hours.
- Demonstrate behavior consistent with the National Association of Social Workers (NASW) Code of Ethics (<https://www.socialworkers.org/About/Ethics/Code-of-Ethics/Code-of-Ethics-English/>).

Students entering the pre-professional social work major who have 45 or more credit hours are strongly encouraged to take SW 200, SW 214, and SW 220 in their first semester. Students who have not been admitted to the major may not enroll in SW 201, SW 300, SW 301, SW 302, SW 401, SW 402, SW 412, SW 414, or any social work electives (SW 310, SW 340, SW 350, SW 360, SW 380, SW 420, SW 460, or SW 490).

### Admission Procedures

Once the specified requirements are complete, the student must submit an application for admission to the social work major, which includes a personal statement, unofficial transcript(s), resume, and list of references. Students who meet the minimum prerequisite requirements are not guaranteed admission into the social work major. The application process is competitive and admission is dependent upon available space. Students are encouraged to consult with their advisor prior to submitting this application.

The student's application for admission to the major will be reviewed by the BSW program faculty and a determination will be made on whether or not the student will be admitted to the major. Following this determination, students will be notified in writing concerning the faculty decision.

Once the student is admitted to the major, the program will initiate a change of major to the university. The criteria for continuation as a major include:

- Maintain a 2.50 grade point average in social work courses.
- Maintain an overall 2.60 grade point average at USA.
- Demonstrate acceptable professional conduct, personal integrity, and emotional stability consistent with the National Association of Social Workers (NASW) Code of Ethics (<https://www.socialworkers.org/About/Ethics/Code-of-Ethics/Code-of-Ethics-English/>).
- Demonstrate identification with the profession of social work.

### Transfer Students

Social work course credit will only be granted for courses transferred from programs accredited by the Council on Social Work Education or in CSWE Candidacy. In order to receive a degree in social work (BSW) from the University of South Alabama, students must complete SW 401, SW 402, SW 412, and SW 414 and meet the university residency requirements. The program director will evaluate social work transfer credits to determine equivalency. No credit will be given for life or prior work experience.

## Graduation Plan

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I	3
MA 110	Finite Mathematics (or higher)	3
SY 109	Introductory Sociology	3
CAS 100	First Yr Exp -	2
BLY 101/BLY 101L	Life Science I/Lab (Area III)	4
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EH 102	English Composition II	3
PSY 120	Introduction to Psychology	3
CA 110	Public Speaking	3
Humanities/Fine Arts Elective	Area II	3
Fine Art	Area II	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
SW 200	Intro to SocWork-SocWelfare	3
SW 214	Exploring Social Work Practice	3
SW 220	Power, Privilege & Oppression	3
Natural Sci with Lab	Area III	4
Foreign Language I	Area II	3
GPA required: 2.60		
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
SY 220	Marriage and the Family	3
History	Area IV <sup>1</sup>	3
Foreign Language II	Area II	3

Literature	Area II <sup>1</sup>	3
Math/Lab Science	Area III	3-4
<b>Hours</b>		<b>15-16</b>
<b>Third Year</b>		
<b>Fall</b>		
SW 201	Human Behav/Social Environ I	3
SW 300	Ethical Decision-Making-W	3
SW 401	Generalist Practice I	3
SY 381	Research Methods (Fall only)	3
Humanities/Fine Arts	Elective OR Literature Sequence Part II (Area II) <sup>1</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
SW 301	Social Welfare Policy	3
SW 302	Human Behav/Social Environ II	3
SW 402	Generalist Practice II	3
SY 382	Research Analysis (Spring only)	3
Hum/Soc Sci/Beh Sci	Elective OR History Sequence Part II (Area IV) <sup>1</sup>	3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
Sociology Minor Elective	Lower Level <sup>2</sup>	3
Sociology Minor Elective	Upper Level <sup>2</sup>	3
General Elective		3
General Elective		3
Select 1st SW Elective from the following:		3
SW 310	Community Context	
SW 340	Family Violence	
SW 350	Child Welfare Services	
SW 360	SW Practice in Mental Health	
SW 380	International SW Practice	
SW 420	Social Work in Health Care	
SW 490	Special Topics	
SY 372	Social Gerontology - W	
SY 494	Directed Studies	
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
SW 412	Field Instruction <sup>3</sup>	9
SW 414	Senior Seminar - W <sup>3</sup>	3
Select 2nd SW Elective from the following:		3
SW 310	Community Context	
SW 340	Family Violence	
SW 350	Child Welfare Services	
SW 360	SW Practice in Mental Health	
SW 380	International SW Practice	
SW 420	Social Work in Health Care	
SW 490	Special Topics	
SY 372	Social Gerontology - W	
SY 494	Directed Studies	
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>121-122</b>

<sup>1</sup> Must have one history elective and one literature elective. In addition, students must choose a second history or literature to complete a two-part sequence.

<sup>2</sup> All majors in the College of Arts and Sciences are required to complete a minor between 18 and 24 credit hours. This suggested plan of study incorporates a Sociology minor (18 credit hours); however, students may choose any minor offered at USA.

<sup>3</sup> SW 412 and SW 414 must be taken concurrently.

**Notes:**

- See General Education Requirements.

## Sociology (BA)

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		<b>33</b>
<i>Sociology (BA)</i>		
A. Complete the following:		
SY 109	Introductory Sociology	3
SY 112	Social Problems	3
SY 406	Sociological Theory	3
SY 407	Social Research Design	3
SY 409	Social Research Analysis	3
AN 100	Intro to Cultural Anthropology	3
or AN 101	Intro Archaeology-Bio Anthro	
B. Complete the following:		
SY Upper Division (300/400) Electives		6
SY Electives, any level		9
<b>Minor Requirements</b>		
A minor is required for this degree program		18-24
<b>A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE</b>		<b>120</b>

All undergraduates must complete two designated writing credit (W) courses, at least one of which must be in the student's major or minor.

## Graduation Plan

(33 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
SY 109	Introductory Sociology	3
MA 110	Finite Mathematics (or higher)	3
EH 101	English Composition I	3
CAS 100	First Yr Exp -	2
Natural Sci with Lab		4
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
SY 112	Social Problems	3
EH 102	English Composition II (or Honors)	3
Natural Sci with Lab		4
History	US or Western Civilization	3
Fine Arts Elective		3
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
CA 110	Public Speaking	3
Natural Sci with Lab		4
English Literature		3
Humanities Elective		3
AN 100	Intro to Cultural Anthropology	3
or AN 101	or Intro Archaeology-Bio Anthro	
<b>Hours</b>		<b>16</b>

<b>Spring</b>		
SY Elective	Select any 200 or 300 SY Elective	3
Humanities Elective <sup>1</sup>		3
SY Elective		3
Minor Course		3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
SY 407	Social Research Design	3
SY Elective	Select any 300-400 level SY Elective	3
Minor Course		3
Foreign Language I		3
Minor Course		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
SY 409	Social Research Analysis	3
SY 406	Sociological Theory	3
Elective		3
Minor Course		3
Foreign Language II		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
SY Elective	300 or 400 level; if not taken previously, recommended SY 372 (W), SY 421 (W), or SY 445 (W) to fulfill writing requirement for major	3
Elective		3
Elective		3
Minor Course		3
Minor Course		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
SY Elective	300 or 400 level	3
Elective		3
Minor Course		3
Minor Course		3
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>119</b>

<sup>1</sup> See Degree Requirements

## Sociology Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

#### Minor in Sociology

A minimum of 18 semester hours in Sociology, including SY 109. No more than six semester hours of Directed Studies may be used in meeting the minor requirements.

Code	Title	Hours
SY 109	Introductory Sociology	3
SY Upper Division (300/400) Electives		9
SY Electives, any level		6
<b>Total Hours</b>		<b>18</b>

## Stokes School of Marine and Environmental Sciences

### Department Information

The Stokes School of Marine & Environmental Sciences website <http://www.southalabama.edu/marinesciences> (<http://www.southalabama.edu/marinesciences/>)

### Undergraduate Minor in Marine Sciences

Seventy percent of the Earth's surface is occupied by oceans. This dominance means that oceans exert a major influence on atmospheric dynamics and terrestrial ecology. The societal and economic importance of healthy ocean ecosystems cannot be overstated or ignored. The School of Marine & Environmental Sciences welcomes qualified students who wish to better focus their academic training towards oceanography and marine biology. The undergraduate minor in marine sciences is designed to complement many science and non-science majors offered at USA. Ocean-related science is relevant to many contemporary environmental issues and problems and central to understanding earth-system evolution, dynamics, climate and sustainability. The minor consists of courses and research opportunities offered primarily by faculty and researchers in the School of Marine & Environmental Sciences and the Dauphin Island Sea Lab.

Requirements for a Minor in Marine Sciences include a minimum of 18 hours in Marine Sciences related classes. The student must take:

Code	Title	Hours
MAS 134	Ocean Science	3
MAS 134L	Ocean Science Lab	1
MAS 331	Marine Science I	3
MAS 332	Marine Science II-W	3
Select 2-3 elective courses from the following:		6-12
MAS 371	Shark and Ray Biology	
MAS 367	Marine Biology	
MAS 430	Marine Botany	
MAS 451	Marine Vertebrate Zoology	
MAS 471	Marine Invertebrate Zoology	
MAS 475	Marine Ecology	
Other Marine Sciences electives may be approved by the Chair		

Up to 6 hours required by a student's major may be applied toward the minor. The Marine Science minor places a strong emphasis on a rigorous natural science foundation; thus, several of the upper division courses related to the minor have prerequisites. Students planning the minor should check catalog course descriptions carefully and should meet with advising staff in the Marine Science Program office.

### Bachelor of Science (B.S.) In Marine Sciences

The School of Marine & Environmental Sciences offers a Bachelors in Marine Sciences to address society's growth need for specialized understanding of the marine environment. This program is designed to prepare students for tackling challenges and opportunities presented by the "Blue Economy (<https://www.worldbank.org/en/news/infographic/2017/06/06/blue-economy/>)". The "Blue Economy" encompasses a broad range of job opportunities related to the marine environment allowing graduates to pursue careers in government, academic, commercial and industrial settings. The degree program takes

advantage of the location of the University South Alabama as well as its partnership with the Dauphin Island Sea Lab, DISL, to provide a unique educational experience as well as experiential learning opportunities.

This degree program takes advantage of the location of the University South Alabama as well as its partnership with the Dauphin Island Sea Lab (<https://www.disl.edu/>), DISL, to provide a unique educational experience as well as experiential learning opportunities. These institutional locations give students direct access to the natural marine laboratories of the Mobile Tensaw Delta, Mobile Bay, and the Gulf of Mexico where students will be immersed in all things marine! A cornerstone of this program is the Semester by the Sea at DISL where students in this program will spend their spring semester of junior or senior year taking coursework at DISL with the option of living in residence at DISL.

### Core Courses

The Marine Science core courses are as follows: MAS 134 and MAS 134L Introduction to Ocean Sciences, MAS 331 and MAS 331L Marine Sciences I: Geological & Physical Oceanography, MAS 332 and MAS 332L Marine Science II: Chemical & Biological Oceanography, Dauphin Island Sea Lab Summer Course Electives (e.g. Shark and Ray Biology, Marine Technical Methods, Marine Vertebrate Zoology, Marine Invertebrate Zoology, and more), and courses in residence at DISL during the spring semester of a student's junior or senior year. Marine Operations and Research (Capstone Course), Marine Geology, Marine Ecology, and Field and Lab Measurements in Marine Science.

### Bachelor of Science (B.S.) In Environmental and Sustainability Sciences

The School of Marine & Environmental Sciences, SOMES, offers a Bachelor's program in Environmental Science & Sustainability to address the need for a broad understanding of the natural world and its interaction with the demands of human development. A fundamental component of environmental science is its interdisciplinary essence and how this integrative approach can be used to develop mutually beneficial solutions to some of society's most pressing challenges. The Environmental Science & Sustainability degree program is designed to provide a foundational knowledge base coupled with specialized skills so that students will be able to immediately begin addressing environmental issues in sustainable ways. A major goal of this program is to provide a workforce that will be trained to address the inevitable environmental pressures that coastal communities are, and will be, facing as global warming continues to accelerate. Students that complete the undergraduate degree program will be prepared to conduct analysis and mitigation of environmental problems in a range of fields (e.g. sustainability, renewable energy, conservation, agriculture, urban planning and development, natural resource management, education, environmental toxicology, etc.) and employers (e.g. environmental consulting firms, health and safety field (HAZMAT), non profit agencies, research labs, education and outreach, government agencies: AL Department of Environmental Management, EPA, Fish and Wildlife Service, Bureau of Land Management, Forest Service, etc.).

### Core Courses

Students will take the following core courses: ENV 337 and ENV 337L Environmental Science I, ENV 338 and ENV 338L Environmental Science II, ENV 339 Climate Change, ENV 340 Fundamentals of Environmental Toxicology & Chemistry, ENV 334 and ENV 334L Environmental Monitoring and Assessment, ENV 335 and ENV 335L Environmental Conservation & Sustainability, GY 425 Hydrology, GIT 460 Intro to Geographic Information Technology, and GEO 410 Biogeography.

### Master of Science (M.S.) in Marine Sciences

The Master of Science (M.S.) Program in marine sciences is designed to train and prepare superior students for a career in this field. The marine sciences program offers courses and opportunities for research in four main areas: biological, chemical, physical, and geological oceanography. Each M.S. student receives formal training in at least three of these disciplines while concentrating in a specific research area. Thus, the program is structured to develop the capacity for productive and innovative research, founded on a solid background of broad scientific knowledge. The requirements and procedures that follow are specifically for the Department of Marine Sciences. However, the general rules and policies of the Graduate School also apply.

### Minimum Requirements for Admission

Application before February 1 is encouraged; beginning February 15, the admission committee will make initial recommendations about applicants for the following Fall class, with formal letters sent to applicants by the end of April. Although students are normally admitted in the Fall Semester, depending on availability of space and funding, applications may be approved and students admitted throughout the year. In addition to the general admissions requirements of the Graduate School, minimal requirements for admission in full standing to the Marine Sciences M.S. Program are:

1. A baccalaureate degree in marine sciences or in a discipline related to marine sciences (e.g., biology, chemistry, geology, physics) from an accredited four year college or university
2. Applicants to graduate programs in Arts and Sciences typically have a minimum GPA of at least a 3.0 on all undergraduate work. In exceptional cases, applicants may be considered with at least a 2.5 GPA on all undergraduate work, or at least a 2.75 GPA on the last 60 hours of undergraduate work.
3. The GRE score is not required for admission. You may optionally submit your GRE scores if you wish for them to be considered as part of your application to any graduate program in the Stokes School of Marine and Environmental Sciences, but this is not required. Individual faculty members may consider available GRE scores as part of a holistic evaluation of the candidates.

The applicant will be required to submit:

1. A completed application including a statement indicating the student's interests and professional goals
2. Official transcripts from all undergraduate institutions attended
3. Three letters of recommendation

Assessment of credentials will be supplemented by evaluation of letters of recommendation and the educational background of the student. Foreign applicants will be required to pass the TOEFL exam with a score of 71 or greater, or equivalent score on computer administered tests.

To insure compatibility between the student's research interests and the faculty expertise in the Marine Sciences Department, particular attention will be given to the statements of research interests. A faculty member will be asked to act as a "mentor" for the applicant based on the statement of interest and, if necessary, a personal interview. Through this process the student's interests will be matched to the expertise available within the faculty. Moreover, the mentor also may be able to offer the student financial support if a departmental stipend is not available. Students whose interests do not correspond to those of a faculty member and/ or have not identified a faculty willing to serve as

a mentor, will not be admitted into the M.S. degree program in marine sciences.

Application forms for admission can be found at <http://www.southalabama.edu/departments/admissions/>. Applications for fellowships (see below) are obtained by writing to:

Chair  
Department of Marine Sciences  
University of South Alabama  
Mobile, AL 36688-0002  
or visit the website at <http://www.southalabama.edu/marinesciences>  
(<http://www.southalabama.edu/marinesciences/>)

### Fellowships and Assistantships

The Department of Marine Sciences offers a variable number of research assistantships that are sponsored by externally funded grants and contracts. The current stipend for M.S. students is \$17,000 per year. Additional funding for tuition fellowship may also be available through extramural grants. Information about assistantships is available from the:

Office of the Dean of the Graduate School  
Administration Building Room 340  
University of South Alabama  
Mobile, AL 36688-0002

### Master of Science (M.S.) in Marine Conservation and Resource Management

The M.S. in Marine Conservation and Resource Management is designed to provide a formal course of training and professional development in the marine sciences that will enable students to contribute to the sustainable management of marine resources.

The program does not require thesis research, but instead offers professional development through group projects and professional internships with government agencies, NGOs, and environmental consulting firms. The curriculum and other requirements can accommodate students currently in the workforce.

### Minimum Requirements for Admission

Applications for Fall admission are due by June 1 of each year. Enrollment normally begins in the fall semester; however spring and summer admissions will be considered on a case by case situation. In addition to the general admissions requirements of the Graduate School, minimal requirements for admission in full standing to the M.S. Program in Marine Conservation and Resource Management are:

1. A baccalaureate degree in a discipline related to marine sciences (e.g., biology, chemistry, geology, physics, and engineering) or conservation biology (economics, sociology) from an accredited four year college or university
2. Applicants to graduate programs in Arts and Sciences typically have a minimum GPA of at least a 3.0 on all undergraduate work. In exceptional cases, applicants may be considered with at least a 2.5 GPA on all undergraduate work, or at least a 2.75 GPA on the last 60 hours of undergraduate work.
3. The GRE score is not required for admission. You may optionally submit your GRE scores if you wish for them to be considered as part of your application to any graduate program in the Stokes School of Marine and Environmental Sciences, but this is not required. Individual faculty members may consider available GRE scores as part of a holistic evaluation of the candidates.

The applicant will be required to submit:

1. A completed application including a statement indicating the student's interests and professional goals
2. Official transcripts from all undergraduate institutions attended

### Doctor of Philosophy (Ph.D.) Program

The Doctor of Philosophy (Ph.D.) Program in marine sciences is designed to provide formal course work and advanced research in marine sciences that produces significant, original contributions to knowledge. The Ph.D. degree is awarded to students who have reached and formally demonstrated a level of competence and accomplishment that enables them to pursue careers as marine science professionals. The Ph.D. degree confers eligibility for many positions in academia, industry, and government.

The marine sciences program offers courses and opportunities for research in multiple sub-disciplines: biological, chemical, physical, and geological oceanography as well as marine ecology, fisheries, and biogeochemistry. Each student receives formal training in each of these disciplines while concentrating in a specific research area. The requirements and procedures that follow are specifically for the Department of Marine Sciences. However, the general rules and policies of the Graduate School also apply.

### Minimum Requirements for Admission

Students are normally admitted in the Fall Semester. Although applications for admission and fellowships are accepted throughout the year, application before February 1 is encouraged; beginning February 15 the admissions committee will make initial recommendations about applicants for the following Fall class, with formal letters sent to applicants by the end of April. Depending on availability of space and funding, applications may be approved and students admitted throughout the year. In addition to the general admissions requirements of the Graduate School, requirements for admission to the Marine Sciences Ph.D. program are:

1. A narrative statement indicating the student's research interests, professional goals and commitment to full-time study for completion of degree requirements
2. Three letters of recommendation
3. For students with baccalaureate degrees:
  - a. A baccalaureate degree in a discipline related to marine sciences (e.g., biology, chemistry, geology, physics) from an accredited four-year college or university
  - b. Applicants to graduate programs in Arts and Sciences typically have a minimum GPA of at least a 3.0 on all undergraduate work. In exceptional cases, applicants may be considered with at least a 2.5 GPA on all undergraduate work, or at least a 2.75 GPA on the last 60 hours of undergraduate work.
4. For students with M.S. degrees:
  - a. An M.S. degree in a discipline related to marine sciences (e.g., biology, chemistry, geology, physics) from an accredited college or university
  - b. A graduate minimum grade-point average of 3.00 overall (A=4)
5. International students must submit an official score of at least 71 on the Test of English as a Foreign Language (TOEFL), or equivalent score on computer administered tests.
6. The GRE score is not required for admission. You may optionally submit your GRE scores if you wish for them to be considered as part of your application to any graduate program in the Stokes School

of Marine and Environmental Sciences, but this is not required. Individual faculty members may consider available GRE scores as part of a holistic evaluation of the candidates.

To ensure research compatibility between the student and the faculty in the marine sciences program, attention will be given to the statement of research interests. A faculty member will be asked to act as a mentor for the applicant based on the statement of interests and, if necessary, a personal interview. Through this process, the student's interests will be matched to the expertise available within the faculty. Moreover, the mentor may also be able to offer the student financial support if a stipend is not available. Students whose interests do not correspond to those of a particular faculty mentor, and have not identified a faculty member willing to serve as a mentor, will not be admitted into the Ph.D. degree program in marine sciences.

Application forms for admission to the program and for fellowships (see below) are obtained by writing to:

Chair  
Department of Marine Sciences  
University of South Alabama  
Mobile, AL 36688-0002

### Fellowships and Assistantships

The Department of Marine Sciences offers at-large fellowships to Ph.D. students annually on a competitive basis. In addition, there are a variable number of doctoral assistantships that are sponsored by externally funded grants and contracts to faculty. The current stipend for Ph.D. fellowships is \$21,000 per year plus a tuition fellowship and waiver of out-of-state fees. The stipend increase to \$24,000 upon completion of the written research prospectus, usually completed within 1.5 years after entering the program. Prospective students must submit applications by February 1 to receive consideration for at-large fellowships. Information about assistantships is available from the:

Office of the Dean of the Graduate School  
Administration Building Room 340  
University of South Alabama  
Mobile, AL 36688-0002

## Degrees, Programs, or Concentrations

- Environmental & Sustainability Sciences (B.S.) (p. 404)
- Environmental Sciences (BS) - Natural Sciences Concentration (<http://bulletin.southalabama.edu/programs-az/arts-sciences/marine-sciences/evss-natural-sciences-concentration/>)
- Environmental Sciences (BS) - Sustainability Concentration (<http://bulletin.southalabama.edu/programs-az/arts-sciences/marine-sciences/evss-sustainability-concentration/>)
- Environmental Sciences Minor (<http://bulletin.southalabama.edu/programs-az/arts-sciences/marine-sciences/environmental-sciences-minor/>)
- Marine Science (MS) - Marine Conservation (p. 405)
- Marine Science (MS) - Non-Thesis Option (p. 406)
- Marine Science (MS) - Thesis Option (p. 407)
- Marine Science (Ph.D.) (p. 409)
- Marine Sciences (B.S.) (p. 410)
- Marine Sciences Minor (p. 412)
- Sustainability Minor (<http://bulletin.southalabama.edu/programs-az/arts-sciences/marine-sciences/sustainability-minor/>)

- <https://nextbulletin.southalabama.edu/programs-az/arts-sciences/environmental-toxicology/>
- <https://nextbulletin.southalabama.edu/programs-az/arts-sciences/environmental-toxicology-ms/>

## Courses

### MAS 134 Ocean Science 3 cr

An introduction to physical, chemical, geological and biological oceanography. Equivalent to BLY 134.

**Corequisite:** MAS 134L

**Cross-Listed:** BLY 134

### MAS 134L Ocean Science Lab 1 cr

Laboratory experiences associated with BLY 134.

**Corequisite:** MAS 134

**Cross-Listed:** BLY 134L

### MAS 331 Marine Science I 3 cr

This course will present the basic principles of geological and physical oceanography. Marine science is an interdisciplinary science field in which geology, physics, chemistry and biology interact in complex ways that are fundamental to the oceanic environment. This course will examine the characteristics of oceanic and coastal geomorphology and the associated marine sediments as well as the circulation of water masses that reside in these different regions of the world's oceans.

Geological oceanography topics that will be covered include: Structure and evolution of ocean basins, types and properties of marine sediments, sediment transport processes and characterizing coastal regions.

Physical oceanography topics that will be covered include: basic physical laws, properties of the water and the ocean, air-sea interactions, general circulation and coastal processes.

**Prerequisite:** MAS 134 Minimum Grade of C and MAS 134L Minimum Grade of C

**Corequisite:** MAS 331L

### MAS 331L Marine Sciences I Lab 1 cr

Lab component for MAS 331.

**Corequisite:** MAS 331

### MAS 332 Marine Science II-W 3 cr

Oceanography ("ocean"= the marine environment, and "graphy"= the study of) is literally the study of the marine environment. In practice, oceanography is an interdisciplinary science at the intersection of geology, chemistry, physics and biology. Marine Science II focuses on fundamental concepts in chemical and biological oceanography. The study of chemical oceanography will encompass dissolved components, stratification, chemical tracers, marine pollution, ocean acidification and global warming. This will lead to an introduction to biological oceanography, which will include organismal biology, marine adaptation and fisheries. In-class lectures will provide the students with the foundation to understand the principles discussed and will be supplemented with discussion of the modern ways in which these disciplines are pursued.

**Prerequisite:** (MAS 134 Minimum Grade of C and MAS 134L Minimum Grade of C)

### MAS 332L Marine Sciences II Lab 1 cr

Lab component for MAS 332.

### MAS 334L Env Monitor & Assess Lab 1 cr

**MAS 336 Marine Operations/Research-W 3 cr**

Students will conduct collaborative experiments at local field sites. This will involve collecting and analyzing samples, analyzing the subsequent data, and using primary scientific literature to write a short paper and conduct an oral presentation.

**Prerequisite:** (BLY 121 Minimum Grade of C and BLY 121L Minimum Grade of C) and (BLY 122 Minimum Grade of C and BLY 122L Minimum Grade of C) and (CH 131 Minimum Grade of C and CH 131L Minimum Grade of C) and (CH 132 Minimum Grade of C and CH 132L Minimum Grade of C) and (MAS 134 Minimum Grade of C and MAS 134L Minimum Grade of C) and (MAS 331 Minimum Grade of C and MAS 331L Minimum Grade of C) and (MAS 332 Minimum Grade of C and MAS 332L Minimum Grade of C) and (PH 114 Minimum Grade of C and PH 114L Minimum Grade of C) and MA 125 Minimum Grade of C

**MAS 367 Marine Biology 4 cr**

The relationship of marine organisms to their environment. (Usually taught in the summer semester.) Equivalent to BLY 367. Requires permission of Department Chair.

**Prerequisite:** (MAS 134 (may be taken concurrently) Minimum Grade of D and MAS 134L (may be taken concurrently) Minimum Grade of D)

**Cross-Listed:** BLY 367

**MAS 371 Shark and Ray Biology 2 cr**

This course will provide an introduction to biology of sharks and rays, with special emphasis on regional shark fauna and field techniques. Topics to be covered include chondrichthyan origin, systematics, sensory biology, trophic ecology, reproductive biology, life history, ecology, fisheries and conservation. Lectures will be supplemented with discussions of papers from the primary literature to familiarize students with current research. In addition, longline, trawl and gillnet sampling will provide students with firsthand knowledge of field techniques and local shark identification. Equivalent to BLY 371. Requires permission of Department Chair.

**Prerequisite:** (MAS 134 (may be taken concurrently) Minimum Grade of D and MAS 134L (may be taken concurrently) Minimum Grade of D)

**Cross-Listed:** BLY 371

**MAS 430 Marine Botany 4 cr**

A general survey of marine algae and vascular and non-vascular plants associated with the marine environment. Distribution, identification, structure, ecology, and reproduction will be considered. Course offered only through Marine Environmental Science Consortium, (usually taught in the summer semester). Equivalent to BLY 430. Requires permission of Department Chair.

**Prerequisite:** (MAS 134 Minimum Grade of D and MAS 134L Minimum Grade of D)

**Cross-Listed:** BLY 430

**MAS 431 Field and Laboratory Measuremn 3 cr**

Provide Marine Science majors with the opportunity to gain a thorough coverage in the many diverse measurements obtained by marine scientists in field/laboratory settings with consideration for the hypotheses, research questions, quality assurance, analysis and data management.

**Prerequisite:** (BLY 121 Minimum Grade of C and BLY 121L Minimum Grade of C) and (BLY 122 Minimum Grade of C and BLY 122L Minimum Grade of C) and (CH 131 Minimum Grade of C and CH 131L Minimum Grade of C) and (CH 132 Minimum Grade of C and CH 132L Minimum Grade of C) and (MAS 331 Minimum Grade of C and MAS 331L Minimum Grade of C) and (MAS 332 Minimum Grade of C and MAS 332L Minimum Grade of C) and MA 125 Minimum Grade of C and (MAS 134 Minimum Grade of C and MAS 134L Minimum Grade of C) and (PH 114 Minimum Grade of C and PH 114L Minimum Grade of C)

**Corequisite:** MAS 431L

**MAS 431L Field and Laboratory Measure 1 cr**

Lab component for MAS 431. Must be taken with Lecture.

**Prerequisite:** (BLY 121 Minimum Grade of C and BLY 121L Minimum Grade of C) and (BLY 122 Minimum Grade of C and BLY 122L Minimum Grade of C) and (CH 131 Minimum Grade of C and CH 131L Minimum Grade of C) and (CH 132 Minimum Grade of C and CH 132L Minimum Grade of C) and (MAS 331 Minimum Grade of C and MAS 331L Minimum Grade of C) and (MAS 332 Minimum Grade of C and MAS 332L Minimum Grade of C) and MA 125 Minimum Grade of C

**MAS 437 Marine Geology 3 cr**

Marine Geology explores our ocean basins and coasts, specifically focusing on the dynamic forces that move and shape our ocean basin through the study of marine geology.

**Prerequisite:** (BLY 121 Minimum Grade of C and BLY 121L Minimum Grade of C and BLY 122 Minimum Grade of C and BLY 122L Minimum Grade of C and CH 131 Minimum Grade of C and CH 131L Minimum Grade of C and CH 132 Minimum Grade of C and CH 132L Minimum Grade of C and MAS 134 Minimum Grade of C and MAS 134L Minimum Grade of C and MAS 331 Minimum Grade of C and MAS 331L Minimum Grade of C and MAS 332 Minimum Grade of C and MAS 332L Minimum Grade of C and MA 125 Minimum Grade of C)

**Corequisite:** MAS 437L

**Cross-Listed:** MAS 337, MAS 537

**MAS 437L Marine Geology Lab 1 cr**

Marine Geology lab.

**Prerequisite:** (BLY 121 Minimum Grade of C and BLY 121L Minimum Grade of C and BLY 122 Minimum Grade of C and BLY 122L Minimum Grade of C and CH 131 Minimum Grade of C and CH 131L Minimum Grade of C and CH 132 Minimum Grade of C and CH 132L Minimum Grade of C and MAS 134 Minimum Grade of C and MAS 134L Minimum Grade of C and MAS 331 Minimum Grade of C and MAS 331L Minimum Grade of C and MAS 332 Minimum Grade of C and MAS 332L Minimum Grade of C and MA 125 Minimum Grade of C)

**Corequisite:** MAS 437

**Cross-Listed:** MAS 337L, MAS 537L

**MAS 451 Marine Vertebrate Zoology 4 cr**

A study of marine vertebrates, with emphasis on fishes; their systematics, zoogeography, and ecology, (usually taught in the summer semester). Equivalent to BLY 451. Requires permission of Department Chair.

**Prerequisite:** (MAS 134 (may be taken concurrently) Minimum Grade of D and MAS 134L (may be taken concurrently) Minimum Grade of D)

**Cross-Listed:** BLY 451

**MAS 471 Marine Invertebrate Zoology 4 cr**

A study of natural history, systematics, and morphology of marine invertebrates, (usually taught in the summer semester). Equivalent to BLY 471. Requires permission of Department Chair.

**Prerequisite:** (MAS 134 (may be taken concurrently) Minimum Grade of D and MAS 134L (may be taken concurrently) Minimum Grade of D)

**Cross-Listed:** BLY 471

**MAS 474 Introduction to Oceanography 4 cr**

A general introduction to the oceans, with emphasis on chemical, physical, and geological processes and their relation to biological systems. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

**Prerequisite:** (BLY 121 Minimum Grade of C or BLY 141 Minimum Grade of C) and (BLY 122 Minimum Grade of C or BLY 142 Minimum Grade of C) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**Cross-Listed:** BLY 474

**MAS 475 Marine Ecology 4 cr**

Marine Ecology is an advanced course open to upper level undergraduate students. The course will provide a background on marine organisms, including their interactions with each other and their environment, threats, and management. Students will be exposed to foundational concepts, ecological theories, and the experimental basis of our current knowledge. The laboratory will consist of field trips to a variety of local marine habitats, and students will be engaged in experiential learning and exposed to diverse collection methods and experimental approaches in these settings. The three main objectives of this course include: 1) gain an appreciation for the diverse local ecosystems and their complex ecology; 2) introduce students to field and laboratory techniques; and 3) demonstrate basic statistics and their applications for marine ecology. Upon completion of the course, students will be able to identify key flora and fauna found in the local area and have a basic understanding of their ecology, be familiar with typical sampling gear and methods, and demonstrate an understanding of the potential consequences of human activities and natural disturbance events on the structure and function of marine ecosystems. Equivalent to BLY 475.

**Prerequisite:** (MAS 134 Minimum Grade of C and MAS 134L Minimum Grade of C) and (MAS 331 Minimum Grade of C and MAS 331L Minimum Grade of C) and (MAS 332 Minimum Grade of C and MAS 332L Minimum Grade of C) and (BLY 121 Minimum Grade of C and BLY 121L Minimum Grade of C) and (BLY 122 Minimum Grade of C and BLY 122L Minimum Grade of C) and (CH 131 Minimum Grade of C and CH 131L Minimum Grade of C) and (CH 132 Minimum Grade of C and CH 132L Minimum Grade of C) and (PH 114 Minimum Grade of C and PH 114L Minimum Grade of C) and MA 125 Minimum Grade of C or ST 210 Minimum Grade of C

**Cross-Listed:** BLY 475

**MAS 476 Marine Technical Methods 2 cr**

This course will provide an introduction to different methods of sensing the ocean, including building and testing simple sensors, use of instruments to collect high resolution data and some background on how technology has led to key advances in marine sciences.

**MAS 477 Coral Reef Biology & Ecology 4 cr**

This course will explore the biology and ecology of coral reef and associated communities, with a view to understanding what is happening in these ecosystems today.

**Prerequisite:** (BLY 121 Minimum Grade of C) or (BLY 101 Minimum Grade of C) or (MAS 134 Minimum Grade of C)

**MAS 478 Marine Mammal Hlth/Strd Resp 2 cr**

**Prerequisite:** (BLY 368 Minimum Grade of C or MAS 490 Minimum Grade of C or BLY 452 Minimum Grade of C)

**MAS 488 Field Marine Science II 3 cr**

The course will focus on the biological and ecological characteristics of the aforementioned ecosystems, and emphasize the importance of connectivity among seascape components for maintaining ecosystem function.

**Prerequisite:** (BLY 121/L Minimum Grade of C or (MAS 134/L Minimum Grade of C)

**MAS 490 Special Topics 1-8 cr**

An in-depth tutorial exposure to specific areas in the marine sciences. Credit and title will be arranged to examine the subject matter in the area of current interest to one group of students. Specialized topics not currently listed in catalog course offerings.

**MAS 494 Directed Studies 1-4 cr**

Directed Studies in Marine Sciences provides students the opportunity to explore authentic research in marine sciences by carrying out an individual research project under the supervision and guidance of a SSoMES faculty member. Requires securing a SSoMES faculty mentor, completed Directed Studies Application (see last page), and permission of the Stokes School of Marine and Environmental Sciences (SSoMES) Program Manager prior to registering for the course (e.g. at least a month prior to registration opening).

**Prerequisite:** (BLY 121 Minimum Grade of C and BLY 121L Minimum Grade of C) and (BLY 122 Minimum Grade of C and BLY 122L Minimum Grade of C) and (CH 131 Minimum Grade of C and CH 131L Minimum Grade of C)

**MAS 510 Oceanography and Marine Bio 3 cr**

Oceanography is an interdisciplinary science at the intersection of geology, chemistry, physics and biology. This course is designed to be a survey course of these four disciplines with special emphasis on the biological aspects of ocean sciences. In-class lectures will provide the students with the foundation to understand the principles discussed, and will be supplemented with discussion of the modern ways in which these disciplines are pursued.

**MAS 511 Marine Analytical Methods 3 cr**

This course will provide an introduction to the analytical methods most commonly used in marine science: spectrometry, fluorometry, colorimetry, gas and liquid chromatography and the use of radio-isotopes. The course will consist of lectures covering the theory of each method and laboratory exercises in their use. Throughout, there will be a focus on the quality of the data being collected, as derived from quantitative assessments of accuracy, precision and repeatability; and propagation of errors. Students will be assessed on problem-sets based on data collected in the labs and on a research project using the instruments and techniques of their choice.

**MAS 512 Chlorophyll Fluorescence Tech 2 cr**

This course will provide an introduction to the scope and application of fluorescence techniques based on excitation of and emission from the ubiquitous plant pigment chlorophyll a. These include fluorometric determination of chlorophyll concentration *in vitro*; the use of active, single-wavelength fluorometry to assess temporal and spatial variability of chlorophyll a and microalgal biomass in natural assemblages; the use of multiple-wavelength excitation and/or hyperspectral emission to determine taxonomic distributions *in vivo*; and the use of modulated (pulse-amplitude modulated and fast repetition rate) fluorometry to investigate photosynthetic efficiency and model productivity.

**MAS 515 Environmental Toxicology 4 cr**

Introduction to the scientific and technical principles of toxicological processes in the context of the ecosystem. Students will understand the types of major environmental toxicants and how to properly evaluate their toxicity and factors that influence toxicity. Students will recognize and coherently formulate risk assessment and by using the tools and techniques acquired, develop and communicate proposals for remediation.

**Prerequisite:** (BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C) and (CH 201 Minimum Grade of C and CH 202 Minimum Grade of C) and (CH 540 Minimum Grade of B and CH 541 Minimum Grade of B)

**Cross-Listed:** CH 515, EXT 515

**MAS 520 Marine Resource Management 3 cr**

Designed to acquaint graduate students concerned with management of marine resources; development of legislation, evolution of policy, legal processes, impacts on human resources. The emphases will be placed on living resources.

**MAS 521 Marine Conservation Biology 3 cr**

This course will develop student's understanding of conservation biology in marine habitats. Lectures and assigned or student-selected readings will cover the widest possible range of current topics in marine conservation biology. Regular field trips will supplement and exemplify lecture topics. Each class will include an introductory lecture that presents an overview of basic ecological concepts and historical perspective for the assigned readings, followed by discussion. Students will lead discussion of student selected papers and write a topical term paper.

**MAS 522 Horseshoe Crabs- Resource Mgmt 2 cr**

The course will travel to Delaware Bay, home of the largest population of horseshoe crabs in the world. Students will gain and apply information on recent conflicts in horseshoe crab research and fishery management to explore political, ecological, and economic values of marine resources, options for management, conservation, and outreach, conflict resolution and applied ecology.

**MAS 523 Anthropogenic Impacts on Coast 3 cr**

This course will offer a state-of-the-art review of the nature and extent of anthropogenic impacts on marine coastal ecosystems, including climate change, destruction of wetlands, overfishing and nutrient pollution.

**MAS 524 Scientific Communication 3 cr**

Instruction on the principles of scientific communication and opportunities to practice different forms of written and oral communication common to marine and other sciences. Topics include: 1) the rationale for scientists to communicate effectively, 2) how to identify and share information to different audiences, 3) successful scientific date presentations, 4) writing, editing, publishing, and reviewing abstracts, scientific papers, and proposals, and 5) biases in scientific communication.

**MAS 525 Chemical Ecology 3 cr**

Chemical Ecology focuses on chemically mediated interactions within organisms in both aquatic and terrestrial environments. The topics covered include: chemoreception, chemical defense, chemical attraction, and the impact of chemical ecology on humans.

**Cross-Listed:** BLY 525

**MAS 530 Marine Microbial Ecology 3 cr**

A general survey of the types of microorganisms found in the marine environment. Emphasis will be on the interaction of microorganisms with each other and with their environment. In particular, the role of microorganisms in carbon cycling and biogeochemical processes will be stressed. Readings from current literature will expose students to the latest techniques and research.

**Cross-Listed:** BLY 530

**MAS 531 Physiol Eco Marine Microalgae 3 cr**

This course will cover the acclimative responses of marine microalgae to variability in light, nutrients, temperature and other environmental factors. Stress responses that are engendered when variability in these environmental factors exceeds the organisms' acclimative capacity will also be covered. The course will emphasize the commonality of these processes across taxa as well as considering taxon-specific responses that allow different groups to exploit their niches. Methods such as molecular biology, active fluorescence and remote sensing that can be used to investigate population dynamics and growth over a range of spatial and temporal scales will be covered.

**MAS 532 Marine Trophic Processes 3 cr**

This course will examine the nature and controls of the trophic routes followed by primary production and resulting carbon budgets in coastal ecosystems. Trophic processes in marine ecosystems such as herbivory, consumption by secondary consumers, decomposition, export/import and burial will be studied. The course will also offer a review of anthropogenic impacts, such as eutrophication and climate change, on the trophic rate of primary production and carbon budgets in coastal ecosystems. Students are expected to contribute with personal experimental projects and critical reading and discussion of seminal papers.

**MAS 533 Marine Molecular Ecology 3 cr**

The use of molecular biology in ecological studies has been increasing rapidly with the development of new techniques. These techniques can supplement the laboratory and field studies traditionally part of ecology. This course seeks to introduce the use of molecular techniques in marine ecology through lectures accompanied by computer exercises using data from public databases. Lectures will pull data from the primary literature, with emphasis on examples of applications in marine science. Computer exercises will introduce students to how data is analyzed as well as to some of the programs available to carry out this analysis.

**MAS 537 Marine Geology 3 cr**

Marine geology is an interdisciplinary subject dealing with the morphology, formation, and evolution of the ocean basin, using a broad range of theories including geochemistry, geophysics, sedimentology, mineralogy, and plate tectonics. Geology looks at some of the most important issues in society today including energy sources and sustainability, climate change, the impacts of developments on the environment, water management, mineral resources and natural hazards. By studying these issues, marine geologists can anticipate earth's future and examine any changes that may need to be made.

**Cross-Listed:** MAS 437

**MAS 537L Marine Geology Lab 1 cr**

This laboratory companion course to marine geology will focus on hands-on experience with the tools and techniques used to study the geological processes and structures of the ocean floor. This course would provide students with the opportunity to apply the theoretical concepts learned in the classroom to practical scenarios. Throughout the course, students will work with a variety of equipment, including seafloor mapping systems and sediment corers, to collect and analyze geological data. They would learn to identify different types of marine sediments, rock formations, and geological structures, and to interpret what these observations tell us about the history and dynamics of the ocean floor. In addition to the fieldwork and lab exercises, students would also be expected to develop their skills in scientific writing and data analysis. Overall, this course would provide a comprehensive introduction to the methods and techniques used in marine geology research, and would prepare students for future coursework and careers in the field.

**Corequisite:** MAS 537

**MAS 540 Sediment Biogeochemistry 3 cr**

Detailed examination of sediment biogeochemical processes and the implications thereof on nutrient cycles, plant production, and animal distribution, including discussion of early diagenesis in coastal sub-tidal and wetland sediment systems. permission of instructor.

**MAS 548 Marine Biogeochem Processes 2 cr**

The course will examine the interaction between biological, chemical and geological processes in the marine environment. This will be done by first reviewing the cycling of several of the major elements (e.g. carbon, nitrogen, phosphorus, sulfur, and iron) in the sea, and then examining how these cycles differ between various marine ecosystems (e.g. open ocean surface waters, estuaries, coral reefs, seagrass systems and tidal marshes). The focus will be on developing an understanding of how biogeochemical processes serve to regulate ecosystem function in these various habitats. Prerequisites: Organic chemistry, geology, marine ecology.

**MAS 550 Fisheries Techniques 3 cr**

Students are exposed to a detailed, semi-quantitative introduction to current biological and technological methodologies for studying fishes and aquatic habitats, with emphasis on study design and integration across sub-disciplines.

**MAS 551 Quant Methods Fish and Ecology 3 cr**

Ecological and fisheries research has progressed beyond qualitative inference and is continuing to adopt more quantitative methods. A diversity of modeling and experimental approaches exists for ecologists and fisheries scientists. This course is designed to familiarize the students with the most commonly used quantitative approaches. Requires permission of instructor.

**MAS 555 Fisheries Oceanography 2 cr**

Students examine the relationships between fish life history, recruitment dynamics and harvest potential, and local-, meso- and global scale oceanographic processes. Students are exposed to the evolution in thinking on the role of interaction between biology and physics relative to fish and fisheries.

**MAS 560 Mar Exp Ecol 4 cr**

Advances in marine ecology and oceanography are dependent on the ability of researchers to design effective and robust experiments to test hypothesis. Understanding the power, limitations and potential biological and statistical artifacts are critical to achieving this goal. The course focuses on fundamental concepts in the design and analysis of experiments in marine sciences, ecology and fisheries. Primary emphasis will be placed on design and interpretation and secondarily on techniques for analyses. Various analysis of variance models will be introduced beginning with completely randomized designs and factorial treatment structures, and proceeding through block and split-plot designs. In-class demonstrations and take-home problems will provide students with experience in performing many of these analyses.

**Prerequisite:** BLY 520 Minimum Grade of C or ST 540 Minimum Grade of C and ST 545 (may be taken concurrently) Minimum Grade of C

**MAS 570 Ocean Var and Global Change 3 cr**

This course will examine large scale, spatial and temporal variability in the Earth/ocean system as evidenced by present-day and paleo records. Variability such as the El Nino Southern Oscillation will be covered. It will critically evaluate the evidence for and the consequences of modern global change as it pertains to the marine environment. Emphasis will be placed on potential changes in climate, biogeochemical cycles, hydrologic cycles, eutrophication/species diversity, and UV light fluxes. Prerequisites: Permission of instructor.

**MAS 571 Marine Hydrodynam-Biomechanics 4 cr**

To present an introduction to the importance of small scale fluid dynamics, thermodynamics, and solid mechanics to marine science and to present techniques for measurement of important parameters.

**MAS 572 Estuarine Hydrodynamics 3 cr**

This course will address physical processes in estuarine environments. With physical processes in estuaries occurring in various time scales, discussion will proceed in terms of three different time scales: turbulent, tidal, and residual time scales. Emphasis will be placed on mass transport by physical transport processes (water movement).

**Prerequisite:** MAS 601 Minimum Grade of B

**MAS 573 Oceanology of Gulf of Mexico 3 cr**

This course provides a survey of the physics, chemistry, biology, geology and meteorology of the continental margins and deep ocean regions in the Gulf of Mexico and adjacent waters. Requires permission of instructor.

**MAS 574 Marine Ecosystem Modelling 3 cr**

An introduction to the principles, tools, and applications of marine ecosystem modelling. Emphasis will be placed on biological and physical coupling and numerical representations of these processes. Students will develop facility with numerical tools and learn how to apply coupled models to their ecosystems of interest.

**MAS 575 Marine Ecology 4 cr**

The course covers general ecological principles and how they apply to marine ecosystems. Both open ocean and nearshore waters are considered. Specific topics covered include: adaptations of marine organisms for life in the intertidal vs. subtidal zones; different modes of feeding and reproduction in marine organisms; and the importance of predation, competition, adult/larval interactions and dispersal mechanisms. The second half of the course is devoted to discussion of specific habitats including: coral reefs, mangrove swamps, kelp forests, and hydrothermal vents.

**MAS 576 Benthic Ecology 2 cr**

This course covers the evolutionary history and the ecology of marine benthic communities from the earliest fossils to present. The importance of scale and of proper design will be considered. Other topics include: predation, competition, adult/larval interactions and dispersal mechanisms. There will be discussion of productivity and materials cycling in benthic systems. Special topics of students' suggestions conclude the course.

**MAS 577 Interdisciplinary Coastal Processes 3 cr**

The coastal ocean has a physical regime that is distinct from that of the open ocean. This physical regime contributes to disproportionately high levels of ecological productivity associated with these areas. Because of the often close coupling of physical and biogeochemical processes in the coastal ocean, the solutions to the problems facing these ecosystems typically require interdisciplinary perspectives. The objective of the course is to introduce the main physical processes and fisheries in the coastal ocean. The course will provide an overview of the physics operating in the coastal ocean and link the physical forcings to biogeochemical processes and ecosystem function. The course will cover topics from shelf break-open ocean interactions to the fundamental processes operating in estuarine environments. The end goal is for graduate students to acquire a fundamental understanding of the physical mechanisms driving the circulation and the associated hydrographic properties in the coastal ocean and how those physical phenomena link to biogeochemical processes.

**Prerequisite:** MAS 601 (may be taken concurrently) Minimum Grade of C

**MAS 579 Coastal Ecosystem Dynamics 2 cr**

Coastal Ecosystem Dynamics will allow students to investigate the basic principles of ecosystem structure and function. The course is divided into 2 parts: an instructional phase for learning basics of ecosystem modeling, and a student-led investigation of the structure and function of a variety of coastal ecosystems. This approach will give the student a set of quantitative tools for modeling ecosystems. Also, students will learn to evaluate differences and similarities of energy and nutrient processing in disparate ecosystems. There will be one 2 hr class meeting each week during which students will learn to use the ecological modeling software packages 'Ecopath' and 'Ecoism'. During the initial period, students will 'dissect' published models (obtained from the Internet) as a mechanism to understand the utility of ecosystem modeling as well as the basics of this particular software. The second half of the course will be devoted to student-constructed ecosystem models. The models will be constructed from data and pathway descriptions in Alongi's 'Coastal Ecosystem Processes' (CRC Press). A synthesis of these models will be constructed and placed on the WWW.

**MAS 580 Marine Biogeo and Paleocology 3 cr**

This graduate level course will give students a broad overview of the time course of evolutionary changes in the structure and function of marine ecosystems, and will consider the interacting roles of both historical and current factors as they influence the distribution and abundance of marine organisms. Lectures will be mixed with discussions of assigned readings from the primary literature to stimulate critical thinking about the various topics.

**MAS 581 Advanced Marine Ecology 3 cr**

This course will build on the foundations provided by introductory ecology courses to enhance understanding of the mechanisms that control the distribution and abundance of marine plants and animals. The class periods will be dominated by discussions of assigned readings from the primary literature, which will be complemented by summary lecture material.

**MAS 582 Marine Larval Ecology 2 cr**

An in depth treatment of the taxonomy, nutrition, dispersal, bio-energetics, behavior, and bio-physical coupling of larval forms of marine species.

**MAS 583 Field Marine Science I 2 cr**

The Field Marine Science course will consist of an 11 day field exercise in representative coastal sites in Maine with emphasis on rocky intertidal, kelp bed and eelgrass habitats. Two faculty members will accompany the students, participate in the pre-trip readings and evaluate the product developed by each student.

**MAS 584 Oceanographic Experience 1-3 cr**

This course provides students with practical skills involved in oceanographic research. Skills may include hydrographic, hydroacoustic, and organismic sampling, gear deployment and use of analytical instrumentation at sea. Students participate in one or more oceanographic cruises during a semester and carry out a defined project using research tools available on the ship. A final report on the project forms the major part of the course grade. Cruises are available only on an ad hoc basis so permission of the instructor is required.

**MAS 585 Marine Zooplankton 3 cr**

This course familiarizes the student with the taxonomic breadth of estuarine and marine zooplankton ranging from protists through all major phyla of metazoa. Though the focus of the course is on taxonomic familiarization, basic biology (including reproduction and feeding) of all major taxa represented in the plankton will be covered. Students will also learn basic and advanced field collection, laboratory and statistical techniques. Although not a prerequisite, it is useful for students to have a background in invertebrate zoology.

**MAS 586 Marine Restoration Ecology 3 cr**

The course examines factors in the evolution current U.S. and International marine and coastal policy related to the management of natural resources. Course includes policy components, policy information implementation, change processes and economic criteria for evaluating policy effectiveness. The course also surveys the basic approaches to economic valuation of marine resources.

**MAS 587 Seagrass Ecosystem Ecology 2 cr**

A survey of current literature on topics related to the ecology of seagrass ecosystems. Students will read assigned papers to be analyzed in faculty lead discussion format. A final research paper will be prepared by each student.

**MAS 588 Field Marine Science II 3 cr**

The Field Marine Science course will consist of an 8 - 12 day field exercise in representative coastal sites. Faculty members with diverse interests will accompany the students, participate in pre-trip discussions and evaluate the product developed by each student. The course is designed to familiarize students with habitats and research conditions on the Northern Gulf Coast. Field trip locations are selected on the basis of faculty and student interest, economics, and availability of logistic support. Students pay their room and board costs for the field exercise. The course is primarily for graduate students, but advanced undergraduates may enroll with consent of instructor. Both MAS 588 and MAS 583 may be taken for credit when each is taught in a different environment.

**MAS 589 Marine Plankton 3 cr**

The course familiarizes the student with the taxonomic breadth of phytoplankton, bacterioplankton and zooplankton in estuaries, coastal seas and open oceans. Though the focus of the course is on taxonomic familiarization, basic biology (including reproduction and feeding) of all major taxa represented in the plankton will be covered. Student will learn fundamental, as well as "cutting-edge", field laboratory and statistical techniques. Two hours of lectures each week will be accompanied by two hours of hand-on laboratory work. Prerequisites: Graduate status in one of the physical or biological sciences.

**MAS 590 Sp Top - 1-4 cr**

An in-depth tutorial exposure to specific areas in the marine sciences. Credit and title will be arranged to examine the subject matter in an area of current interest to one or group of students. Specialized topics not currently listed in catalog course offerings. MAS 590 is available to master students - MAS 690 is available to Ph.D. students.

**MAS 592 Seminar 1 cr**

Students and faculty meet weekly in an interactive discussion of current literature in marine sciences. The focus will be on "state-of-the-art" theories and methodologies as they occur in the primary marine literature. Student presentation is required to receive credit.

**MAS 594 Directed Studies 1-4 cr**

Independent research, not related to the thesis, under the direction of a member of the graduate faculty. May be used to learn new techniques or explore research questions of special interest. A maximum of 4 hours may be earned for this course toward the MS degree.

**MAS 599 Thesis 1-8 cr**

Independent research by the student under the sponsorship of a member of the department. Progress reports of the work accomplished are required every six months.

**MAS 601 Physical Oceanography 4 cr**

Physical properties and circulation of the world's oceans. Topics to be covered include: basic physical laws; properties of heat, water, and salt budgets; waves; tides; large and small scale circulations; sea-level fluctuations; interactions of the sea with the atmosphere and land masses; light and acoustics.

**MAS 602 Chemical Oceanography 4 cr**

An in-depth examination of the chemistry of sea water and its relationship with biological, geological, and physical processes in the oceans. Coverage of sea water composition, buffering capacity, redox potential, and photochemistry will form the basis for an in-depth analysis of dynamic equilibria of gases, organic materials, nutrients, and trace elements in the sea. Critical evaluation of recent primary literature in chemical oceanography will be used to illustrate state-of-the-art research approaches.

**MAS 603 Geological Oceanography 4 cr**

Geological Oceanography encompasses the historic and current consequences of both geophysical and classical geological processes. Included topics are tectonic theory and its development, sedimentary processes in coastal and oceanic provinces, stratigraphy, structural geology, micropaleontology, erosion, diagenesis and the formation of hydrocarbons.

**MAS 604 Biological Oceanography 4 cr**

A comprehensive survey of marine organisms and their interaction including pelagic and benthic communities of the oceans, coastal waters and estuaries. Primary formation of particulate material, feeding processes, kinetics of food webs, biogeochemical processes, patterns of distribution, ecology of biotic systems, human interactions and current concerns are topics to be covered.

**MAS 690 Sp Top - 1-4 cr**

An in-depth tutorial exposure to specific areas in the marine sciences. Credit and title will be arranged to examine the matter in an area of current interest to one or group of students. Specialized topics not currently listed in catalog course offerings. MAS 590 is available to master students - MAS 690 is available to Ph.D. students.

**MAS 692 Seminar 1 cr**

Students and faculty meet weekly in an interactive discussion of current literature in marine sciences. The focus will be on "state-of-the-art" theories and methodologies as they occur in the primary marine literature. Student presentation is required to receive credit.

**MAS 694 Directed Studies 1-6 cr**

Independent research, not related to the dissertation, under the direction of a member of the graduate faculty. May be used to learn new techniques or explore research questions of special interest. A maximum of 4 hours may be earned for this course toward a Ph.D. degree.

**MAS 799 Dissertation 1-8 cr**

Independent research by the student under the sponsorship of a member of the department.

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
ALBINS, MARK ALLEN (markalbins@southalabama.edu)	Marine Sciences	Research Assistant Professor	BA, University of Hawaii At Hilo PHD, Oregon State University
ALEMU, JAHSON BERHANE (jalemu@southalabama.edu)	Marine Sciences	Research Assistant Professor	BS, Univ of the West Indies MS, Bangor University PHD, Univ of the West Indies
BAKER, RONALD (ronaldbaker@southalabama.edu)	Marine Sciences	Assistant Professor	BS, James Cook University PHD, James Cook University
CARMICHAEL, RUTH H. (rcarmichael@southalabama.edu)	Marine Sciences	Professor	BA, University of Chicago MA, Boston University PHD, Boston University

CLOYED, CARL STEPHEN (ccloyed@southalabama.edu)	Marine Sciences	Part-Time Instructor	BA, Prescott College PHD, University of Louisville
DEBOSE, JENNIFER (jdebose@southalabama.edu)	Marine Sciences	Part-Time Instructor	BS, Texas A&M Univ At Galveston MS, University of California-Davis PHD, University of California-Davis
DORGAN, KELLY M. (kdorgan@southalabama.edu)	Marine Sciences	Associate Professor	BS, University of CA-Santa Cruz PHD, University of Maine
DZWONKOWSKI, BRIAN (bdzwonkowski@southalabama.edu)	Marine Sciences	Associate Professor	BA, The College of New Jersey MS, University of Delaware PHD, University of Delaware
GARRISON BLOODGOOD, JENNIFER CLAIRE (jbloodgood@southalabama.edu)	Marine Sciences	Part-Time Instructor	BS, Clemson University MS, Clemson University PHD, University of Georgia DVM, University of Georgia
HOADLEY, KENNETH DAVID (kheadley@southalabama.edu)	Marine Sciences	Part-Time Instructor	BS, University of NC- Chapel Hill MS, University of NC-Wilmington PHD, University of Delaware
KIEL REESE, BRANDI (bkierreese@southalabama.edu)	Marine Sciences	Associate Professor	BS, Southern Methodist University MS, University of California-River PHD, Texas A & M University
KRAUSE, JEFFREY WILLIAM (krause@southalabama.edu)	Marine Sciences	Associate Professor	BS, Long Island U-Southampton Col PHD, Oregon State University
LEHRTER, JOHN C. (jlehrter@southalabama.edu)	Marine Sciences	Professor	BS, University of North Alabama MS, University of Alabama PHD, University of Alabama
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LUNT, JESSICA (jlunt@southalabama.edu)	Marine Sciences	Part-Time Instructor	BS, University of West Florida PHD, Texas A & M U-Corpus Christi
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## Environmental & Sustainability Sciences (B.S.)

### Bachelor of Science (B.S.) in Environmental & Sustainability Sciences

The University of South Alabama offers a B.S. in Environmental and Sustainability Sciences designed to address the need for a broad understanding of the natural world and its interaction with the demands of human society and development. A fundamental component of environmental science is its interdisciplinary essence and how this integrative approach can be used to develop mutually beneficial solutions to some of society's most pressing challenges.

Students must earn a "C" or higher in all program core courses: ENV 100, ENV 101, ENV 337/L, ENV 339, ENV 335/L, ENV 421, and GIT 460.

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		<b>53-57</b>
General Education (p. 96)		
<b>Core Environmental &amp; Sustainability Sciences Courses</b>		<b>23</b>
ENV 100	Gulf Coast Sustainability Seminar	1
ENV 101	Environment & Society	3
ENV 337 & 337L	Enviro Sciences I and Environ Sciences I Lab	4
ENV 339	Climate Change - W	3
ENV 335 & 335L	Enviro Conserv/Sustainabilit-W and Env Conserv & Sustain Lab	4
ENV 421	Environmental Policy	4
GIT 460	Intro to GIT	4
<b>CONCENTRATION Required</b>		<b>16</b>
<i>See Natural Sciences concentration or Sustainability concentration</i>		
<b>Other STEM Requirements</b>		<b>15-28</b>
<i>See STEM course requirements for each concentration</i>		
<b>Minor Requirement</b>		<b>18-24</b>
A minor is required for this degree program.		
<b>A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE</b>		<b>120</b>

All undergraduates must complete two designated writing credit (W) courses.

NOTE: PHL 231 is suggested as one of the AREA II. General Education Requirements.

### Other Course Requirements:

Additional STEM courses are required and vary depending on chosen concentration. See concentration for list.

### Graduation Plan

(120-121 Total Hours)

### Major Milestones

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
BLY 121 & 121L	General Biology I and General Biology I Lab	4
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
MA 125 or ST 210	Calculus I or Stat Reason and Application	3-4
EH 101	English Composition I (Students who earn an English ACT score of 27 or above, SAT score of 610 or above on the verbal portion, or a new SAT Reading Test can opt out of EH 101.)	3
<b>Hours</b>		<b>16-17</b>
<b>Spring</b>		
GY 111 & 111L	Physical Geology and Physical Geology Lab	4
BLY 122 & 122L	General Biology II and General Biology II Laboratory	4
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
EH 102	English Composition II	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
ENV 100	Gulf Coast Sustainability Seminar	1
ENV 101	Environment & Society	3
ENV 337 & 337L	Enviro Sciences I and Environ Sciences I Lab	4
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab	5
Humanities & Fine Arts Elective (Gen Ed)		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ENV 421	Environmental Policy	4
CA 110	Public Speaking	3
History, Social & Behavioral Sciences (Gen Ed)		3
History, Social, & Behavioral Sciences (Gen Ed) (Social Ethics PHL 231 is recommended)		3
Humanities & Fine Arts Elective (Gen Ed)		3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
Foreign Language I (Gen Ed)		3
Humanities & Fine Arts Elective (Gen Ed)		3
Natural Sciences Conc. Elective		4
Elective		4
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
Foreign Language II (Gen Ed)		3
Natural Sciences Conc. Elective		4
English Literature (Gen Ed)		3
Elective		4
<b>Hours</b>		<b>14</b>
<b>Fourth Year</b>		
<b>Fall</b>		
ENV 339	Climate Change - W	3
GIT 460	Intro to GIT	4

Natural Sciences Conc. Elective	4
History, Social & Behavioral Elective (Gen Ed)	3
<b>Hours</b>	<b>14</b>
<b>Spring</b>	
ENV 335 Enviro Conserv/Sustainabilit-W & 335L and Env Conserv & Sustain Lab	4
Natural Sciences Conc. Elective	4
Minor Course (GY 112 and GY 112L recommended)	4
History, Social & Behavioral Elective (Gen Ed)	3
<b>Hours</b>	<b>15</b>
<b>Total Hours</b>	<b>120-121</b>

## Major Milestone Notes

- Students with ACT Math scores 22-23 should take MA 112 in the first semester. Students with ACT Math scores 21 and below should begin math courses in the summer before Fall - Year 1.
- There may be additional prerequisites for upper level major electives. Refer to the bulletin for more information.
- All Arts and Sciences majors require a minor between 18 and 24 hours. Courses used in a minor can also be used for general education requirements or major requirements (up to two courses).
- Two designated writing (W) courses are required with at least one course chosen from offerings in the student's major or minor. Courses carrying this required credit are identified in the University Bulletin by a (W) after the course title.
- The Sample 4-year plan is designed as a guide for students preparing for their course selections. This information provides only a suggested schedule. Actual course selections should be made in consultation with an advisor.

# Marine Science (MS) - Marine Conservation

## Master of Science (M.S.) In Marine Conservation and Resource Management

The M.S. in Marine Conservation and Resource Management is designed to provide a formal course of training and professional development in the marine sciences that will enable students to contribute to the sustainable management of marine resources. The program does not require thesis research, but instead offers professional development through group projects and professional internships with government agencies, NGOs, and environmental consulting firms. The curriculum and other requirements can accommodate students currently in the workforce.

## Minimum Requirements for Admission

Applications for Fall admission are due by June 1 of each year. Enrollment normally begins in the fall semester; however spring and summer admissions will be considered on a case by case situation. In addition to the general admissions requirements of the Graduate School, minimal requirements for admission are:

1. A baccalaureate degree in a discipline related to marine sciences (e.g., biology, chemistry, geology, physics, and engineering) or conservation biology (economics, sociology) from an accredited four year college or university.
2. Applicants to graduate programs in Arts and Sciences typically have a minimum GPA of at least a 3.0 on all undergraduate work. In exceptional cases, applicants may be considered with at least a 2.5

GPA on all undergraduate work, or at least a 2.75 GPA on the last 60 hours of undergraduate work.

3. The GRE score is not required for admission. You may optionally submit your GRE scores if you wish for them to be considered as part of your application to any graduate program in the Stokes School of Marine and Environmental Sciences, but this is not required. Individual faculty members may consider available GRE scores as part of a holistic evaluation of the candidates.

## Degree Requirements

### Required Credit

A minimum of thirty (30) semester hours of course credit beyond the baccalaureate degree is required for students pursuing an MS degree. Details about the curriculum are given as follows.

### Transfer Credit

A maximum of twelve (12) semester hours of graduate courses taken at another accredited university in the same (or closely related) subject as that of the masters program may be considered as part of the MS degree requirements at USA. Only grades of "A" or "B" may be accepted as transfer credits. The School's Director or Associate Director will evaluate transfer credit; the transfer credit is approved by the Dean of the Graduate School only after completion of a minimum of eight (8) semester hours of graduate course work in the MS program at USA.

### Time Limit

All requirements for the MS degree must be completed within two and one half years from the date of matriculation. A student who has not satisfactorily completed a M.S. degree in a 2.5-year period must apply for a defined extension to complete the degree. This request must be recommended by a major professor, the Chair, the Director of Graduate Studies, and approved by the Dean of the Graduate School. If the student does not complete the degree requirements in the defined extension period, the Director of Graduate Studies may recommend, and the Dean of the Graduate School may take, whatever action is necessary up to and including dismissal.

Failure to complete the work within the periods specified shall necessitate reevaluation of the student's program, and may result in a recommendation of dismissal by the Director of Graduate Studies to the Graduate Dean.

## Coursework

All students must complete the four core courses of the program. At least two statistics courses will be required for the program. For students who have not had statistics courses as an undergraduate, ST 540 must be one of those courses taken. Two seminar courses and directed studies are also required. The remaining coursework (6 cr) should be met through elective courses that are approved by the program coordinator.

## Requirements

Code	Title	Hours
<b>Core Courses</b>		
MAS 510	Oceanography and Marine Bio	3
MAS 520	Marine Resource Management	3
MAS 521	Marine Conservation Biology	3
SY 567	Environmental Sociology	3
<b>Statistics</b>		
Select two of the following:		6

MAS 560	Mar Exp Ecol	
ST 540	Stat in Research I	
ST 550	Environmental Statistics	
ST 560	Appl Desgn & Analysis of Exper	
<b>Seminars</b>		
MAS 592	Seminar	1
GIS 501	Responsible Conduct of Researc	1
<b>Directed Studies</b>		
MAS 594	Directed Studies <sup>1</sup>	4
<b>Electives</b>		
Select two courses from the following, at least one course must be outside MAS to fulfill interdisciplinary requirement of the program:		6
MAS courses that may be used as electives:		
MAS 604	Biological Oceanography	
MAS 602	Chemical Oceanography	
MAS 555	Fisheries Oceanography	
MAS 551	Quant Methods Fish and Ecology	
MAS 603	Geological Oceanography	
MAS 601	Physical Oceanography	
MAS 581	Advanced Marine Ecology	
MAS 583	Field Marine Science I	
MAS 584	Oceanographic Experience	
MAS 560	Mar Exp Ecol	
Non-MAS Electives: <sup>2</sup>		
CE 579	Fundamentals Environmental Eng	
CH 514	Environmental Chemistry	
PHA 643	Molecular-Cellular Toxicology	
GIT 542	Remote Sensing II	
GIT 560	Intro to GIT	
GIT 561	Environmental GIS	
Directed studies		
MAS 594	Directed Studies (Up to four credits of directed studies may be earned once a student completes their capstone project)	
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> Ideally these directed studies classes should be taken in Fall – Semester Year 2 –Directed Studies -Part 1; and Spring Year 2- Directed Studies Part II- Project completion.

<sup>2</sup> These courses represent suggested electives. Other graduate level courses offered at USA can be used to fulfill the elective requirement provided approval of the Program coordinator is received.

A key element of the program is participation in a professional internship or the completion of a capstone research project. Students will do either an internship or capstone, but not both. We recommend that students pursue the internship route in order to develop professional experience. The requirements for these options are below.

1. To fulfill the requirements of the program by performing an internship, a student must perform an internship of approximately 6-month duration working 20 hours a week (approximately 480 hours of internship) in the field of Marine Conservation and Resource Management.
2. In some cases, students may opt for a capstone research project in lieu of the internship. A capstone project provides an opportunity to

go more in depth on a topic to address the complex problems facing marine and coastal systems. With the help of a faculty mentor and the program coordinator, a student pursuing the capstone project will design and perform a project to resolve a problem related to conservation and/or resource management. The project shall result in a paper of modest length (about the length of a journal article) and a formal presentation to the Stokes School of Marine and Environmental Sciences faculty and students.

## Marine Science (MS) - Non-Thesis Option

### Master of Science in Marine Sciences

The Master of Science degree in Marine Sciences is awarded in recognition of the student's demonstrated ability to successfully complete a prescribed program of courses. It also is preferred that students undertake original scholarly research, which culminates in writing and defending an acceptable thesis.

### Minimum Requirements for Admission

Students are normally admitted in the Fall Semester. Although applications for admission and fellowships are accepted throughout the year, application before February 1 is encouraged; beginning February 15 the admissions committee will make initial recommendations about applicants for the following Fall class, with formal letters sent to applicants by the end of April. Depending on availability of space and funding, applications may be approved and students admitted throughout the year.

In addition to the general admissions requirements of the Graduate School, requirements for admission to the Marine Sciences M.S. program are:

1. A narrative statement indicating the student's research interests, professional goals and commitment to full-time study for completion of degree requirements. It is highly encouraged that prospective students reach out to the faculty to discuss research interests. All of our M.S. students are funded on grant-funded research assistantships. Thus, acceptance of new students may be a condition of available funding.
2. Three letters of recommendation.
3. For students with baccalaureate degrees:
  - a. A baccalaureate degree in a discipline related to marine sciences (e.g., biology, chemistry, geology, physics) from an accredited four-year college or university.
  - b. Applicants to graduate programs in Arts and Sciences typically have a minimum GPA of at least a 3.0 on all undergraduate work. In exceptional cases, applicants may be considered with at least a 2.5 GPA on all undergraduate work, or at least a 2.75 GPA on the last 60 hours of undergraduate work.
  - c. The GRE score is not required for admission. You may optionally submit your GRE scores if you wish for them to be considered as part of your application to any graduate program in the Stokes School of Marine and Environmental Sciences, but this is not required. Individual faculty members may consider available GRE scores as part of a holistic evaluation of the candidates.

4. International students must submit an official score of at least 71 on the Test of English as a Foreign Language (TOEFL), or equivalent score on computer administered tests.

## Degree Requirements

### Required Credit

A minimum of thirty (30) semester hours of approved graduate credit is required. Details about the curriculum are given below.

### Transfer Credit

A maximum of twelve (12) semester hours of graduate courses taken at another accredited university in the same (or closely related) subject as that of the masters program may be considered as part of the MS degree requirements at USA. Only grades of "A" or "B" may be accepted as transfer credits. The student's mentor (major professor), in consultation with the Chair, and if necessary, the student's advisory committee, will evaluate transfer credit. The final approval is by the Dean of the Graduate School.

### Residence, Full-Time Study, and Continuous Registration

A minimum of two (2) consecutive semesters of full-time study in residence is required. The residency requirements may be met at USA or the Dauphin Island Sea Lab. Students are considered full-time if registered for six (6) or more hours during fall and spring semesters. Students on assistantship must be registered continuously, i.e., every semester (fall, spring, and summer), during their program. Typical summer registration is 3 hours.

Employment other than University activities directly associated with graduate study is not allowed during full-time study, unless specifically approved by the Chair.

### Time Limit

All requirements for the MS degree must be completed within three (3) years from the date of matriculation. A student who has not satisfactorily completed a M.S. degree in a three-year period must apply for a defined extension to complete the degree. This request must be recommended by a major professor, the Chair, the Director of Graduate Studies, and approved by the Dean of the Graduate School.

Failure to complete the work within the periods specified shall necessitate reevaluation of the student's program, and may result in a recommendation of dismissal by the Director of Graduate Studies to the Graduate Dean.

### Curriculum

All students pursuing the non-thesis option must have formal coursework in the following general areas of marine sciences; physical, chemical, geological, or biological oceanography. This requirement is met by completion of four (4) core courses, representing sixteen (16) credit hours.

### Coursework

The required core courses are each four (4) semester hours. In addition, two (2) seminar courses are required that are one-hour each.

The remaining course work will be determined by the student's advisory committee and may include marine sciences or other graduate electives, directed studies, and thesis hours.

Code	Title	Hours
<b>Core Courses</b>		<b>16</b>
MAS 601	Physical Oceanography	
MAS 602	Chemical Oceanography	
MAS 603	Geological Oceanography	
MAS 604	Biological Oceanography	
<b>Seminar</b>		<b>2</b>
Two (2) enrollments in seminar, one (1) hour per semester		
<b>Minimum Number of Hours for Electives and Directed Studies</b>		<b>12</b>
<b>Electives</b>		
Select Marine Sciences or other electives (500 or 600 level courses) as determined by advisory committee		
<b>Directed Studies</b>		
Maximum of six (6) hours		
<b>Total Hours</b>		<b>30</b>

- Minimum of thirty (30) hours
- Comprehensive examinations
- Grades of "B" or better in all core courses will satisfy the requirement of a comprehensive exam.

### Non-Thesis Program

Students pursuing the MS degree in Marine Sciences are encouraged to follow the thesis option. However, a non-thesis curriculum is available for students, upon agreement of the major professor and advisory committee, who so elect. The student will be required to complete the same degree requirements as those for a student who chooses the thesis option, with the following exceptions:

1. A thesis will not be required, consequently thesis hours can not be applied to the thirty (30) hour minimum requirement.
2. Course work must include all four (4) core courses.
3. The student must take written and oral comprehensive exams to be given by the advisory committee.
4. The student must complete Directed Studies under the direction of the major professor. The student must also have an advisory committee whose members will decide if the student's report relating to the directed study is satisfactory. The committee normally will consist of the major professor and two others. The student is required to present an open seminar about the directed study during the last semester of residency.

## Marine Science (MS) - Thesis Option

### Master of Science in Marine Sciences

The Master of Science degree in Marine Sciences is awarded in recognition of the student's demonstrated ability to successfully complete a prescribed program of courses and undertake original scholarly research, which culminates in writing and defending an acceptable thesis.

### Minimum Requirements for Admission

Students are normally admitted in the Fall Semester. Although applications for admission and fellowships are accepted throughout the year, application before February 1 is encouraged; beginning February 15 the admissions committee will make initial recommendations about applicants for the following Fall class, with formal letters sent to

applicants by the end of April. Depending on availability of space and funding, applications may be approved and students admitted throughout the year.

In addition to the general admissions requirements of the Graduate School, requirements for admission to the Marine Sciences M.S. program are:

1. A narrative statement indicating the student's research interests, professional goals and commitment to full-time study for completion of degree requirements. It is highly encouraged that prospective students reach out to the faculty to discuss research interests. All of our M.S. students are funded on grant-funded research assistantships. Thus, acceptance of new students may be a condition of available funding.
2. Three letters of recommendation.
3. For students with baccalaureate degrees:
  - a. A baccalaureate degree in a discipline related to marine sciences (e.g., biology, chemistry, geology, physics) from an accredited four-year college or university.
  - b. Applicants to graduate programs in Arts and Sciences typically have a minimum GPA of at least a 3.0 on all undergraduate work. In exceptional cases, applicants may be considered with at least a 2.5 GPA on all undergraduate work, or at least a 2.75 GPA on the last 60 hours of undergraduate work.
  - c. The GRE score is not required for admission. You may optionally submit your GRE scores if you wish for them to be considered as part of your application to any graduate program in the Stokes School of Marine and Environmental Sciences, but this is not required. Individual faculty members may consider available GRE scores as part of a holistic evaluation of the candidates.
4. International students must submit an official score of at least 71 on the Test of English as a Foreign Language (TOEFL), or equivalent score on computer administered tests.

## Degree Requirements

### Required Credit

A minimum of thirty (30) semester hours of approved graduate credit is required. Details about the curriculum are given below.

### Transfer Credit

A maximum of twelve (12) semester hours of graduate courses taken at another accredited university in the same (or closely related) subject as that of the masters program may be considered as part of the MS degree requirements at USA. Only grades of "A" or "B" may be accepted as transfer credits. The student's mentor (major professor), in consultation with the Chair, and if necessary, the student's advisory committee, will evaluate transfer credit. The final approval is by the Dean of the Graduate School.

### Residence, Full-Time Study, and Continuous Registration

A minimum of two (2) consecutive semesters of full-time study in residence is required. The residency requirements may be met at USA or the Dauphin Island Sea Lab. Students are considered full-time if registered for six (6) or more hours during fall and spring semesters. Students on assistantship must be registered continuously, i.e., every

semester (fall, spring, and summer), during their program. Typical summer registration is 3 hours.

Employment other than University activities directly associated with graduate study is not allowed during full-time study, unless specifically approved by the Chair.

### Time Limit

All requirements for the MS degree must be completed within three (3) years from the date of matriculation. A student who has not satisfactorily completed a M.S. degree in a three-year period must apply for a defined extension to complete the degree. This request must be recommended by a major professor, the Chair, the Director of Graduate Studies, and approved by the Dean of the Graduate School.

Failure to complete the work within the periods specified shall necessitate reevaluation of the student's program, and may result in a recommendation of dismissal by the Director of Graduate Studies to the Graduate Dean.

### Curriculum

All students must have formal coursework in two (2) of the following general areas of marine sciences; physical, chemical, geological, or biological oceanography. This requirement is met by completion of two core courses, representing eight (8) credit hours.

### Coursework

The required two (2) core courses are each four (4) semester hours. In addition, two (2) seminar courses are required that are one-hour each.

The remaining course work will be determined by the student's advisory committee and may include marine sciences or other graduate electives, directed studies, and thesis hours. This program is oriented toward research and students will be expected to demonstrate research capability through completion of an acceptable thesis. Up to nine (9) hours of thesis credit may be directed toward the minimum requirement of thirty (30) semester hours. Thesis hours are taken after completion of the student's research prospectus (described below), which is due within 1.25 years of matriculation.

Code	Title	Hours
<b>Core Courses (Take 2 of 4)</b>		<b>8</b>
MAS 601	Physical Oceanography	
MAS 602	Chemical Oceanography	
MAS 603	Geological Oceanography	
MAS 604	Biological Oceanography	
<b>Seminar</b>		<b>2</b>
Two enrollments in seminar, one hour per semester		
<b>Minimum Number of Hours for Electives, Directed Studies, and Thesis</b>		<b>20</b>
<b>Electives</b>		
Select Marine Sciences or other electives (500 or 600 level courses) as determined by advisory committee		
<b>Directed Studies</b>		
Maximum of six (6) hours		
<b>Thesis</b>		
Maximum of nine (9) hours		
<b>Total Hours</b>		<b>30</b>

- Minimum of 30 hours
- Grades of "B" or better in core courses

## Research Prospectus

Beyond beginning coursework, the first milestone is to develop a written research prospectus in consultation with a thesis advisory committee.

The research prospectus is a document that lays out the student's rationale, methods, and objectives for their thesis research. It must include enough detail for the committee to evaluate both the novelty of the proposed work as well as the techniques needed to achieve the research objectives. Students are expected to complete this task with 1.25 years of matriculation.

## Defense of Thesis

The final oral defense of the thesis is scheduled after the written thesis is completed except for such revisions as may be necessary as a result of the defense. The final oral defense will not be given before all required course work has been completed or is currently in progress.

# Marine Science (Ph.D.)

## Doctor of Philosophy (Ph.D.) in Marine Sciences

The Doctor of Philosophy (Ph.D.) Program in Marine Sciences is designed to provide formal coursework and advanced research in marine sciences that produces significant, original contributions to knowledge. The Doctor of Philosophy degree is awarded in recognition of the student's demonstrated ability to conduct original, scholarly research at the highest levels without extensive supervision. The degree is not granted upon completion of a stated amount of coursework, but rather after demonstration by the student of a comprehensive knowledge and research capability in a specialized field of study. The student must demonstrate this ability in writing and by defending a dissertation based upon the results of an original investigation. Earning a Ph.D. demonstrates a level of competence and accomplishment that enables graduates to pursue careers as marine science professionals in academia, industry, and government.

The Marine Sciences program offers courses and opportunities for research in multiple sub-disciplines: biological, chemical, physical, and geological oceanography as well as marine ecology, fisheries, and biogeochemistry. Each student receives formal training in these disciplines while concentrating in a specific research area.

## Minimum Requirements For Admission

Students are normally admitted in the Fall Semester. Although applications for admission and fellowships are accepted throughout the year, application before February 1 is encouraged; beginning February 15 the admissions committee will make initial recommendations about applicants for the following Fall class, with formal letters sent to applicants by the end of April. Depending on availability of space and funding, applications may be approved and students admitted throughout the year. In addition to the general admissions requirements of the Graduate School, requirements for admission to the Marine Sciences Ph.D. program are:

1. A narrative statement indicating the student's research interests, professional goals and commitment to full-time study for completion of degree requirements. It is highly encouraged that prospective students reach out to the faculty to discuss research interests. Most

of our Ph.D. students are funded through grant-funded research assistantships. Thus, acceptance of new students may be a condition of available funding as well as matching students to faculty with new grant funded projects.

2. Three letters of recommendation.
3. For students with baccalaureate degrees:
  - a. A baccalaureate degree in a discipline related to marine sciences (e.g., biology, chemistry, geology, physics) from an accredited four-year college or university.
  - b. Applicants to graduate programs in Arts and Sciences typically have a minimum GPA of at least a 3.0 on all undergraduate work. In exceptional cases, applicants may be considered with at least a 2.5 GPA on all undergraduate work, or at least a 2.75 GPA on the last 60 hours of undergraduate work.
4. For students with MS degrees:
  - a. A. An MS degree in a discipline related to marine sciences (e.g., biology, chemistry, geology, physics) from an accredited college or university.
  - b. A graduate minimum grade-point average of 3.0 overall.
5. International students must submit an official score of at least 71 on the Test of English as a Foreign Language (TOEFL), or equivalent score on computer administered tests.
6. The GRE score is not required for admission. You may optionally submit your GRE scores if you wish for them to be considered as part of your application to any graduate program in the Stokes School of Marine and Environmental Sciences, but this is not required. Individual faculty members may consider available GRE scores as part of a holistic evaluation of the candidates.

To ensure research compatibility between the student and the faculty in the marine sciences program, attention will be given to the statement of research interests. A faculty member will be asked to act as a mentor for the applicant based on the statement of interests and, if necessary, a personal interview. Through this process, the student's interests will be matched to the expertise available within the faculty. Moreover, the mentor may also be able to offer the student financial support if a stipend is not available. Students whose interests do not correspond to those of a particular faculty mentor or who have not identified a faculty member willing to serve as a mentor will not be admitted into the Ph.D. degree program in marine sciences.

## Degree Requirements

### Required Credit

A minimum of sixty (60) semester hours of approved graduate course credit is required. Details about the curriculum are given below.

### Transfer Credit

Graduate courses taken at another accredited university, such as for students with MS degrees in the same (or a closely related) subject as that of the Ph.D. program, may be considered in the Ph.D. plan of study up to a maximum of 30 semester hours. Only grades of "A" or "B" may be accepted as transfer credit. The student's mentor, in consultation with the Chair, and if necessary, the advisory committee, will evaluate transfer credit. The final approval is by the Dean of the Graduate School.

## Residence, Full-time Study, and Continuous Registration

A minimum of two (2) consecutive semesters of full-time study in residence is required. The residency requirements may be met at USA or the Dauphin Island Sea Lab. Students are considered full-time if registered for six (6) or more hours during fall and spring semesters. Students on assistantship must be registered continuously, i.e., every semester (fall, spring, and summer), during their program. Typical summer registration is 3 hours.

Employment other than University activities directly associated with graduate study is not allowed during full-time study, unless specifically approved by the Chair.

## Time Limit

All requirements for the Ph.D. degree must be completed within five years from the date of matriculation. A student who has not satisfactorily completed a dissertation in an five-year period must apply for a defined extension to complete the degree. This request must be recommended by the major professor, the Chair of the Department, the Director of Graduate Studies, and approved by the Dean of the Graduate School.

Failure to complete the work within the periods specified shall necessitate reevaluation of the student's program and may result in a recommendation for dismissal by the Director of Graduate Studies to the Graduate Dean.

## Curriculum

All students must have formal course work in three (3) of the following general areas of marine sciences; physical, chemical, geological, or biological oceanography. This requirement is met by completion of three core courses, representing twelve (12) credit hours.

## Coursework

The required three (3) core courses are each four (4) semester hours. In addition, two (2) semester hours of seminar (two, one (1) semester hour enrollments) and a minimum of twelve (12) dissertation hours are required. Dissertation hours are taken after completion of the student's research prospectus (described below), which is due within 1.5 years of matriculation.

The remaining course work will be determined by the student's advisory committee and may include marine sciences or other graduate electives, directed studies, and dissertation hours. No more than eighteen (18) hours of dual-listed courses (400- and 500- level listing for the same course) may be counted toward meeting the minimum hours required. Graduate students will only receive graduate credit for the 500-level version of dual-listed courses.

Code	Title	Hours
<b>Core Courses (Take 3 or 4)</b>		<b>12</b>
MAS 601	Physical Oceanography	
MAS 602	Chemical Oceanography	
MAS 603	Geological Oceanography	
MAS 604	Biological Oceanography	
<b>Seminar</b>		<b>2</b>
Two enrollments in seminar, one hour per semester		
<b>Dissertation</b>		<b>12</b>
1-5 hours per semester, minimum requirement is 12 hours and maximum that may be applied to the 60 hour total is 15		
<b>Minimum Number of Hours for Electives, Directed Studies, and Additional Dissertation</b>		<b>34</b>

## Electives

Select Marine Sciences or other electives (500 or 600 level courses) as determined by advisory committee

## Directed Studies

Maximum of eight (8) hours

**Total Hours** **60**

- Minimum of 60 hours
- Grades of "B" or better in core courses

## Research Prospectus

Beyond beginning coursework, the first milestone is to develop a written research prospectus in consultation with a dissertation advisory committee. The research prospectus is a document that lays out the student's rationale, methods, and objectives for their thesis research. It must include enough detail for the committee to evaluate both the novelty of the proposed work as well as the techniques needed to achieve the research objectives. Students are expected to complete this task with 1.5 years of matriculation.

## Comprehensive Examinations

Written and oral examinations are required of all students seeking the Ph.D. degree in marine sciences. These examinations are given after completion of the core courses requirement and submission of the research prospectus. The written comprehensive examination is taken first and normally is more general in scope focusing on materials from core courses as well as the student's research area. The oral comprehensive examination may also address general knowledge in the student's discipline but is more focused on questions about the research prospectus. The examinations may be taken no more than twice.

## Candidacy

A doctoral student is admitted to candidacy after submitting a prospectus, passing both the written and oral comprehensive examinations, and completing all formal course work requirements. The doctoral candidate is a student who has fulfilled all preliminary requirements for the Ph.D. and has only completion of the dissertation research as the remaining requirement.

## Defense of Dissertation

The final oral defense of the dissertation is scheduled after the dissertation is written except for such revisions as may be necessary as a result of the defense. The final oral defense will not be given earlier than one semester after admission to candidacy and not before all required course work has been completed or is currently in progress.

## Marine Sciences (B.S.)

### Bachelor of Science (B.S.) in Marine Sciences

The Stokes School of Marine & Environmental Sciences offers a B.S. in Marine Sciences to address society's need for specialized understanding of the marine environment. This program is designed to prepare students for tackling challenges and opportunities presented by the "Blue Economy". The "Blue Economy" encompasses a broad range of job opportunities related to the marine environment allowing graduates to pursue careers in government, academic, commercial and industrial settings. The degree program takes advantage of the location of the University South Alabama as well as its partnership with the Dauphin

Island Sea Lab (DISL), to provide a unique educational experience as well as experiential learning opportunities. These institutional locations give students direct access to the natural marine laboratories of the Mobile Tensaw Delta, Mobile Bay, and the Gulf of Mexico where students will be immersed in all things marine!

A cornerstone of this program is the Semester by the Sea at DISL where students in this program will spend their spring semester of junior or senior year taking coursework at DISL with the option of living in residence at DISL. Students must complete the following courses with a grade of "C" or higher prior to attending the spring Semester by the Sea: BLY 121/L, BLY 122/L, CH 131/L, CH 132/L, PH 114/L or PH 201/L, MAS 134/L, MAS 331/L, and MAS 332/L.

Students must earn a "C" or higher in all required Marine Science courses including MAS 336, MAS 437/L, or an approved course substitution (i.e., MAS 490), MAS 431/L and MAS 475.

## Degree Requirements

Code	Title	Hours
<b>General Education Requirements. Please see the STEM requirements below that must be taken for this major.</b>		
General Education (p. 96)		53-57
<b>Required Marine Sciences Courses</b>		<b>37</b>
MAS 134 & 134L	Ocean Science and Ocean Science Lab	4
MAS 331 & 331L	Marine Science I and Marine Sciences I Lab	4
MAS 332 & 332L	Marine Science II-W and Marine Sciences II Lab	4
MAS 336	Marine Operations/Research-W	3
MAS 437 & 437L or MAS 490	Marine Geology and Marine Geology Lab Special Topics	4
MAS 431 & 431L	Field and Laboratory Measuremn and Field and Laboratory Measure	4
MAS 475	Marine Ecology	4
Choose 3 of the following DISL Summer courses:		10
MAS 371	Shark and Ray Biology	
MAS 367	Marine Biology	
MAS 430	Marine Botany	
MAS 451	Marine Vertebrate Zoology	
MAS 471	Marine Invertebrate Zoology	
MAS 477	Coral Reef Biology & Ecology	
MAS 478	Marine Mammal Hlth/Strd Resp	
MAS 488	Field Marine Science II	
MAS 490	Special Topics	
<b>Other Course Requirements</b>		
See list below		
<b>Minor Requirements</b>		
A minor is required for this degree program.		18-24

The Composite Science minor consists of three laboratory science sequences. Marine Science students may satisfy a Composite Science minor by completing the major additional course requirements (i.e. BLY 121/L, BLY 122/L, CH 131/L, CH 132/L, and PH 201/L or PH 114/L) plus either PH 115 & PH 115L or PH 202 & PH 202L. Or a student could take GY 111 & GY 111L and GY 112 & GY 112L to complete the Composite Science minor or by taking GEO 101 & GEO 101L and GEO 102 & GEO 102L.

**A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE 120**

All undergraduates must complete two designated writing credit (W) courses.

Note: PHL 231 is suggested as one of the AREA II. General Education Requirements.

## Other Course Requirements:

Additional courses required for the major includes 16 credits hours of general education courses in the following list.

Code	Title	Hours
MA 125 or ST 210	Calculus I Stat Reason and Application	3-4
BLY 121 & 121L	General Biology I and General Biology I Lab	4
BLY 122 & 122L	General Biology II and General Biology II Laboratory	4
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
Choose one from the following:		4-5
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab	
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	

## Major Milestones

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CAS 100	First Yr Exp -	2
EH 101	English Composition I	3
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
BLY 121 & 121L	General Biology I and General Biology I Lab	4
MA 125 or ST 210	Calculus I or Stat Reason and Application	3-4
<b>Hours</b>		<b>16-17</b>
<b>Spring</b>		
MAS 134 & 134L	Ocean Science and Ocean Science Lab	4
EH 102	English Composition II	3
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
BLY 122 & 122L	General Biology II and General Biology II Laboratory	4
<b>Hours</b>		<b>15</b>

**Second Year**

<b>Fall</b>		
MAS 331 & 331L	Marine Science I and Marine Sciences I Lab	4
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab	5
History, Social & Behavioral Sciences (Gen Ed)		3
Humanities & Fine Arts Elective (Gen Ed)		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
CA 110	Public Speaking	3
PHL 231	Social Ethics (Gen Ed - HUMANITIES ELECT)	3
MAS 332	Marine Science II-W	3
MAS 332L	Marine Sciences II Lab	1
Humanities & Fine Arts Elective (Gen Ed)		3
<b>Hours</b>		<b>13</b>
<b>Third Year</b>		
<b>Fall</b>		
History, Social & Behavioral Sciences Elective (Gen Ed)		3
Foreign Language I (Gen Ed)		3
Humanities & Fine Arts Elective (Gen Ed)		3
Minor Course		3
<b>Hours</b>		<b>12</b>
<b>Spring</b>		
MAS 336	Marine Operations/Research-W	3
MAS 475	Marine Ecology	4
MAS 431 & 431L	Field and Laboratory Measuremn and Field and Laboratory Measure	4
MAS 437 & 437L or MAS 490	Marine Geology or Special Topics	4
<b>Hours</b>		<b>15</b>
<b>Summer</b>		
Students may take a DISL summer course during Second year summer to lighten load during Third Year Summer.		
MAS 371	Shark and Ray Biology	2
MAS 451	Marine Vertebrate Zoology	4
MAS 471	Marine Invertebrate Zoology	4
<b>Hours</b>		<b>10</b>
<b>Fourth Year</b>		
<b>Fall</b>		
History, Social, and Behavioral Sciences Elective (Gen Ed)		3
Minor Course		3
Minor Course		3
Minor Course		3
<b>Hours</b>		<b>12</b>
<b>Spring</b>		
Foreign Language II (Gen Ed)		3
History, Social, and Behavioral Sciences Elective (Gen Ed)		3
Minor Course		3
Minor Course		3
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>120-121</b>

**Notes**

Students with ACT Math scores 22-23 should take CH 100 and MA 112 in the first semester, and they will graduate with 128 hours; MA 125 also satisfies the math requirement. Students with ACT Math scores 21 and below should begin math courses in the summer before Fall - Year 1.

\* Students who earn an English ACT score of 27 or above, SAT score of 610 or above on the verbal portion, or a new SAT Reading Test can opt out of EH 101.

\*\* Must have one history elective and one literature elective. In addition, students must choose a second history or literature to complete a two-part sequence.

\*\*\* There may be additional prerequisites for upper level major electives. Refer to the bulletin for more information.

All Arts and Sciences majors require a minor between 18 and 24 hours. Courses used in a minor can also be used for general education requirements or major requirements (up to two courses).

Two designated writing (W) courses are required with at least one course chosen from offerings in the student's major or minor. Courses carrying this required credit are identified in the University Bulletin by a (W) after the course title.

The Sample 4-year plan is designed as a guide for students preparing for their course selections. This information provides only a suggested schedule. Actual course selections should be made in consultation with an advisor.

## Marine Sciences Minor

### Degree Requirements

#### Undergraduate Minor in Marine Sciences

Seventy percent of the Earth's surface is occupied by oceans. This dominance means that oceans exert a major influence on atmospheric dynamics and terrestrial ecology. The societal and economic importance of healthy ocean ecosystems cannot be overstated or ignored. The Stokes School of Marine and Environmental Sciences welcomes qualified students who wish to better focus their academic training towards oceanography and marine biology. The undergraduate minor in marine sciences is designed to complement many science and non-science majors offered at USA. Ocean-related science is relevant to many contemporary environmental issues and problems and central to understanding earth-system evolution, dynamics, climate and sustainability. The minor consists of courses and research opportunities offered primarily by faculty and researchers in the Stokes School of Marine and Environmental Sciences and the Dauphin Island Sea Lab.

Requirements for a Minor in Marine Sciences include a minimum of 18 hours in Marine Sciences related classes. The student must take MAS 134 Ocean Science, MAS 134L Ocean Science Lab, MAS 331 Marine Sciences I and MAS 332 Marine Science II. In addition to these core requirements, students must take 8 credit hours of coursework at the Dauphin Island Sea Lab during the Summer Program which is equivalent to 2-3 electives courses (e.g., MAS 371, MAS 367, MAS 430, MAS 451, MAS 471, MAS 475 or other summer courses). Up to 6 hours required by a student's major may be applied toward the minor. The Marine Science minor places a strong emphasis on a rigorous natural science foundation. Students planning the minor should check catalog course descriptions carefully and should meet with advising staff in the Marine and Environmental Sciences Program office.

**If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.**

Code	Title	Hours
<b>Required Courses</b>		
MAS 134 & 134L	Ocean Science and Ocean Science Lab	4
MAS 331	Marine Science I	3
MAS 332	Marine Science II-W	3
<b>Electives</b>		
Select 2-3 courses (8 credits needed) from the following:		8
MAS 371	Shark and Ray Biology	
MAS 367	Marine Biology	
MAS 430	Marine Botany	
MAS 451	Marine Vertebrate Zoology	
MAS 471	Marine Invertebrate Zoology	
MAS 475	Marine Ecology	
MAS 477	Coral Reef Biology & Ecology	
MAS 478	Marine Mammal Hlth/Strd Resp	
MAS 488	Field Marine Science II	
MAS 490	Special Topics	
<b>Other DISL offered courses will be considered for elective</b>		
<b>Total Hours</b>		<b>18</b>

### Course of Study

- Freshmen/Sophomore*  
On Campus- MAS 134 Ocean Science (3 cr) and MAS 134L (1 cr)
- Junior/Senior Level*  
On Campus - MAS 331 Advance Marine Sciences I (3 cr lecture)  
On Campus - MAS 332 Advance Marine Sciences II (3 cr lecture)  
Two-three MAS listed electives at the Dauphin Island Sea Lab (DISL).

## Theatre and Dance

### Department Information

Department of Theatre & Dance website  
<https://www.southalabama.edu/colleges/artsandsci/theatre/>

The program is designed to provide students with a theoretical foundation and a practical proficiency in the arts of theatre.

The Bachelor of Arts (B.A.) allows the student to gain a better understanding of the theatre, while allowing each individual student the opportunity to start to specialize in a specific area of the art, including performance, and design/tech. Courses in this degree utilize lectures, workshops, and practical experience in all phases of the theatre.

All first-time freshmen must successfully complete CAS 100 as a degree requirement. Students must enroll during their first term at USA, except for summer-entry students who must enroll in the fall semester following entry.

### Degrees, Programs, or Concentrations

- Drama (BA) (p. 415)
- Drama Minor (p. 416)
- Drama Minor with Concentration in Dance (p. 416)

## Courses

### DRA 100 Theatre Practicum: Performance 1 cr

Practical experience in acting. May be repeated three times for a maximum of four credit hours. Prerequisite: Permission of department chair. Fulfills the Fine Arts and Humanities requirement in general education.

### DRA 101 Theatre Practicum: Tech 1 cr

Practical experience in backstage work. May be repeated three times for a maximum of four credit hours. Prerequisite: Permission of department chair. Fulfills the Fine Arts and Humanities requirement in general education.

### DRA 102 Theatre Practicum: Leadership 1 cr

Practical experience in theatre areas other than acting or technical production. May be repeated three times for a maximum of four credit hours. Prerequisite: Permission of department chair. Fulfills the Fine Arts and Humanities requirement in general education.

### DRA 106 Theatre Cornerstone 1 cr

An introductory course designed to familiarize incoming majors to the basics of professional theatre, the expectations for the upcoming 4-year degree, and the processes of the USA Department of Theatre and Dance.

### DRA 110 Introduction to Theatre 3 cr

A basic survey of theatre practice. Fulfills the Fine Arts and Humanities requirement in general education.

### DRA 121 Acting II 3 cr

A continuation of Acting I, this course emphasizes character development and analysis of classic American texts and introduces the work of Konstantin Stanislavski. Prerequisite: DRA 120 or permission of the instructor. Restrictions: Must be a drama major or minor or a dance minor. This course fulfills the Fine Arts and Humanities requirements in General Education

**Prerequisite:** DRA 120 Minimum Grade of D

### DRA 125 Fundamentals of Acting 3 cr

An introductory class in acting for the stage, aimed at those with little or no previous experience. Students will be introduced to a basic acting vocabulary, begin to develop skills in necessary script analysis, observe acting through live and recorded performances, and gain practical experience in acting through exercise, rehearsal and performance.

### DRA 135 Fund of Technical Theatre I 3 cr

A basic survey of fundamentals of scenery and lights for the theatre. This course prepares students for the Essential Skills in Entertainment Technician exams as proctored by the United States Institute of Theatre.

### DRA 136 Fund of Technical Theatre II 3 cr

A basic survey of fundamentals of Costuming, Wigs/Stage Make-up and Properties for theatre. Course prepares students for the Essential Skills in Entertainment Technician exams as proctored by the United States Institute of Theatre.

### DRA 150 Text Analysis 3 cr

Reading and analyzing play scripts as blueprints for dramatic actions, sights, sounds, characters, and productions. This course fulfills the Fine Arts and Humanities requirement in General Education.

### DRA 220 Stage Movement 3 cr

Through exercises and scene study, student-actors explore movement for the stage.

**Prerequisite:** DRA 121 Minimum Grade of C

**DRA 221 Voice for Actors 3 cr**

A workshop-lecture course in speaking voice and articulation for performance.

**Prerequisite:** DRA 121 Minimum Grade of C

**DRA 235 Fund of Theatrical Design 3 cr**

A basic survey of theatrical design practices including the fundamental elements of line, shape, texture, composition, and color utilized for visual communication.

**Prerequisite:** DRA 135 Minimum Grade of C and DRA 136 Minimum Grade of C

**DRA 290 Special Topics - 1-3 cr**

Theatre and drama topics not covered in regular curriculum. May be repeated when subject varies for a total of 9 hours.

**DRA 300 Adv Wksp Rehearsal and Perform 1 cr**

Advanced practical experience in acting. May be repeated for a maximum of 4 hours. Prerequisites: Junior status and Permission of Instructor.

**DRA 301 Adv Wksp Technical Production 1 cr**

Advanced practical experience in backstage work. May be repeated for a total of 4 hours. Prerequisites: Junior status and permission of Instructor.

**DRA 302 Adv Wksp Spec Activities 1 cr**

Advanced practical experience in theatre areas other than acting or technical production. May be repeated three times for a total of four hours. Prerequisites: Junior status and permission of department chair.

**DRA 310 Playwriting 3 cr**

Studies in character, plot development, and the one-act play form. Prerequisite: Permission of Instructor.

**DRA 321 Acting IV 3 cr**

A continuation of Acting III, this course emphasizes the techniques of theatrical styles, typically "Shakespeare." Prerequisite: DRA 121 or permission of the instructor. Limited to undergraduate status.

**Prerequisite:** DRA 121 (may be taken concurrently) Minimum Grade of D

**DRA 323 Acting II 3 cr**

Course is designed to teach theory and techniques in character development and analysis, as used in Realistic theatre, through the use of scene study. Prerequisites: DRA 120 Acting I, DRA 220 Stage Movement, DRA 221 Voice of the Actor, or permission of the dept. chair.

**Prerequisite:** DRA 120 Minimum Grade of C or DRA 220 Minimum Grade of C or DRA 221 Minimum Grade of C

**Cross-Listed:** DRA 222

**DRA 330 Scene Design 3 cr**

The fundamentals of scene design for the stage. Prerequisite: Limited to undergraduate status.

**Prerequisite:** DRA 235 Minimum Grade of C

**DRA 331 Lighting Design 3 cr**

The course focuses on the fundamentals of lighting design for the Stage.

**Prerequisite:** DRA 235 Minimum Grade of C

**DRA 332 Costume Design 3 cr**

The fundamentals of costume design for the stage.

**Prerequisite:** DRA 235 Minimum Grade of C

**DRA 334 Costume Design 3 cr**

A class in basic design theory,, concentrating on design concept, characterization and research. Some instruction in figure drawing and rendering. Artistic and Technical concerns as they apply to Costume Design will be addressed through lectures, discussions, and critiques. The course will focus on the first half of the design process: research, direction and rendering of ideas. Special concentration will focus on character analysis and their physical manifestations. In-class critiques will help the student to identify and utilize the characteristics of good design.

**Cross-Listed:** DRA 432

**DRA 340 Directing I 3 cr**

The fundamental techniques involved in directing a stage play: analysis, casting, and blocking.

**Prerequisite:** DRA 120 Minimum Grade of C and DRA 150 Minimum Grade of C

**DRA 350 Theatre History I - W 3 cr**

A comprehensive study of the important developments in theatre art from its beginnings to 1642, including a computer component.

**Prerequisite:** DRA 120 Minimum Grade of C and DRA 150 Minimum Grade of C and EH 102 Minimum Grade of C

**DRA 351 Theatre History II - W 3 cr**

A continuation of DRA 350 from the Restoration to the present.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**DRA 400 Theatre Internship 6 cr**

Practical experience in stock, repertory, or touring theatre. Prerequisites: Junior status or permission of the department chair. May be repeated for a maximum of 6 credit hours.

**DRA 410 3-Dimensional Makeup and Masks 3 cr**

A class in basic face casting, theatrical masks and slush mold latex appliances for the Stage.

**Prerequisite:** DRA 210 Minimum Grade of C

**DRA 420 Studies in Acting Styles 3 cr**

Variable content course featuring acting styles found in different theatrical genres as well as for the camera. May be repeated twice for credit when topic varies.

**Prerequisite:** DRA 120 Minimum Grade of C and DRA 220 Minimum Grade of C and DRA 221 Minimum Grade of C

**DRA 431 Lighting Design 3 cr**

The fundamentals of lighting design for the stage.

**Prerequisite:** DRA 131 Minimum Grade of C and DRA 133 Minimum Grade of C

**DRA 432 Costume Design 3 cr**

The fundamentals of costume design for the stage. Prerequisite: DRA 132

**Prerequisite:** DRA 132 Minimum Grade of D

**DRA 435 Design Practicum - Main Stage 3 cr**

A class geared to giving the student practical application design theory, continued development of render/modeling skill, and actualization of design

**Prerequisite:** DRA 330 Minimum Grade of C or DRA 331 Minimum Grade of C or DRA 332 Minimum Grade of C

**DRA 480 Senior Capstone 3 cr**

A culminating experience for all theatre majors, this course will provide instruction in professional theatre business practices aimed at graduating students about to leave the university for early career opportunities, as well as afford the student the opportunity to prepare and present a major research project that builds upon and synthesizes the knowledge and skills acquired during their theatre studies. A presentation of the research project will be presented to the entire department, and adjudicated by the full-time theatre faculty.

**Prerequisite:** DRA 340 Minimum Grade of C

<b>Faculty Name</b>	<b>Faculty Department</b>
JOHNSON, CHRISTINA LYN WILSON (christinajohnson@southalabama.edu)	Theatre and Dance

NARA, JOHN A (nara@southalabama.edu)	Theatre and Dance
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## Drama (BA)

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
General Education (p. 96)		53-57
<b>Major Requirements</b>		<b>45</b>
<i>Drama Major Core</i>		
A. Complete the following:		
DRA 100	Theatre Practicum: Performance	1
DRA 101	Theatre Practicum: Tech	1
DRA 106	Theatre Cornerstone	1
DRA 125	Fundamentals of Acting	3
DRA 135	Fund of Technical Theatre I	3
DRA 136	Fund of Technical Theatre II	3
DRA 150	Text Analysis	3
DRA 235	Fund of Theatrical Design	3
DRA 340	Directing I	3
DRA 350	Theatre History I - W	3
DRA 351	Theatre History II - W	3
DRA 480	Senior Capstone	3
B. Select one of the following:		
DRA 220	Stage Movement	3
DRA 221	Voice for Actors	3
DRA 323	Acting II	3
C. Select one of the following:		
DRA 330	Scene Design	3
DRA 331	Lighting Design	3
DRA 334	Costume Design	3
DRA Upper Division (300/400) Electives		6
DRA Electives, any level		3
<b>Minor Requirements</b>		

**DRA 490 Special Topics 1-3 cr**

Various topics of special interest to Theatre majors. Restrictions: Limited to undergraduate status. Prerequisite: Permission of department chair. May be repeated once for a maximum of six credit hours when topic varies.

**DRA 494 Directed Studies - 1-3 cr**

Independent study under faculty supervision, involving research readings, or artistic projects. Restrictions: Limited to undergraduate status. Prerequisites: Permission of department chair. May be repeated seven times for a maximum of eight credit hours.

**DRA 496 Theatre Internship 6 cr**

Practical experience in stock, repertory, or touring theatre.

## Faculty

Faculty Position	Degrees Held
Assistant Professor	BA, Miscellaneous Institution 02 BA, Southern Arkansas Univ-Main MFA, University of Alabama
Instructor	BA, Le Moyne College MFA, University of Alabama

A minor is required for this degree program	22
<b>A MINIMUM OF 120 HOURS IS REQUIRED FOR A DEGREE</b>	<b>120</b>

All undergraduates must complete two designated writing credit (W) courses, at least one must be in major or minor.

**Additional Information**

- DRA 350 and DRA 351 satisfy the Writing requirement for the major.

## Graduation Plan

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I	3
MA 110	Finite Mathematics	3
DRA 106	Theatre Cornerstone	1
DRA 125	Fundamentals of Acting	3
HY 101	HY of Western Civilization I	3
CAS 100	First Yr Exp -	2
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EH 102	English Composition II	3
HY 102	HY of Western Civilization II	3
DRA 101	Theatre Practicum: Tech	1
DRA 135	Fund of Technical Theatre I	3
DRA 150	Text Analysis	3
CA 110	Public Speaking	3
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
DRA 100	Theatre Practicum: Performance	1
DRA 136	Fund of Technical Theatre II	3
DRA 323	Acting II	3
Lab Sciences	Area III, B <sup>1</sup>	4
Minor course or DRA elective		3
<b>Hours</b>		<b>14</b>

<b>Spring</b>		
DRA 150	Text Analysis	3
DRA 235	Fund of Theatrical Design	3
Lab Sciences	Area III, B <sup>1</sup>	4
Fine Arts	Area II, C <sup>1</sup>	3
Literature	Area II, D <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
DRA 350	Theatre History I - W	3
Select one of the following:		3
DRA 330	Scene Design	
DRA 331	Lighting Design	
DRA 432	Costume Design	
Foreign Language	Area II, B <sup>1</sup>	3
Hum/Fine Arts	Area II, E <sup>1</sup>	3
Minor		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
DRA 351	Theatre History II - W	3
DRA 480	Senior Capstone	3
Foreign Language	Area II, B <sup>1</sup>	3
HY/Social/Behavioral Sciences	Area IV, B <sup>1</sup>	3
Minor		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
DRA 340	Directing I	3
Hum/Fine Arts	Area II, E <sup>1</sup>	3
Minor		9
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
DRA	Additional Drama courses	6
HY/Social/Behavioral Sciences	Area IV, B <sup>1</sup>	3
Minor		6
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>121</b>

<sup>1</sup> See General Education Requirements

#### Notes:

\*Recommended Course

## Drama Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

#### Minor in Drama

(min of 22)

Code	Title	Hours
Select one of the following:		1
DRA 100	Theatre Practicum: Performance	
DRA 101	Theatre Practicum: Tech	

DRA 102	Theatre Practicum: Leadership	
DRA 110	Introduction to Theatre	3
DRA 125	Fundamentals of Acting	3
DRA 150	Text Analysis	3
Select one of the following:		3
DRA 135	Fund of Technical Theatre I	
DRA 136	Fund of Technical Theatre II	
DRA 235	Fund of Theatrical Design	
Select one of the following:		3
DRA 350	Theatre History I - W	
DRA 351	Theatre History II - W	
DRA Upper Division (300/400) Electives		6
<b>Total Hours</b>		<b>22</b>

## Drama Minor with Concentration in Dance

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

#### Minor in Drama with Concentration in Dance

Code	Title	Hours
Select one of the following:		1
DRA 100	Theatre Practicum: Performance	
DRA 101	Theatre Practicum: Tech	
DRA 102	Theatre Practicum: Leadership	
DRA 110	Introduction to Theatre	3
DRA Approved Dance Electives		6
Select one of the following:		3
DRA 135	Fund of Technical Theatre I	
DRA 136	Fund of Technical Theatre II	
DRA 235	Fund of Theatrical Design	
Select one of the following:		3
DRA 350	Theatre History I - W	
DRA 351	Theatre History II - W	
DRA Upper Division (300/400) Electives		6
<b>Total Hours</b>		<b>22</b>

## College of Education and Professional Studies

### General Information

(251) 380-2738

College of Education and Professional Studies Website  
<https://www.southalabama.edu/colleges/ceps> ([https://](https://www.southalabama.edu/colleges/ceps/)  
[www.southalabama.edu/colleges/ceps/](https://www.southalabama.edu/colleges/ceps/))

## Administrative Staff

Title	Name
Dean	Angela T. Barlow
Associate Dean	James R. Stefurak
Executive Director of Student Services	Josh L. Wooden
Director of Academic Assessment	Matt T. Binion
Director of Field Services	Jennifer L. Simpson

## Vision and Mission

### Vision Statement

The vision of the College of Education and Professional Studies is to prepare exemplary professionals committed to life-long learning who are leaders in contributing to the betterment of our diverse and dynamic world.

### Mission Statement

The mission of the College of Education and Professional studies is to transform our community and expand our outreach through a commitment to excellence in education and human services, advancement of innovative research, and supporting the dedicated service of our faculty, staff, students, and alumni.

### Diversity, Equity, and Inclusion Statement

The College of Education and Professional Studies is committed to creating and sustaining an inclusive environment where every student's unique identity is valued and respected, and in which students feel safe to explore their intellectual, interpersonal and professional development in order to serve competently in a multicultural world.

The risk of engaging in bias is always present and requires constant vigilance. Faculty, staff and administrators of the College of Education and Professional Studies are dedicated to making an active, conscious, and intentional effort to provide educational experiences, conduct research, and provide community service in a manner which furthers our collective capacity for civil discourse, which actively combats racism, sexism and other forms of bigotry, and which reflects an appreciation for diverse values and cultures of all people.

### International Education

As part of its mission, the College of Education and Professional Studies is committed to broadening students' understanding of different cultures and preparing them for the global community in which we live. We believe that an international academic experience, in which students immerse themselves in a different culture and apply what they have learned in their USA classes, can enhance their cross-cultural competence and improve their interpersonal skills. While abroad, students develop a greater understanding and a deeper appreciation of the complexity of educational, cultural, political, environmental, economic, and social issues worldwide that promote the knowledge and skills needed to interact effectively in today's global society. Students are encouraged to explore the full range of international opportunities for directed study, teaching internships, collaborative research, and service learning projects available in the College and in other programs across campus.

Interested students should contact the College's Office of Student Advising (<https://www.southalabama.edu/colleges/ceps/advising.html>) or the USA Office of International Education (<https://www.southalabama.edu/colleges/ceps/international.html>)

[www.southalabama.edu/ie](https://www.southalabama.edu/ie) (<https://www.southalabama.edu/ie/>) to explore options available to students majoring in programs in the College.

## Accreditation and Approvals

The College of Education and Professional Studies at the University of South Alabama is accredited by the:

Council for the Accreditation of Educator Preparation (CAEP)  
1140 19th St. NW, Suite 400  
Washington, DC 20036  
(202) 223-0077

This accreditation covers initial and advanced educator preparation programs.

Additionally, teacher and support personnel certification programs are approved by the Alabama State Board of Education.

The Clinical Mental Health Counseling and School Counseling programs at the University of South Alabama are accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP).

The Combined-Integrated Clinical & Counseling Psychology Ph.D. program is accredited by the American Psychological Association Commission on Accreditation.

## Choice of Bulletin

If a student does not attend the College for a period of one (1) calendar year or longer, he/she will be required to fulfill the requirements of the program as specified by the Bulletin in effect during the year of his/her return as a student.

Students requesting to change their program, major, or concentration must meet the requirements as specified by the Bulletin in effect at the time of the change.

## Fingerprint/Background Check Requirement

Beginning fall term 2011 proof of a clear ALSDE background check (Suitability Letter) will be required to complete any course in a teacher education program which contains a field experience/placement in a K-12 school.

In addition, proof of clear background check may also be required prior to enrollment in any course which contains a field experience in a Non Teacher Cert program.

## Departments of Instruction

- Counseling And Instructional Sciences (p. 425)
  - Clinical Mental Health Counseling (MS) (p. 437)
  - Clinical Mental Health Counseling Graduate Certificate (p. 438)
  - Educational Media (M.Ed.) - Library Media (p. 439)
  - Educational Media and Technology (MS) (p. 440)
  - Educational Media and Technology Graduate Certificate (p. 440)
  - Human Performance Improvement Graduate Certificate (p. 440)
  - Instructional Design and Development (MS) (p. 441)
  - Instructional Design and Development (Ph.D.) (p. 442)

- Instructional Design and Development Graduate Certificate (p. 444)
- School Counseling (M.Ed.) (p. 444)
- Health, Kinesiology, And Sport (p. 446)
  - Coaching Certificate (p. 459)
  - Exercise Science (BS) (<http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/exercise-science-bs/>)
  - Exercise Science (BS) - Health And Fitness Concentration (p. 459)
  - Exercise Science (BS) - Pre-Professional Concentration (p. 462)
  - Exercise Science (MS) (p. 481)
  - Exercise Science and Performance Nutrition (Ph.D.) (p. 465)
  - Health & Wellness Minor (p. 467)
  - Health (BS) - Health Education 6-12 Teacher Certification (p. 467)
  - Health (BS) - Health Promotion (p. 470)
  - Health Promotion (MS) (p. 482)
  - Health-Physical Ed (BS) - Physical Education P-12 and Health Education 6-12 Teacher Certification (p. 474)
  - Performance Nutrition Minor (p. 477)
  - Physical Education (BS) - P-12 Teacher Certification (p. 477)
  - Physical Education (M.Ed.) - Health Education 6-12 Teacher Certification (p. 480)
  - Physical Education (M.Ed.) - P-12 Teacher Certification (p. 481)
  - Recreational Therapy (BS) (p. 482)
  - Sport Management (MS) (p. 485)
  - Sport Management and Recreation Studies (BS) - Coaching Administration (p. 485)
  - Sport Management and Recreation Studies (BS) - Sport Administration (p. 489)
  - Sport Management and Recreation Studies Minor (p. 492)
- Hospitality and Tourism Management (p. 492)
  - Hospitality and Tourism Management (BS) (p. 495)
  - Hospitality and Tourism Management (BS) Events Marketing and Management Concentration (<http://bulletin.southalabama.edu/programs-az/education-professional-studies/hospitality-tourism-management/hospitality-tourism-management-bs-events-concentration/>)
  - Hospitality and Tourism Management (BS) Global Leadership Concentration (<http://bulletin.southalabama.edu/programs-az/education-professional-studies/hospitality-tourism-management/hospitality-tourism-management-bs-global-ldr-concentration/>)
  - Hospitality and Tourism Management Minor (p. 498)
- Integrative Studies (p. 498)
  - Interdisciplinary Studies (BS or BA) (p. 503)
  - Interdisciplinary Studies Minor (p. 506)
  - Organizational Leadership (BS) (p. 506)
- Leadership/Teacher Education (p. 509)
  - Early Childhood Education (Alt. M.Ed.) (p. 532)
  - Early Childhood Education (M.Ed.) (p. 532)
  - Early Childhood Studies (BS) (p. 533)
  - Educational Administration (M.Ed.) (p. 536)
  - Educational Leadership (Ed.D.) (p. 537)
  - Educational Specialist (Ed.S.) (p. 539)

- Elementary Education (Alt. M.Ed.) (p. 542)
- Elementary Education (M.Ed.) (p. 542)
- Elementary Education: K-6 (BS) (p. 543)
- Reading Specialist Certification (p. 547)
- Secondary Education (Alt. M.Ed.) (p. 547)
- Secondary Education (M.Ed.) (p. 548)
- Secondary Education Biology (BS) (p. 549)
- Secondary Education English Language Arts (BS) (p. 552)
- Secondary Education General Sciences (BS) (p. 555)
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- Special Education (BS) (p. 566)
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## Undergraduate

### Requirements for Admission to Candidacy in Teacher Education Programs

Student should make a written application for admission to a teacher education program during the semester preceding the completion of 60 semester hours of credit. Courses in progress during the semester the student makes the application for candidacy may be used as a part of meeting the regulations.

Admission to a program in teacher education requires:

1. The student
  - a. declare teaching specializations,
  - b. take any necessary tests
  - c. submit any needed evaluations, and
  - d. be available for necessary interviews.
2. The student's application must be submitted to the College of Education and Professional Studies Advising Center by the published deadline of the semester in which the student is eligible to be admitted.
3. Transfer students must complete twelve semester hours of work at the University of South Alabama to be eligible for candidacy consideration.
4. The student's application receives approval from the Undergraduate Candidacy Committee.

### Criteria for Admission to Teacher Education Candidacy

1. Completion of 60 semester hours of course work, 48 of which must be in general studies.
2. A minimum overall grade-point average of 2.5 on all work attempted at the University of South Alabama and a minimum program grade-point average of 2.5 (including transfer work).
3. A minimum grade point average of 2.5 in professional studies (including transfer work), no grade below "C" is acceptable.
4. A minimum grade-point average of 2.5 in area(s) of teaching specialization(s) (including transfer work).
5. Completion of EH 101, EH 102, CA 110, EDM 310, EPY 351 including successful completion of the e-portfolio assessment of standards in completed courses. Secondary Education, Health Education, and Physical Education and SPE Collaborative 6-12 must also complete EDU 400.

6. Satisfactory completion of a departmental interview designed to provide information on the applicant's personality, dispositions, interests, and aptitudes consistent with the requirements for the successful teaching.
7. Proof of clear (ALSDE) background check, and professional liability insurance.
8. Sufficient physical ability and emotional stability to perform successfully as a teacher. (**Note:** These factors might be covered in the departmental interview.)
9. Recommendation of advisor and department chair.
10. Department/program may have additional candidacy requirements.

Completion of the minimum requirements does not guarantee admission to Teacher Candidacy.

## Requirements for Admission to Student Teaching

Admission to student teaching requires that the applicant:

1. Submit an application for student teaching to the Office of Field Services through the advisor February 15 for fall placements and September 15 for spring placements.
2. Receive approval of the application from the Director, Office of Field Services.
3. All students must comply with the College of Education and Professional Studies Policies and Procedures, which are on file in the Office of Field Services and in the Office of the Dean.
4. A student may not enroll in any other course during the hours assigned for student teaching except by approval and for one course only.
5. Student Teaching Assignments: All student teaching placements and nontraditional fifth-year teaching field internships will be coordinated by the Office of Field Services. All student teaching placements will be made in the Greater Mobile area to facilitate the supervision of students by University of South Alabama faculty or other personnel so designated by the chair of the department in which that student is enrolled.

## Criteria for Admission to Student Teaching

1. Be admitted to Teacher Candidacy and senior standing.
2. A minimum overall grade point average of 2.5 at the University of South Alabama.
3. A minimum program grade point average of 2.5 (including transfer work).
4. A minimum grade point average of 2.5 in professional studies (including transfer work). No grade below a "C" is acceptable.
5. Completion of a minimum of three-fourths of teaching specialization(s) with a minimum grade point average of 2.5 (including transfer work).
6. Completion of all program prerequisite courses.
7. Continued satisfactory progress in meeting requirements for admission to the program of teacher education.
8. Recommended for Student Teaching by assigned faculty advisor.
9. Satisfactory score on the required Praxis II test(s).
10. Completion of any departmental prerequisites.
11. Proof of clear (SDE suitability letter) background check and professional liability insurance.
12. Completion of field experience requirement, hours vary with program.
13. Department/program may have additional admission requirements.

See departmental section of the bulletin.

## Graduate Admission/Readmission

Each applicant to a graduate program must hold a bachelor's degree from a regionally accredited institution of higher education documented on an official transcript and meet the admission requirements of the Graduate School (<http://www.southalabama.edu/colleges/graduateschool/>), The College of Education and Professional Studies (<http://www.southalabama.edu/colleges/ceps/index.html> (<http://www.southalabama.edu/colleges/ceps/>)), and the specific program that the student is seeking admission. Individual programs may have additional requirements for admission and may be restricted because of capacity limitations in addition to the Graduate School and College of Education and Professional Studies requirements.

Individuals interested in applying for admission to a specific program should consult the department program website for program GPA and any other or more specific requirements. Satisfying minimal standards, however, does not guarantee admission. Some programs have additional GPA minimum requirements above the college GPA requirement.

Sufficient courses in the major subject are required to qualify for graduate study in the involved discipline. A student who has a deficiency in courses in the discipline but who otherwise qualifies for admission will be required to complete appropriate prerequisite course work.

The different programs in the College have different requirements as to whether standardized testing is required. Consult specific requirements on the department program website to determine which test results if any are required for admission.

Readmission to some programs in the College of Education and Professional Studies require review and approval by program faculty. A student wishing to change from one graduate program to another must apply to the new program through the Office of Admissions.

## Admission Requirements

1. GPA Requirement: A minimum overall grade-point-average (GPA) of 2.5 on a 4.0 scale based on the GPA used as the basis for granting the degree and posted on the official transcript from a regionally accredited institution at the time the degree was earned OR a 2.5 GPA on the last 60 semester hours of undergraduate course work posted on the official transcript from a regionally accredited institution at the time the degree was earned. For specific program GPA admission requirements, consult the department program website.  
GPA Exception: Individuals who have earned a bachelor's degree from a regionally accredited institution at the time the degree was earned and who do not have a qualifying GPA for admission may seek admission based on a qualifying score of the Graduate Record Examination (GRE) or the Miller Analogies Test (MAT). For the GRE, this standard is defined as having a score at the 50th percentile on all of the following subtests: Verbal Reasoning, Quantitative Reasoning, and Analytical Writing. For the Miller Analogies Test, students must have a score at or above the 50th percentile based on the total group percentile rank score. For Alternative Class A programs, applicants must submit a qualifying alternate score on the Alabama-prescribed Praxis subject-area test.
2. Personal statement on purpose for graduate study and applicant's career goals.

3. Sufficient coursework in the major subject to qualify for graduate study in the involved discipline. Students with a deficiency in required coursework may be required to successfully complete additional prerequisite courses.
4. For those students who have had previous graduate work, performance at the graduate level may be taken into consideration as well as undergraduate performance. An earned advanced degree may substitute for some admission requirements.

## Non-Degree Admission

See Non-Degree Admission requirements in Graduate School section of the Bulletin.

## Undergraduate Programs

The College of Education and Professional Studies, working in cooperation with the Administrative staff and with other colleges of the University, recognizes and accepts the responsibility for identifying, recruiting, and preparing students who will be capable of providing education in a dynamic society. The College accepts the further responsibility of ensuring that every student preparing to teach will have the advantage of continuous counseling. Planned observation and participation are regular parts of the student's program throughout the preparation period.

The College of Education and Professional Studies has five major objectives: to prepare professional educators for meeting the educational needs of children, youth, and adults; to prepare support personnel for meeting the educational needs of the schools; to assist schools with the improvement of instructional programs; to prepare students in professional areas other than teaching; and to conduct research to expand, enhance, and evaluate instructional programs and personnel.

Undergraduate preparation is offered in elementary education, secondary education, special education, health and physical education, health promotion, exercise science, sport and recreation management, recreational therapy, hospitality and tourism management, interdisciplinary studies, and organizational leadership.

## Student Portfolio Assessment

The College of Education and Professional Studies uses student portfolio assessment as a part of program requirements and assessment of student learning outcomes.

Students majoring in the College of Education and Professional Studies are required to purchase the License to use the portfolio beginning with the first College of Education and Professional Studies course containing teacher education standards taken and will continue to use the software throughout their program of study.

## The Teacher Education Program

The Teacher Education Program begins with selective recruitment, gives careful attention to each phase of the preparation program, and assists in the proper placement and adjustment of teachers and other educational personnel. Follow-up studies of graduates are made in an effort to assist them, to gain knowledge of their effectiveness on the job, and to secure data vital to future planning and development. Programs for the preparation of teachers are built on a liberal arts foundation. Those preparing for teaching positions in the secondary schools pursue a composite teaching specialization in the College of Education and Professional Studies, and a content area in the College of Arts and Sciences. Those preparing to teach in elementary school concentrate on subject matter relevant to the elementary school curriculum while

completing general requirements in the liberal arts. Those preparing for a teaching specialization which extends from nursery through twelfth grade pursue a broad program appropriate to elementary and secondary schools. All groups complete their undergraduate programs with suitable professional preparation.

## Course Fees

All undergraduate three semester hour courses in the CEPS, except the PE activity courses, internships and practicum, require a computer lab course fee. Internships require an internship fee, and some PE activity courses require special fees as noted in other sections of this Bulletin.

## Minimum Professional Studies Requirements

Because professional studies requirements vary from program to program, the student is referred to the appropriate departmental section in this Bulletin. However, a candidate may not enroll in more than five professional studies courses before the candidate has met all criteria for unconditional admission to a teacher education program. The candidate may repeat any of the five courses in which he or she received a grade of "C" or below. A student who changes from non-teacher certification to a teacher certification program must comply with this standard. A student who violates this standard is in jeopardy of losing academic credit.

## Requirements For Admission To Candidacy In Teacher Education Programs

The student should make a written application for admission to a teacher education program during the semester preceding the completion of 60 semester hours of credit. Courses in progress during the semester the student makes the application for candidacy may be used in meeting the requirements.

### Admission to a program in teacher education requires:

1. The student
  - a. declare teaching specialization(s),
  - b. take any necessary tests,
  - c. submit any needed evaluations, and
  - d. be available for necessary interviews.
2. The student's application must be submitted to the College of Education and Professional Studies Advising Center by the published deadline of the semester in which the student is eligible to be admitted.
3. Transfer students must complete twelve semester hours of work at the University of South Alabama to be eligible for candidacy consideration.
4. The student's application receives approval from the Undergraduate Candidacy Committee.

## Criteria For Admission To Teacher Education Candidacy

1. Completion of 60 semester hours of course work, 48 of which must be in general studies.
2. A minimum overall grade-point average of 2.5 on all work attempted at the University of South Alabama and a minimum program grade-point average of 2.5 (including transfer work).
3. A minimum grade point average of 2.5 in professional studies (including transfer work), no grade below "C" is acceptable.
4. A minimum grade-point average of 2.5 in area(s) of teaching specialization(s) (including transfer work).
5. Completion of EH 101, 102, CA 110, EDM 310, EPY 351 including successful completion of the e-portfolio assessment of standards in completed courses. Secondary Education, Health Education, and

Physical Education and SPE Collaborative 6-12 must also complete EDU 400.

6. Satisfactory completion of a departmental interview designed to provide information on the applicant's personality, dispositions, interests, and aptitudes consistent with the requirements for the successful teaching.
7. Proof of clear (ALSDE) background check, and professional liability insurance.
8. Sufficient physical ability and emotional stability to perform successfully as a teacher. (NOTE: These factors might be covered in the departmental interview.)
9. Recommendation of advisor and department chair.
10. Department/program may have additional candidacy requirements.

\*\*Completion of the minimum requirements does not guarantee admission to Teacher Candidacy.\*\*

### **Requirements For Admission To Student Teaching** **Admission to student teaching requires that the applicant:**

1. Submit an application for student teaching to the Office of Field Services by February 15 for fall placements and September 15 for spring placements.
2. Receive approval of the application from the Director, Office of Field Services.
3. All students must comply with the College of Education and Professional Studies Policies and Procedures, which are on file in the Office of Field Services.
4. A student may not enroll in any other course during the hours assigned for student teaching except by approval and for one course only.
5. Student Teaching Assignments: All student teaching placements will be coordinated by the Office of Field Services. All student teaching placements will be made in the Greater Mobile area to facilitate the supervision of students by University of South Alabama faculty or other personnel so designated by the chair of the department in which that student is enrolled.

### **Criteria For Admission To Student Teaching**

1. Be admitted to Teacher Candidacy and senior standing.
2. A minimum overall grade point average of 2.5 at the University of South Alabama.
3. A minimum program grade point average of 2.5 (including transfer work).
4. A minimum grade point average of 2.5 in professional studies (including transfer work). No grade below a "C" is acceptable.
5. Completion of a minimum of three-fourths of teaching specialization(s) with a minimum grade point average of 2.5 (including transfer work).
6. Completion of all program prerequisite courses.
7. Continued satisfactory progress in meeting requirements for admission to the program of teacher education.
8. Recommended for Student Teaching by assigned faculty advisor.
9. Satisfactory score on the required Praxis test(s).
10. Completion of any departmental prerequisites.
11. Proof of clear (SDE suitability letter) background check and professional liability insurance.
12. Completion of field experience requirement, hours vary with program.

13. Department/program may have additional admission requirements. See departmental section of the bulletin.

## **Retention**

To remain in the teacher education program, each student shall make satisfactory progress as determined by continuous evaluation. A student shall be removed from candidacy when any of the minimum required program GPA's drop below 2.5, or, the USA transcript GPA drops below 2.5 or if a D or F or U grade is received in a candidacy course. Violations of the Alabama Educators Code of Ethics is grounds for dismissal from the program or delay in advancing through the program. Failure to receive or maintain a clear background check is grounds for dismissal from the program.

## **Minimum Completion Requirements for Certification Programs**

Successful completion of the following minimum requirements may qualify the student for Class B Certification. Currently in Alabama this certificate is valid for five years.

1. Satisfactory completion of a program approved by the State Board of Education with a minimum overall grade-point average of 2.5 on all work attempted at the University of South Alabama and a minimum program grade-point average of 2.5 (including transfer work), a minimum grade point average of 2.5 in professional teacher education with no grade below "C" (including transfer work), and a minimum grade-point average of 2.5 in area(s) of teaching specialization(s) (including transfer work).
2. Demonstrated readiness to teach through on-the-job performance as a student teacher as determined by an evaluation plan approved by the State Board of Education.
3. Satisfactory completion of the student teaching experience.
4. A minimum of 25 percent of the credit hours required for the degree from the last 45 semester hours and a minimum of 32 semester hours of upper level course work in the major discipline must be earned in residence at The University of South Alabama.
5. A community college graduate can transfer no more than 50% of the credits used toward the degree with a maximum of 64 semester hours toward the Bachelor of Science degree requirements.
6. Satisfactory performance on the specified Standards as determined by the e-portfolio assessment.
7. Satisfactory performance on all requirements of the Alabama Educator Certification Assessment Program (AECAP).
  - a. Praxis test(s)
  - b. Effective September 1, 2018, a performance assessment (edTPA) administered by Pearson will be required for initial certification in a teaching field or area of instructional support.
  - c. For Elementary Education and Special Education K-6: A passing score on the Foundations of Reading test for Alabama.
8. An official transcript from a regionally accredited institution documenting an earned bachelor's degree.
9. Course work used to meet certification requirements (B, A, AA) may not be used to meet a different level requirement.
10. Secondary Education programs require an academic major in Arts & Sciences.
11. Remedial or developmental studies courses may not be used to meet program requirements.

## Recommendation for Certification

The Dean of the College of Education and Professional Studies is responsible for recommending qualified University of South Alabama students seeking teacher certification. Only those students who have completed requirements of the University and of the Alabama State Department of Education will be recommended for Class B Professional Teaching Certificate.

A candidate cannot be recommended for certification based on completion of a program for which State approval expired more than seven years prior to the date of program completion.

## Warranty Statement

Consistent with the policies of the Alabama State Department of Education, the College of Education and Professional Studies at the University of South Alabama warrants its graduates (State Approved Program Competencies) under the following conditions:

Warranties will be provided to USA graduates who receive their initial professional certification through the college and are employed by a public school district in Alabama in their area of specialization. The College of Education and Professional Studies shall provide assistance at no cost to such individuals who were recommended for certification by the College of Education and Professional Studies and are deemed to be unsatisfactory based on performance evaluations established/approved by the Alabama State Board of Education and recommended by the Local Education Agency within two years after program completion.

## Transfer Credit From Non-Accredited Institutions

No degree credit will be accepted by the College of Education and Professional Studies from any collegiate institution unless that institution has regional accreditation and prepares teachers on the same degree level of certification. Course work from institutions in foreign countries require an official (WES or IEE) evaluation to determine if the course may be used for programs leading to Teacher Certification.

## Persons With Degrees Other Than in Education

Persons holding degrees other than in Education may apply for study in an approved program leading to professional certification; they will be required to complete their approved programs outlined in this Bulletin to qualify for Alabama certification.

## Worksheets Available for All Programs

Course of Study sheets are available on-line at <https://www.southalabama.edu/colleges/ceps/programs.html>. Each student will have access to his/her degree audit via PAWS.

## Approvals and Services

Upon satisfactory completion of an approved program of study and upon recommendation of the Dean and Certification Officer of the College of Education and Professional Studies, a professional certificate will be issued by the appropriate State Department of Education only if the student is eligible and applies.

## Certification in More Than One Teaching Field

Students enrolled in the College of Education and Professional Studies desiring to complete certification requirements in more than one teaching field will complete the curriculum in each field including general studies, professional studies in teacher education (including the internship), and teaching specialization. Courses used for one level of certification may not be used again for a higher level certificate.

## Graduation Grade Point Average

Undergraduate students seeking teacher certification must have a minimum overall grade-point average of 2.5 on all work attempted at the University of South Alabama and a minimum program grade-point average of 2.5 (including transfer work), a minimum grade-point average of 2.5 in professional teacher education with no grade below "C" (including transfer work), and a minimum grade-point average of 2.5 in area(s) of teaching specialization(s) (including transfer work). Undergraduate students in the majors of Early Childhood Studies, Recreational Therapy, and Sport Management and Recreation Studies must have a minimum grade-point average of 2.2 in the major/specialization (including transfer work) and a grade-point average of 2.2 on all work undertaken in residence at the University of South Alabama. All other majors must earn a minimum grade-point average of 2.0 in residence.

## Directed/Independent Studies

No more than two (2) Directed/Independent Study courses may be used for degree and/or certification requirements, including use in improving the grade-point average. For students with a minor, no more than 12 hours can count toward major or professional studies.

## Graduate Programs

The Master of Education degree in Educational Administration with an emphasis in higher education leadership. The Master of Education degree leading to Alabama Class A Certification in Art Education, Early Childhood Education, Elementary Education, English for Speakers of Other Languages, Health Education, Instructional Leadership, Library Media, Physical Education, Reading Specialist, School Counseling, Secondary Education, Special Education, and Visual Arts. Both thesis and non-thesis degree options are available to the graduate student.

The Alternative Master of Education degree leading to the Alabama Class A Certificate, or equivalent, to persons who have earned a non-education baccalaureate degree from an accredited institution of higher education: Early Childhood Education, Elementary Education, English for Speakers of Other Languages, Foreign Languages, Secondary Education, Special Education and Visual Arts.

The Master of Science degree in Clinical Mental Health Counseling, Educational Media and Technology, Exercise Science, Health Promotion, Instructional Design and Development, and Sport Management. Both thesis and non-thesis degree options are available to the graduate student.

The Educational Specialist degree leading to AA Certification, in Alabama, in the following areas: Early Childhood Education, Elementary education, Instructional Leadership, Reading Specialist, Secondary Education, Special Education and Teacher Leader.

The Doctor of Philosophy degree in Instructional Design and Development. The Doctor of Philosophy degree in Exercise Science and Performance Nutrition. The Doctor of Education degree in Educational Leadership. The doctoral program in Educational Leadership offers two tracks—one with a focus in P-12 education and the other with a focus in higher education.

The combined-integrated Doctor of Philosophy Degree in Clinical and Counseling Psychology offered jointly with the Department of Psychology in the College of Arts and Sciences.

## Admission/Readmission

Each applicant to a graduate program must hold a bachelor's degree from a regionally accredited institution of higher education documented on an official transcript and meet the admission requirements of the Graduate School (<http://www.southalabama.edu/colleges/graduateschool/>), The College of Education and Professional Studies (<http://www.southalabama.edu/colleges/ceps/index.html> (<http://www.southalabama.edu/colleges/ceps/>)), and the specific program that the student is seeking admission. Individual programs may have additional requirements for admission and may be restricted because of capacity limitations in addition to the Graduate School and College of Education and Professional Studies requirements.

Individuals interested in applying for admission to a specific program should consult the department program website for program GPA and any other or more specific requirements. Satisfying minimal standards, however, does not guarantee admission. Some programs have additional GPA minimum requirements above the college GPA requirement.

Sufficient courses in the major subject are required to qualify for graduate study in the involved discipline. A student who has a deficiency in courses in the discipline but who otherwise qualifies for admission will be required to complete appropriate prerequisite course work.

The different programs in the College have different requirements as to whether standardized testing is required. Consult specific requirements on the department program website to determine which test results if any are required for admission.

Readmission to some programs in the College of Education and Professional Studies requires review and approval by program faculty. A student wishing to change from one graduate program to another must apply to the new program through the Office of Admissions.

## Admission Requirements

1. GPA Requirement: A minimum overall grade-point-average (GPA) of 2.5 on a 4.0 scale based on the GPA used as the basis for granting the degree and posted on the official transcript from a regionally accredited institution at the time the degree was earned OR a 2.5 GPA on the last 60 semester hours of undergraduate course work posted on the official transcript from a regionally accredited institution at the time the degree was earned. For specific program GPA admission requirements, consult the department program website.

GPA Exception: Individuals who have earned a bachelor's degree from a regionally accredited institution at the time the degree was earned and who do not have a qualifying GPA for admission may seek admission based on a qualifying score of the Graduate Record Examination (GRE) or the Miller Analogies Test (MAT). For the GRE, this standard is defined as having a score at the 50th percentile on all of the following subtests: Verbal Reasoning, Quantitative Reasoning, and Analytical Writing. For the Miller Analogies Test, students must have a score at or above the 50th percentile based on the total group percentile rank score. For Alternative Class A programs, applicants must submit a qualifying alternate score on the Alabama-prescribed Praxis subject-area test.

2. Personal statement on purpose for graduate study and applicant's career goals.
3. Sufficient coursework in the major subject to qualify for graduate study in the involved discipline. Students with a deficiency in required coursework may be required to successfully complete additional prerequisite courses.

4. For those students who have had previous graduate work, performance at the graduate level may be taken into consideration as well as undergraduate performance. An earned advanced degree may substitute for some admission requirements.

## Non-Degree Admission

See Non-Degree Admission requirements in the Graduate School section of the Bulletin.

## Completion Time

All requirements for a master's degree or educational specialist degree must be completed within seven calendar years from admission as a graduate student at the University of South Alabama. Course work completed more than seven years prior to the date for graduation in a master's degree or educational specialist degree may not be counted for degree credit. All requirements for a doctoral degree must be completed within ten calendar years from admission to a doctoral program at the University of South Alabama. Under extraordinary circumstances, an appeal for a time extension may be made to the Director of Graduate Studies in the College of Education and Professional Studies.

## Examinations

Students are responsible to apply for the Graduate Comprehensive Examination. This should be done prior to the end of the first week of class in the semester the student intends to sit for the examination. Two types of examinations are available. See departmental programs for specific information.

### Type I Comprehensive Examination – Written or Oral

This examination is written or oral, or both, at the option of the faculty of the student's major department, and is in the candidate's Program of Study. The examination is conducted by a committee of at least three members appointed by the chair of the department in which the student has majored. This examination shall not exceed three hours. Comprehensive examinations are scheduled once each semester. The student is responsible for ascertaining the date and time of the examination. The student must be in good standing, i.e. not on academic probation in order to take the exam.

The comprehensive examination is taken during the semester in which students complete their degree requirements or a subsequent semester. The examination is given at least two weeks before the end of the semester.

Application for the comprehensive examination can be obtained from <https://www.southalabama.edu/colleges/ceps/gradschool/resources/compsapp.pdf>. Submission deadlines for the application are available at <https://www.southalabama.edu/colleges/ceps/gradschool/comps.html>. The result of this examination is reported to the Director of Graduate Studies College of Education and Professional Studies by the Chairperson of the department.

Comprehensive examinations may be repeated at the discretion of the graduate student's department. A student will be dismissed from the program after two unsuccessful attempts to pass the examination. Specific recommendations for additional work, following failure of the comprehensive examination, will be at the discretion of the department involved.

### Type II Comprehensive Examination Performance

This examination requires a performance either as part of a culminating seminar, internship, field study, or practicum review. Successful

completion of this examination is determined by the faculty of the department of the student's major.

The result of this examination is reported to the Director of Graduate Studies, College of Education and Professional Studies, by the Chair of the Department. The student should consult with an advisor for entering this phase of graduate work.

If a thesis is submitted, an oral examination on the thesis is required. The examination is conducted by the candidate's Thesis Committee. Approval by a majority of the examination committee is required.

## Course Fees

All graduate three semester hour courses in the CEPS, except internships, practicum and pre-practicum experiences have a computer course lab fee.

## Graduate Assistantships

Masters level assistantships are awarded on an annual basis and are granted for the fall and spring semesters. The stipend for the two semesters is \$6,000 and waiver of up to 10 hours of tuition. Fees are paid by the student. In return, twenty clock hours of work are required per week. Awards are made generally in the summer for the next academic year.

Doctoral level assistantships are awarded on an annual basis and are granted for the fall, spring, and summer semesters. The stipend for the three semesters is \$11,000 and waiver of up to 10 hours of tuition. Fees are paid by the student. In return, twenty clock hours of work are required per week. The awards are made generally during the summer for the next academic year.

## Teacher Certification Policies

### For All Graduate Programs Leading to Alabama Class A or AA Certification

1. **Prior-Level Credit:** Credits used for prior-level certification or degree in any teaching field or area of instructional support may not be used to meet subsequent-level certification requirements.
2. **Special Education/Diversity Requirement:** A survey of special education course is required unless that course was taken for prior-level certification. If taken for prior-level certification, then an ALSDE-approved diversity course is required for each subsequent level of certification.
3. **Transfer Courses from Previous Degrees:** Students with a previous master's or specialist degree, seeking Class A or AA certification without obtaining a second master's and second specialist degree, and wish to apply this credit, must obtain approval from the CEPS Office of Graduate Studies. Courses approved in this manner may be applied to certification requirements, but will not be applied toward earning a second master's or second specialist degree.
4. **Degree for Certification:** If seeking Class A certification, then a transcript from a regionally accredited institution documenting an earned master's degree is required. If seeking Class AA certification, then a transcript from a regionally accredited institution documenting an earned education specialist degree is required.
5. **Validity of Certificate:** The certification used as the basis for admission must be valid at the time of admission and at the time of graduation for certification recommendation. If unconditionally admitted based on a valid certificate from another state, the individual must hold an appropriate and valid certificate in Alabama before applying for Class A or Class AA certification.

6. **Unconditional Admission:** Admission to the graduate school is not equivalent to unconditional admission to an approved program. Admission requirements listed for educator preparation programs are for unconditional admission and must be met to begin the program. In addition to program specific admission requirements, all programs require a criminal history background check with a suitable status in the ALSDE Certification Search.
7. A candidate cannot be recommended for certification based on completion of a program for which State approval expired more than seven years prior to the date of program completion.

## For Graduate Programs Leading to Alabama Class A Certification

1. **Certification/Graduation Requirements:** For students unconditionally admitted July 1, 2017, and thereafter, to Class A programs, a minimum GPA of 3.25 is required in coursework used to meet the requirements for the ALSDE-approved program.
2. **Level of Course Enrollment:** Students may not enroll in courses unique to Ed.S. programs that lead to Class AA certification while enrolled in Class A programs.

## Master of Education, Traditional Class A Certification in a Teaching Field

1. **Admission Requirements:** A valid bachelor's-level professional educator certificate in the same teaching field(s) in which the Class A Professional Educator Certificate is sought, with the exception of special education, English for speakers of other languages (ESOL), and reading specialist. Unconditional admission to a Class A special education program or a Class A ESOL program requires at least a valid bachelor's-level certificate in any teaching field. Unconditional admission to a Class A reading specialist program requires two full years of full-time classroom teaching experience.
2. **Certification/Graduation Requirements:** A qualifying score on the prescribed Praxis subject assessment(s) for initial Class A certification in a teaching field.

## Master of Education, Alternative Class A Certification in a Teaching Field

1. **Admission Requirements:**
  - a. A criminal history background check.
  - b. A bachelor's degree from a regionally accredited institution with a minimum overall GPA of 2.5 or a master's or higher degree with a GPA of at least 3.0. This GPA must be documented on the official transcript of the degree granting institution and must be the GPA that was used as the basis for granting the degree, not a GPA that includes post-degree courses. If admitted on master's or higher degree GPA, courses from that degree cannot be used to meet certification requirements.
  - c. Appropriate coursework in the teaching field or a passing score on the prescribed Praxis subject assessment.  
GPA Exception for unconditional admission to Alternative Class A State Department of Education-approved programs: Individuals who have earned a bachelor's degree from a regionally accredited institution at the time the degree was earned and do not meet the minimum overall undergraduate GPA of 2.5, but have at least a 2.0 overall undergraduate GPA, may seek provisional admission to an Alternative Class A program if the alternate score on the Alabama prescribed Praxis subject-area test is obtained. The alternate scores can be found on the Alternate Score Requirements document at <https://>

www.alabamaachievers.org/ (Teachers & Administrators: Teacher Center: Teacher Certification). The **only** tests and scores accepted are those listed on the Alternate Score Requirements document. All other requirements for admission must also be met.

2. Certification/Graduation Requirements:
  - a. A qualifying score on the prescribed Praxis subject assessment(s).
  - b. A passing score on the appropriate Educative Teacher Performance Assessment (edTPA) handbook administered by Pearson.
  - c. For Early Childhood Education, Elementary Education, and Special Education K-6: A passing score on the Foundations of Reading test for Alabama.

### Master of Education, Class A Certification in Areas of Instructional Support

1. Admission Requirements:
  - a. A valid bachelor's-level or valid master's-level professional educator certificate in a teaching field or a valid master's-level certificate in another area of instructional support.
  - b. A minimum of two full years of full-time, acceptable P-12 professional educational work experience documented on the Supplement EXP form. The School Counseling program at USA is CACREP accredited, leads to Class A certification, and does not require existing certification or work experience for admission.
2. Certification/Graduation Requirements:
  - a. A qualifying score on the prescribed Praxis assessment.

### Master of Education, Class A Certification in Instructional Leadership

1. Admission Requirements:
  - a. A valid bachelor's-level or valid master's-level ALABAMA professional educator certificate in a teaching field or a valid master's-level certificate in another area of instructional support.
  - b. A minimum of three full years of full-time, acceptable professional educational experience in a P-12 setting, which must include at least one full year of full-time P-12 classroom teaching experience documented on the Supplement EXP form.
  - c. Three letters of recommendation to include the applicant's principal or supervisor.
  - d. Completed copy (all forms) of the most recent performance appraisal to include the professional development component, if available.
  - e. Evidence of ability to improve student achievement.
  - f. Evidence of leadership and management potential, including evidence of most recent accomplishments in the area of educational leadership.
  - g. Summary of candidate's reasons for pursuing instructional leadership certification.
  - h. Summary of what the candidate expects from the preparation program.
  - i. Pass an interview conducted by a program admission committee that includes both P-12 instructional leaders and higher education faculty.
2. Certification/Graduation Requirements:
  - a. A qualifying score on the prescribed Praxis assessment.

### For Graduate Programs Leading to Alabama Class AA Certification

1. Certification/Graduation Requirements: For students unconditionally admitted July 1, 2017, and thereafter, to Class AA programs, a minimum GPA of 3.5 is required in coursework used to meet the requirements for the ALSDE-approved program.

### Educational Specialist, Class AA Certification in a Teaching Field

1. Admission Requirements: A valid master's-level professional educator certificate in the same teaching field(s) in which the Class AA Professional Educator Certificate is sought with the exception of Special Education (Class A in any teaching field), Early Childhood (if Class B in Early Childhood and Class A in Reading), Elementary Education (if Class B in Elementary and Class A in Reading), English Language Arts (if Class B in English and Class A in Reading), and any teaching field for which Class B is valid if Class A in ESOL.
2. Teacher Leader Admission Requirements:
  - a. A valid master's level professional educator certificate in any teaching field or area of instructional support.
  - b. A minimum of three full years of full-time teaching experience in a P-12 setting documented on the Supplement EXP form.
  - c. Three letters of recommendation.
  - d. Evidence of ability to positively affect student achievement.
  - e. Evidence of collaborative leadership potential.

### Educational Specialist, Class AA Certification in Areas of Instructional Support

1. Admission Requirements: A valid master's-level professional educator certificate in the instructional support field in which the Class AA Professional Educator Certificate is sought with the exception of Teacher Leader.

### Educational Specialist, Class AA Certification in Instructional Leadership

1. Admission Requirements:
  - a. A valid Class A Professional Educator Certificate in Instructional Leadership or a valid Class A Professional Leadership Certificate.
  - b. If certificate is not Instructional Leadership, then applicant must submit same admission documents as required for Class A Instructional Leadership and meet one of the following criteria on Supplement EXP form:
    - i. Currently serving as a superintendent, assistant or associate superintendent, assistant to the superintendent, principal, assistant principal, supervisor (any subject and/or grade level), administrator of career and technical education, coordinator, or evaluator.
    - ii. Document three years of employment in an instructional leadership position.

## Counseling And Instructional Sciences

### Department Information

(251) 380-2861

Department of Counseling and Instructional Sciences website

<https://www.southalabama.edu/colleges/ceps/cins> (<https://www.southalabama.edu/colleges/ceps/cins/>)

Title	Name
Chair	James P. Van Haneghan
Professors	Getch, McDermott, Van Haneghan
Associate Professors	Fregeau, Zha
Assistant Professors	Chen, Ding, Gaston, Kim, McCarty, Moore, Tittler, Upton

## Department of Counseling and Instructional Sciences

The Department of Counseling and Instructional Sciences offers the Master of Education degree in Educational Media (leading to certification in Library Media), and in School Counseling leading to certification as a school counselor, and the Master of Science degree in Educational Media & Technology, Clinical Mental Health Counseling, and Instructional Design. The department also offers the Doctor of Philosophy degree in Instructional Design and Development. The department collaborates with the Department of Psychology in the College of Arts and Sciences to deliver the Ph.D. degree in Combined-Integrated Clinical & Counseling Psychology. Finally, the department offers the B.S. degree and minor in Instructional Design & Performance Improvement.

## Interdepartmental Education

Faculty within the department offer foundational coursework in Education Technology, Educational Psychology, Educational Foundations, and Educational Research. These courses are offered for students in the undergraduate and graduate programs throughout the college and are designed to broaden and strengthen degree-area preparation.

## Degrees, Programs, or Concentrations

- Clinical Mental Health Counseling (MS) (p. 437)
- Clinical Mental Health Counseling Graduate Certificate (p. 438)
- Educational Media (M.Ed.) - Library Media (p. 439)
- Educational Media and Technology (MS) (p. 440)
- Educational Media and Technology Graduate Certificate (p. 440)
- Human Performance Improvement Graduate Certificate (p. 440)
- Instructional Design and Development (MS) (p. 441)
- Instructional Design and Development (Ph.D.) (p. 442)
- Instructional Design and Development Graduate Certificate (p. 444)
- School Counseling (M.Ed.) (p. 444)

## Courses

### Counselor Education (CED)

#### **CED 560 Diagnosis/Treatment Planning 3 cr**

The Diagnostic and Statistical Manual of Mental Disorders (DSM) is used to develop a basic understanding of mental disorders. Students learn to utilize the DSM classification system to identify counseling techniques and develop counseling plans.

#### **CED 561 Marriage and Family Counseling 3 cr**

The theories, principles, and techniques of counseling couples and families are examined. Other topics include ethical and multicultural issues, assessment, and current research in marriage and family counseling.

#### **CED 562 Addictions Counseling 3 cr**

This course provides an overview of research and theory in regards to the etiology, assessment, diagnosis and treatment of addictive disorders, e.g. alcoholism, drug addiction, gambling, etc. The course will review theoretical and evidence-based models of counseling for addictive disorders as well as considerations for treating addictive disorders among various special populations and with culturally diverse clients.

#### **CED 563 Divorce Mediation 3 cr**

This course will introduce students to the techniques of divorce mediation. Legal, ethical and psychological issues in the divorce mediation process will be examined with special emphasis on the neutral role of the mediator explored.

#### **CED 564 Gerontological Counseling 3 cr**

Emphasis is on a basic knowledge of the theories, principles and techniques of counseling elderly individuals, couples and their families. Includes such topics as assessment, ethical and cultural issues, model programs, and current research in gerontological counseling.

#### **CED 565 Found of Prof School Couns 3 cr**

Provides an overview of the history, philosophical foundations, and professional duty of professional school counseling. Review of historical and contextual forces that shaped the evolution of professional school counselors' roles and functions within schools. Special emphasis will be placed on current trends and best practices as identified by ASCA and current literature.

#### **CED 566 Multicultural Counseling 3 cr**

Includes a study of historical and current theories and issues in multicultural counseling, provides an understanding of societal trends and changes, and demonstrates strategies/techniques for cross-cultural counseling techniques through class exercises, case studies, and demonstrations. Reflective experiences are used to allow for the development of cultural self-knowledge.

#### **CED 567 Couples Counseling 3 cr**

This course will provide an overview of various theoretical approaches and related research findings for couples counseling. The course will also provide an overview of current theory and research in human sexuality, including sexual development, sexual well-being/wellness, sexual orientation and sexual dysfunction and disorders. The course will apply particular focus to sexuality issues as they are an aspect of individual and couples counseling work.

#### **CED 568 Comm Mental Health Counseling 3 cr**

This course examines community mental health counseling and includes a survey of its organizational, fiscal, and legal dimensions; of community needs assessment, program delivery, advocacy, funding, and intervention; of the principles of consultation, education and outreach; of client and community characteristics; and of the various practice settings and roles.

#### **CED 569 Child Counseling 3 cr**

This course provides an overview of current theoretical perspective and evidence-based intervention paradigms regarding psychological, behavioral, cultural and social context/environmental problems commonly occurring during childhood and adolescence. A focus will be upon knowledge of basic counseling skills for use with children and adolescents as well as learning to conceptualize childhood problems at various levels of social ecology: individual, cultural, academic, familial, community and societal.

#### **CED 571 Foundations of CMHC 3 cr**

This course is an introduction to the historical and philosophical foundation of Clinical Mental Health Counseling as well as overview of contemporary clinical practice issues within this counseling specialty.

**CED 572 Princ and Theories of Couns 3 cr**

Includes a study of various theories, principles, and techniques in counseling. Opportunity is provided for the implementation of counseling techniques through the study of case studies and transcripts.

**CED 573 Ed Occup Info Sys - Mats - Res 3 cr**

The study of educational, vocational, psychological, and individual resources needed to make employment decisions. Emphasis is on the collection and evaluation of information, procedures and strategies for researching employment opportunities, and the management of information services.

**CED 574 Group Couns Theory and Process 3 cr**

Includes both the theory and practice of group counseling, counseling with clients of diverse backgrounds, and selecting group work suitable to multicultural needs. Emphasis is on the developmental level and background of clients with which the counselor expects to work.

**CED 575 Intro to Community Rehab 3 cr**

Introduces the student to a broad field of community rehabilitation. Included is the history, philosophy, present activities and future trends in rehabilitation. A multidisciplinary approach to the study of the "whole person" is emphasized and direct contact with community social service agencies is an integral part of the course.

**CED 576 Supv Practicum in Couns 3 cr**

This course requires the student to demonstrate the appropriate use of a variety of counseling skills and techniques. Audio and video tapes of individual counseling sessions are critiqued in class by the instructor. Requires special permission of the instructor.

**Prerequisite:** (CED 571 Minimum Grade of B or CED 565 Minimum Grade of B) and CED 586 Minimum Grade of B and CED 572 Minimum Grade of B and CED 574 Minimum Grade of B and CED 566 Minimum Grade of B and CED 584 Minimum Grade of B

**CED 578 Supv Pract-Group Counseling 3 cr**

Supervised practice is provided in group counseling and other group work experience appropriate for a counselor. Practicum experience is offered in the setting in which the student plans to work.

**CED 579 Soc and Psych Asp of Disabil 3 cr**

The theory, research, and practices in related disciplines which contribute to an understanding of human disability. Field work and case study serve as integrating activities.

**CED 580 Student Personnel Services 3 cr**

Included is a survey of historical developments and current practices in student personnel services in post-high school educational institutions. The organization, administration, and functions of the various services are stressed.

**CED 581 Rehab Case Management 3 cr**

This course provides for critical analysis of representative rehabilitation case studies. Case records are used as a basis for developing an understanding of the clients with handicaps and their problems, the rehabilitation case work process, diagnosis, eligibility requirements, and the provision of services.

**CED 582 Data-Driven School Counseling 3 cr**

Provides an overview of how school counselors can access, interpret, and use achievement data, demographic data, school process data, and perception data to inform school counseling programmatic decisions. Assessment of systemic data, using data to guide program development, formative and summative evaluation methods, and strategies for dissemination of data are reviewed.

**CED 583 Indiv and Group Testing Lab 3 cr**

Supervised experience in the selection, administration, and scoring of educational and psychological tests, and the interpretation and reporting of test results.

**Prerequisite:** EPY 555 Minimum Grade of B

**CED 584 Sem Ethical and Legal Issues 3 cr**

Ethical standards of the profession and current legal issues will be examined in the context of case studies and current literature. Critical analysis by each student of legal and ethical issues faced by counselors and psychometrists will be stressed.

**CED 585 Medical Aspects of Rehab 3 cr**

Common symptomology, treatment, and medical management techniques of rehabilitation and physical medicine are emphasized. Other topics include assessment of client's functional limitations, interpretation of medical information, and planning for the client's rehabilitation.

**CED 586 Counseling Skills and Process 3 cr**

Emphasis is placed on the counseling procedures involved in developing and maintaining the therapeutic relationship. Students are required to model the basic skills of counseling using videotaped incidents and observations for feedback on skill development.

**CED 588 Career Devel, Assess, & Interv 3 cr**

Emphasis is placed on a basic knowledge of the theories, principles, and techniques of career counseling used for a wide range of ages. Other topics include model career development programs, assessment, population and age diversity, individual characteristics, placement and current research.

**CED 590 Special Topics - 3 cr**

Guided supervision in the completion of learning tasks in counselor education such as program design and revision study of a significant topic, theory, model and supervision of selected learning activities to acquire specific counseling and testing skills.

**CED 591 Advocacy, Collab. & Consult. 3 cr**

This course will provide an overview of advocacy, collaboration and consultation models and essential skills for professional school counselors and clinical mental health counselors. The role that each of these skills play in the professional identity of the school and mental health counselor and strategies for using these skills to promote systemic change and equitable social systems will be examined.

**CED 592 Crisis & Trauma Counseling 3 cr**

Students will gain knowledge of research-informed theoretical models of etiology and development of problems such as suicidality and other forms of mental health crisis, as well as grief, trauma, and disaster-related mental health symptoms. Students will also gain knowledge of evidence-based models of counseling and intervention in these areas such as comprehensive risk assessment strategies, psychological first aid and systems of mental health crisis management.

**CED 594 Dir St and Research 1-3 cr**

Students explore through directed study problems and issues of special interest or significance in Counselor Education. Not more than three semester hours of any departmental 594 courses can be accepted toward a degree program.

**CED 595 Internship - School Counseling 1-9 cr**

The internship is a supervised learning experience in a work setting similar to that in which a school counselor eventually will be employed. The internship provides the student with an opportunity to apply the theories and concepts learned during the graduate program. Not more than 12 hours may be taken. Prerequisite: Special permission of the instructor and a grade of B or above in CED 586 and CED 576.

**Prerequisite:** (5421 156) and CED 576 Minimum Grade of B and CED 586 Minimum Grade of B and CED 584 Minimum Grade of B

**CED 596 Internship-School Psychometry 1-9 cr**

The internship is a supervised learning experience in a work setting similar to that in which a school psychometrist eventually will be employed. The internship provides the student with an opportunity to apply the theories and concepts learned during the graduate program. Not more than 12 hours may be taken. Requires special permission of the instructor.

**Prerequisite:** EPY 556 Minimum Grade of B and CED 584 Minimum Grade of B and EPY 558 Minimum Grade of B and CED 583 Minimum Grade of B

**CED 597 Internship in CMHC 1-9 cr**

The internship is a supervised learning experience in a work setting similar to that in which a community counselor eventually will be employed. The internship provides the student with an opportunity to apply the theories and concepts learned during the graduate program. Not more than 12 hours may be taken. Requires special permission of the instructor.

**Prerequisite:** CED 576 Minimum Grade of B and CED 584 Minimum Grade of B and CED 586 Minimum Grade of B

**CED 598 Internship-Rehab Counseling 1-9 cr**

The internship is a supervised learning experience in a work setting similar to that in which a rehabilitation counselor eventually will be employed. The internship provides the student with an opportunity to apply the theories and concepts learned during the graduate program. Not more than 12 hours may be taken. Requires special permission of the instructor.

**Prerequisite:** CED 576 Minimum Grade of B and CED 584 Minimum Grade of B and CED 586 Minimum Grade of B

**CED 599 Thesis 1-9 cr**

A student selects a project, study or investigation which is related to an area of specialization in Counselor Education. The project forms a basis for the thesis. A thesis committee will provide direction during the writing of the thesis.

**CED 672 Adv Couns Theory and Practice 3 cr**

An advanced study of counseling theories and strategies as they apply to practical situations and special populations.

**Prerequisite:** CED 572 Minimum Grade of B

**CED 674 Adv Theory and Pract Grp Couns 3 cr**

This course provides the student with advanced skills and knowledge designed to facilitate working with groups. The course emphasizes group theory, research, and participation in group dynamics.

**Prerequisite:** CED 574 Minimum Grade of B

**CED 676 Advanced Practicum-Counseling 3 cr**

Supervised field experience in appropriate settings. Required weekly seminar. Requires special permission of the instructor.

**CED 678 Negotiation Training 3 cr**

This course focuses on the development of negotiation, conflict resolution, and communication skills needed to be effective in resolving a variety of training-related problems. Students will have an opportunity to research and practice in the negotiation process by applying communication and conflict resolution techniques in simulated and real situations.

**CED 690 Sp Top - 3 cr**

Guided supervision in the completion of learning tasks in counselor education such as program design and revision, study of a significant topic, theory, model, and supervision of selected learning activities to acquire specific counseling and testing skills.

**CED 694 Dir St and Research 1-3 cr**

Students explore through directed study problems and issues of special interest or significance in Counselor Education. Not more than three semester hours of any departmental 694 courses can be accepted toward a degree program.

**CED 699 Research Project 3 cr**

A supervised field project, or investigation in the Counselor Specialist Program, serving as the culminating experience in the program. Applying concepts and skills learned during the sixth-year program, the student will conduct an investigation and prepare a field project report in standard form.

**Prerequisite:** CED 576 Minimum Grade of B

**Educational Foundations (EDF)****EDF 207 Law and Politics in Educ 3 cr**

Examines the legal and political considerations that affect education in America. Emphasis will be placed on the practical applications of these legal and political considerations to the operation of schools.

**EDF 211 Clinical and Lab Experience 0 cr**

Provides relevant clinical and laboratory experiences directly related to the several academic disciplines that constitute the social foundations of education. Must be taken with EDF 315. Requires a special fee.

**Corequisite:** EDF 315

**EDF 290 Sp Top - 1-3 cr**

Varies in content in one disciplinary area of educational foundations (e.g., history of education or anthropology of education) or in an interdisciplinary area (e.g., multicultural education). May be repeated for credit when course content varies.

**EDF 300 Gender & International Devel-W 3 cr**

This course introduces concepts in gender, international development and global education through an examination and critique gender issues in developing nations and international efforts to address these concerns from the 1970's to the present with particular emphasis on the context of women. Includes formal and nonformal education of women, cultural differences (reproduction, marriage, male/female hierarchies) affecting life opportunities, rural vs. urban issues, politics, social class influences, international movements, and organizations and efforts to empower girls and women to advance their lives within the context of gendered social roles. Analysis of issues through various lenses including the Gender Equality Continuum. Students will interact directly with individuals in the field via videoconferencing and other modes of electronic communication. Assessment will center on a guided project and experience specific to individual student interests.

**Prerequisite:** EH 102 Minimum Grade of C

**EDF 310 International Develop & Educ-W 3 cr**

A study of international development and education in global and gender contexts that includes an examination of policy, structure, sociological issues (gender, religion, social class), and formal, adult and nonformal education. Major agency providers in the field and employment opportunities in the public and private sectors will be reviewed. Students will interact with individuals in the field through videoconferencing, face-to-face dialogues and other electronic interactions. Assessment will center on a guided project and experience specific to individual student interests. This course helps prepare students for a summer study abroad service learning experience in a developing country.

**Prerequisite:** EH 102 Minimum Grade of C

**EDF 315 Living, Working, and Educating in a Diverse and Global Society 3 cr**

Explores ones' understanding and acceptance of individuals perceived as culturally different in educational, work, and social settings. Students collaborate with people of other cultures to negotiate and compromise across distances and cultures, create new ideas and products, reach common goals, exchange cultural ideas, and reflect on how cultural differences affect their thoughts and behaviors.

**EDF 320 Compar & Intl. Gender & Fam 3 cr**

The content will focus on comparative and international gender and family issues regarding non-formal adult health education and services. The student will do readings in this content area and compare human rights related to gender and family roles, woman's health issues and family planning services across the nations, how these relate to life opportunities for women and men. Programs providing related services and education will be analyzed. Students will dialogue with individual working in the field to gain a deeper understanding of contemporary real-world endeavors. Assessment will center on a guided project and experience specific to individual student interests and includes a service learning component at a local agency or an agency serving a developing country.

**EDF 325 Global Gender Perpec in Ed 3 cr**

An examination of gender and race, class, religion, language and ethnicity in formal and nonformal education in US and global contexts that develops cultural competencies and prepares students with an interest in international development/education careers. Students will interact directly with professionals in the field from various cultural backgrounds via videoconferencing and other modes of electronic communication. Assessment will center on weekly applications of course topics to real world situations and guided project or service learning specific to individual student interests.

**EDF 330 Amer Ed Comp Global Framework 3 cr**

An overview of education in its three aspects: formal, non-formal and informal. It will include the history, philosophy, sociology, policy and structure of the American education in comparison with other countries' systems. A regional approach will include northern Africa, the Indian Sub-continent, Asia, Pacific Islands and Australia, Central America and the Caribbean, South America, Canada and Europe. Assessment will center on weekly applications of course topics to real world situations and a guided project or service learning experience specific to individual student interests.

**EDF 335 Intern. Devel & Global Ed 3 cr**

A study of current problems and issues in non-formal, informal and all levels of formal education. Includes poverty, inequality and human rights and related structures, policies and programs. Includes poverty, inequality and human rights and related structures, policies and programs. Major issue areas include health, gender, rural development, agriculture, civil society, economics, sustainability, politics and reform. Content may vary according to currently important issues. Assessment will center on weekly applications of course topics to real world situations and a guided project or service learning experience specific to individual student interests.

**EDF 490 Special Topics 1-3 cr**

Varies in content in one disciplinary area of educational foundations (e.g., history of education or anthropology of education) or in an interdisciplinary area (e.g., multicultural education). May be repeated for credit when course content varies.

**EDF 494 Directed Studies 1-3 cr**

Directed study. Prerequisite: Permission of Department. (No more than two directed studies can be counted toward the Bachelor's Degree and Class B Certificate.)

**EDF 501 Cult Found of Education 3 cr**

A presentation and investigation of basic concepts, issues, and principles of American education within a social scientific framework; particular emphasis is on multicultural concerns and strategies.

**EDF 515 Multicultural Education 3 cr**

In a multicultural society, teachers must be able to work with students from a variety of backgrounds-some quite differently from the teachers' own. Four cultural factors are the focus of this course: social class, race, gender, and ethnicity. Teachers sensitive to these factors can prepare students to survive and function in the dominant culture without sacrificing pride in the students' own cultures.

**EDF 590 Sp Top - 1-3 cr**

Course may vary in content or may be supervised study in one disciplinary area of educational foundations (e.g., history of education or anthropology of education) or in an interdisciplinary area (e.g., multicultural education). May be repeated for credit when course content varies.

**EDF 594 Dir St and Research 1-3 cr**

Students explore problems and issues of special interest or significance in educational foundations. Not more than three semester hours of any departmental 594 courses can be accepted toward a degree program.

**EDF 610 History of American Educ 3 cr**

Designed to give the student an historical perspective on important issues in American education. Among these issues are the influence of class, race, gender, ethnicity, and exceptionality on educational attainment; the control of public education; the debate over public schools versus private schools; the status and work of teachers; and the role of education in social change. The student will relate the past to the present in analyzing these issues.

**EDF 615 Sem in Ed Policy Studies 3 cr**

This course offers advanced graduate students the opportunity to examine educational policy and policy-making from sociocultural, political, historical, philosophical, and comparative and international perspectives. After analyzing a common core of issues, students will investigate a topic of their choice using research skills from the educational foundations disciplines.

**EDF 620 Compar-Internat Educ 3 cr**

Comparative and International Education will examine different world cultures and nations and their educational systems. The course will explore the various outcomes of education (achievement, status, employment, living conditions) and will examine the world crisis in education. In all, a study of education from a world-wide perspective will help illuminate the educational purposes, programs, and achievements of schools in the United States.

**EDF 690 Sp Top - 1-3 cr**

Course may vary in content or may be supervised study in one disciplinary area of educational foundations (e.g., history of education or anthropology of education) or in an interdisciplinary area (e.g., multicultural education). May be repeated for credit when course content varies.

**EDF 694 Dir St and Research 1-3 cr**

Exploration of problems and issues of special interest or significance for advanced students. No more than three semester hours of any departmental 694 courses can be accepted toward a degree.

**Educational Media (EDM)****EDM 310 Microcomputing Systems 3 cr**

Basic understanding of current and emerging technologies for instructional purposes. Requires a special fee.

**EDM 312 Ed Tech - 3 cr**

Application of current educational technology in various instructional environments. Laboratory experience is given with selected software programs. May be repeated when technological application changes.

**EDM 385 Methods Instr Comm 3 cr**

Application of current concepts in communication and instructional system design to elementary and secondary teaching. Operation of basic mediaware and overview of literature related to media use are stressed.

**EDM 430 Workshop in Educ Media 1-9 cr**

In-depth study of operational experience in current trends and techniques in educational media research.

**EDM 482 Prep Instr Materials 3 cr**

Basic elements in the planning preparation, and evaluation of teacher-produced instructional materials.

**EDM 490 Sp Top - 3 cr**

Investigation of contemporary topics of interest in Educational Media. Requires permission of the department.

**EDM 494 Dir St - 1-3 cr**

Directed study in Educational Media. No more than two directed studies can count toward the Bachelor's degree. Required departmental approval.

**EDM 510 Microcomputing Systems in Ed 3 cr**

Application of current and emerging technologies that support and enhance instruction and can be used to improve student achievement.

**EDM 520 Research in Ed Tech 3 cr**

Introduction to history and theories of computer use in education.

**EDM 530 Workshop in Ed Media 1-9 cr**

In-depth study and operational experience in current trends and techniques in educational media research.

**EDM 533 Curriculum Media for Children 3 cr**

This course explores media used for learning and enjoyment with children in preschool through grade eight. Other topics include: the professional roles and responsibilities of a collection developer, the influence of child development and curriculum on collection development, an overview of the marketplace, strategies to encourage teachers to use media center materials in teaching, and related research.

**EDM 540 Curr Media for Children & Yth 3 cr****EDM 552 Curr Media for Young Adults 3 cr**

This course initiates or extends a student's knowledge of how to identify, select, and use library media resources for students in grades 6 through 12. Other topics include: the role of a library media specialist in establishing and maintaining a collection of resources; steps that can be taken to encourage students and teachers to use the collection; related research; and ways professionals can keep abreast of the latest knowledge, practices, and resources.

**EDM 580 Information Literacy 3 cr**

This course focuses on the role of the library media specialist in teaching students and instructional staff how to select, evaluate, and use information from print, non-print, and online sources. Emphasis is placed on information access, retrieval, and interpretation; advanced research techniques; copyright laws; and lessons and projects that utilize research information.

**EDM 581 Media Center Management 3 cr**

This course covers the procedures and routines for effective media center management, including acquiring, organizing, classifying, cataloging, maintaining, and inventorying a relevant collection. Other topics include: selecting resources to support the total curriculum and budget, responding to the needs of a school's demographic population, assisting students and teachers in the application of information skills, and applying the fundamentals of library design to achieve an effective environment for learning and leisure use.

**EDM 582 Prod of Curriculum Media 3 cr**

Provides instruction in the elements of planning, preparation and evaluation of professional circular materials for group and individual instruction.

**Prerequisite:** EDM 510 Minimum Grade of B or EDM 520 Minimum Grade of B

**EDM 583 Library Media Programs 3 cr**

This course covers the professional responsibilities for planning, implementing, and evaluating a library media program that serves a school program. Emphasis is placed on curriculum, leadership, environment, teaching and learning styles, a planning model, collaboration, staff development, program administration and evaluation activities, and ways in which research can be used to help shape an effective program.

**EDM 584 Educational Technology Design 1-3 cr**

Design and evaluation of information technology hardware, software, and networked information resources that support classroom pedagogy, educational administrative services, and student learning.

**Prerequisite:** EDM 520 Minimum Grade of B and ISD 581 Minimum Grade of B

**EDM 585 Admin Educ Media Center 3 cr**

General practices and procedures for establishing, organizing and operating the media center. Students submit plans for hypothetical or actual situations.

**EDM 590 Sp Top - 3 cr**

Presents topics of contemporary interest in the area of Educational Media.

**EDM 591 Trends and Issues in Ed Tech 3 cr**

Students will investigate current research as well as discuss emerging trends and developmental issues in the fields of educational media and instructional technology and their use as a pedagogical tool in P-12 schools.

**Prerequisite:** EDM 510 Minimum Grade of B or ISD 581 Minimum Grade of B

**EDM 594 Dir St and Research - 1-3 cr**

Students explore problems and issues of special interest or significance in Educational Media. Not more than three semester hours may be accepted toward degree programs.

**EDM 595 Internship - 1-9 cr**

The internship is a supervised learning experience in a work setting similar to that in which a media specialist eventually will be employed. Departmental approval is required.

**EDM 595A Internship A 1 cr**

The internship is a supervised learning experience in a work setting similar to that in which a media specialist eventually will be employed.

**Prerequisite:** EDM 581 Minimum Grade of B

**EDM 595B Internship B 1 cr**

The internship is a supervised learning experience in a work setting similar to that in which a media specialist eventually will be employed.

**Prerequisite:** EDM 580 Minimum Grade of B

**EDM 595C Internship C 1 cr**

The internship is a supervised learning experience in a work setting similar to that in which a media specialist eventually will be employed.

**Prerequisite:** EDM 583 Minimum Grade of B

**EDM 599 Thesis 1-9 cr**

A student selects a project, study or investigation related to the area of specialization in Educational Media. The project forms a basis for the thesis. A thesis committee provides direction during the investigation and during the writing of the thesis.

**EDM 610 Adv Prod Curric Media 3 cr**

The planning, design and preparation of photographic and audio instructional materials will form the basis of comprehensive, sophisticated, software systems.

**EDM 685 Administering Ed Media Center 3 cr**

Practices and procedures for administering the educational media center.

**EDM 689 Info Storage and Retrieval 3 cr**

Examination and application of computer systems to school library media centers.

**EDM 690 Sp Top - 3 cr**

Presents topics of contemporary interest in the area of Educational Media.

**EDM 696 Adv Ref and Selection Resource 3 cr**

Bibliographic organization and reference use of professional resources in education, including governmental documents, publications of educational associations, professional journals and indices, research reports and computerized bibliographies.

**EDM 698 Advanced Cataloging 3 cr**

Modern trends in cataloging with emphasis on standards for cataloging and educational media.

**EDM 699 Research Project 3 cr**

Provides an opportunity to synthesize and apply the various program components in a selected instructional setting. May be repeated for a total of 6 semester hours.

**Educational Psychology (EPY)****EPY 251 Human Growth and Development 3 cr**

A study of the physical, mental, social and emotional development of young people from conception to late adolescence.

**EPY 315 The Adolescent in School 3 cr**

Assists future educators to understand adolescent development and behavior of students in the middle and high schools. Issues and problems include the school's role in the social, emotional, and intellectual development of middle and secondary school students from diverse multicultural backgrounds; student-teacher and peer relationships; and the academic and vocational planning process.

**EPY 351 Human Growth & Development 3 cr**

A study of the physical, mental, social and emotional development of young people from conception to late adolescence.

**EPY 355 Eval of Teaching-Learning 3 cr**

The application of formative and summative evaluative concepts in building and interpreting tests in the educational setting.

**EPY 455 Eval of Teaching-Learning - W 3 cr**

The application of formative and summative evaluative concepts in building and interpreting tests in the educational setting.

**EPY 490 Sp Top - 3 cr**

Study of a significant topic, theory, model or problem in behavioral studies. May be repeated once for credit when content varies.

**EPY 494 Directed Study 1-3 cr**

Directed individual study and research. Consent of department chair is required. (No more than two directed studies can be counted toward the Bachelor's degree and Class B Certificate).

**EPY 502 Psy Prin Learning 3 cr**

Psychology of learning as it pertains to education. Emphasis is on both the practical application of learning principles in educational and training classroom situations and theories of learning.

**EPY 521 Human Dev and Behavior 3 cr**

A study of the crucial developmental principles of human development and behavior focusing on: developmental tasks over the life span; growth patterns of the diverse subcultures emphasizing attitudes, values, and learning styles; family, school, and community impact on people of all ages living and growing in a multicultural society.

**EPY 525 Assessment & Research in Educ 3 cr**

This course is offered as part of the Alternative Masters Degree in Education. Upon completion of the course, students will be able to construct, evaluate, administer, and interpret classroom and school-related assessment. In addition, students will be prepared to be effective consumers of research reports, writings, and results in professional literature in their field.

**EPY 555 Tests-Measurement and Eval 3 cr**

Understanding and interpreting the meaning of test scores. Technical qualities desired in a test. Techniques for obtaining information about clients and/or students. Using this information in counseling, consulting, and teaching. Cultural bias in tests. Problems of testing and obtaining information about clients and/or students with diverse backgrounds.

**EPY 556 Ed Testing - Wechsler Scales 3 cr**

Includes basic theories of intelligence, basic concepts and principles of intelligence testing, extensive practice in administering, scoring and interpreting the Wechsler Adult Intelligence Scale, the Wechsler intelligence Scale for Children and the Wechsler Preschool and Primary Scales of Intelligence in a wide variety of educational settings.

**Prerequisite:** EPY 555 Minimum Grade of B

**EPY 557 Ind Intel Test -Stanford-Binet 3 cr**

Includes basic theories of intelligence, basic concepts and principles of intelligence testing, extensive practice in administering, scoring and interpreting the Stanford-Binet Scale in a variety of educational settings. Competencies in consulting with professional personnel and with parents will be emphasized.

**Prerequisite:** EPY 555 Minimum Grade of B

**EPY 558 Ed Testing - Kaufman Scales 3 cr**

The Kaufman Assessment Battery for Children and the Kaufman Adolescent and Adult Scale are the basic instruments used for extensive practice in administering, scoring, and interpretation of intelligence. The various theories of intelligence, especially those of Horn and Cattell, Luria, Sperry and Neisser are emphasized.

**Prerequisite:** EPY 555 Minimum Grade of B

**EPY 590 Sp Top - 3 cr**

Guided supervision in the completion of learning tasks in educational psychology such as program design and revision, study of a significant topic, theory, model, and supervision of selected learning activities to acquire specific counseling and testing skills.

**EPY 594 Dir St and Research 1-3 cr**

Students explore through directed study of problems and issues of special interest or significance in Educational Psychology. Not more than three semester hours of any departmental 594 courses can be accepted toward a degree program.

**EPY 602 Advanced Theories of Learning 3 cr**

A study of the major psychological theories, models, research and principles that apply to the teaching and learning process. Special attention will be given to cognitivistic approaches.

**Prerequisite:** EPY 502 Minimum Grade of B

**EPY 610 Indiv Diff Among Learners 3 cr**

Examination of individual and developmental differences as related to learning, performance and behavior. Intelligence attitudes, cognitive and learning styles, anxiety, prior knowledge, and locus of control are among the topics discussed. Models and methods for using learner characteristics in instructional design, teaching practices, and research are considered.

**Interdepartmental Educ (IDE)****IDE 010 Reading Exam 0 cr**

IDE 010 is a one hour reading exam that tests students' current proficiency in communication skills. Failure to complete the exam as scheduled, with a passing score, will require the students to re-register for IDE 010.

**IDE 101 Freshman Seminar in Education 2 cr**

Assists freshman with maximizing the student's potential to achieve success and to respond responsibly to the individual and interpersonal challenges presented by college life. Emphasis will be placed on study skills, time management, and writing skills. The course also provides information on the functions and resources of the University that support student academic success. Special emphasis is placed on orienting the student to the special roles and responsibilities of being an educator in today's society.

**IDE 400 Positive Classroom Mgt 3 cr**

Emphasis is placed on ways to create a class and school environment that encourages responsible student behavior. William Glasser's concept of Reality Therapy as a process for successful teacher-student involvement is examined.

**IDE 510 Educ Research and Evaluation 3 cr**

Course will examine research and evaluation methodology, its application to questions in education, and the application of research findings to problems in education. The students will read and evaluate research in education.

**IDE 525 Fnds Teach Eng Sec Lang 3 cr**

A comprehensive survey of current research, methodology and materials in the field of English as a Second Language.

**IDE 540 Found of Career Education 3 cr**

The underlying philosophies behind the career education movement and various approaches to career education are discussed. Ways to increase the career options available to individuals and to facilitate more rational and valid career planning and preparation, are explored through the career education phases: career awareness, career exploration, and career preparation.

**IDE 590 Sp Top - 1-3 cr**

Current topics of special concern to educators. Not more than 6 hours may be earned in Special Topics courses.

**IDE 594 Dir St and Research 1-3 cr**

Exploration of problems and issues of special interest or significance in education. Not more than 3 hours can be accepted for a degree.

**IDE 597 Student Teaching - 3-6 cr**

Observation and supervised teaching in selected schools with opportunity for study and discussion of problems and issues encountered. Prerequisite: Permission of advisor.

**IDE 615 Assess & Eval for Leaders 3 cr**

This course will focus on the assessment and evaluation skills needed by educational leaders. The course will provide students with the knowledge and skills to carry out, and utilize effectively, the evaluations of programs, organizations, personnel, and students. The course will also cover how to create, interpret, and evaluate the reliability and validity of assessments.

**IDE 620 Quantitative Methods I 3 cr**

Basic quantitative methods for decision making in the educational environment. Computer application of basic descriptive and inferential statistics.

**Prerequisite:** IDE 510 Minimum Grade of B or KIN 505 Minimum Grade of B

**IDE 621 Quantitative Methods II 3 cr**

Basic research designs, with appropriate statistical analysis. The course will consider strategies needed for, but not limited to, the following: N-of-One research surveys and needs assessments; ex post-facto designs, and true experimental designs.

**Prerequisite:** IDE 620 Minimum Grade of B

**IDE 630 Quantitative Methods III 3 cr**

An extensive examination of the nature and character of experimental design in educational research. Includes the development of appropriate analytical techniques.

**Prerequisite:** IDE 620 Minimum Grade of B and IDE 621 Minimum Grade of B

**IDE 631 Intro Qual/Mixed Methods Res 3 cr**

Introduces students to the major kinds of qualitative research and mixed methods research. Attention is given to underlying philosophies, methods of data collection, theoretical perspectives, research design, sampling, data analysis and interpretation, validity types and strategies, and writing research reports.

**Prerequisite:** IDE 510 Minimum Grade of B or IDE 692 Minimum Grade of B

**IDE 635 Adv Measurement and Eval 3 cr**

Nature and function of measurement in instructional design and development environments. Approaches to reducing test error, including establishing validity and reliability estimates. Item analysis and discrimination. Test development for norm-based and criterion-referenced tests. Knowledge of descriptive statistics required.

**Prerequisite:** IDE 620 Minimum Grade of B

**IDE 640 Instructional Development 3 cr**

Preparation of a modular program of instruction which incorporates all elements of the instructional-design process.

**Cross-Listed:** EDU 640

**IDE 645 Adv Human Perform Improvement 3 cr**

This course provides students with knowledge and skills related to human performance improvement in relation to instructional design profession. It provides an overview of foundational theories of industrial-organizational psychology, organizational behavior, and organizational development and change in relation to instructional design and performance improvement practices.

**IDE 650 Instructional Techniques 3 cr**

This course assists teachers in becoming more professional in instructional skills through the use of micro-teaching techniques and analysis of research in teaching.

**Cross-Listed:** EDU 650

**IDE 660 Program Research and Eval 3 cr**

Course strives to increase the effectiveness of instructional personnel in their use of research and evaluative techniques in instructional environments. Three major areas of focus are: the conceptualization of research and evaluative models appropriate for the population; the application of basic assessment concepts to the teaching-learning environment; and the analysis of basic applied research in evaluation.

**Prerequisite:** IDE 510 (may be taken concurrently) Minimum Grade of B

**IDE 665 Inter Techniques Instr Envrmts 3 cr**

This courses concentrates on developing three major areas: the examination of psychological underpinning of various communicative models and concepts; the practicing of interactional skills, such as active listening, congruent sending, and conflict resolution; the building of a communication model for the student's instructional environment.

**IDE 685 Ed Simulation and Games 3 cr**

Teaches the role and function of simulation and games as effective instructional and learning devices.

**IDE 690 Special Topics - 1-3 cr**

Current topics of special concern to educators. Not more than 6 semester hours may be earned in Special Topics courses.

**IDE 692 Research Project Seminar 3 cr**

Survey of both current and classic research in education. Students will identify a research problem of significance in their area of specialization and develop a strategy or research design to solve this problem.

**Prerequisite:** IDE 510 Minimum Grade of B

**Cross-Listed:** EDU 692

**IDE 694 Dir St and Research 1-3 cr**

Exploration of problems and issues of special interest or significance in education. Not more than 3 semester hours can be accepted for a degree.

**IDE 696 Internship-Masters/Doctoral- 0 cr**

The internship is a supervised learning experience in an actual or similar setting to that in which instructional designers or medial administrators are employed. Prerequisite: Approval of internship coordinator.

**IDE 700 AU-USA Doctoral Program 1 cr**

Provides an opportunity for advanced graduate students and professors to pursue cooperatively selected concepts and theoretical formulations. May be repeated as necessary.

**IDE 710 Research Seminar I 1-6 cr**

This course provides an introduction to doctoral study in IDD. Topics include graduate student socialization, nature of scholarship and scholarly writing, epistemology, sociology of knowledge, and systems theory as a meta-theory. Admission to doctoral program is required. 3 credit hours.

**IDE 711 Research Seminar II 1 cr**

This course is designed to help doctoral students think about their dissertation research, understand the process of reviewing the literature, and organizing and writing a dissertation-level research proposal. Prerequisite: Approval of student's dissertation advisor. 1 credit hour per semester for 3 semesters.

**Prerequisite:** IDE 710 Minimum Grade of S

**IDE 790 Sp Top - 1-3 cr**

Current topics of special concern to educators. Not more than 6 semester hours may be earned in Special Topics courses.

**IDE 792 Research Proj Seminar 3 cr**

Survey of both current and classic research in education. Students will identify a research problem of significance in their area of specialization and develop a strategy or research design to solve this problem.

**Prerequisite:** IDE 510 Minimum Grade of B

**IDE 794 Dir St and Research 1-3 cr**

Exploration of problems and issues of special interest or significance in education. Not more than 3 hours can be accepted for a degree.

**IDE 799 Research-Dissertation 1-9 cr**

Independent research by the student under the sponsorship of the graduate faculty. Students are required to achieve doctoral candidacy before enrolling in the course. Requires faculty advisor approval.

**Instructional Sys Design (ISD)****ISD 301 Trends & Issues in IDPI-W 3 cr**

This is an introductory course that provides an overview of current trends, technology and issues in instructional design and performance improvement.

**Prerequisite:** EH 101 Minimum Grade of C and EH 102 Minimum Grade of C

**ISD 310 Instructional Design 3 cr**

Instructional Design is a project-based course that includes step-by-step strategies to create instruction using the design models, instructional strategies, and technology applications. Students will explore the processes of analysis, design, development, implementation, and evaluation in order to apply real-world training solutions to actual instructional problems.

**ISD 320 Training Interventions 3 cr**

This course will provide students with experience in designing and developing facilitator-lead training interventions focused on improving performance in various contexts. Students will interact with a client in a professional manner and create a professional training session incorporating motivational strategies, instructional delivery methods, and appropriate assessment measures from initial contact needs assessment to final session evaluations.

**ISD 340 Analysis, Assessment & Eval 3 cr**

Students will learn how to make assessments of human attitudes, knowledge, and performance, analyze empirical data, and evaluate training and human performance programs.

**ISD 350 Emerg Learning Technologies 3 cr**

This course provides students with the skills and knowledge necessary to develop technology-based modules using different delivery methods for application in non-instructional and instructional training solutions.

**Prerequisite:** ISD 310 Minimum Grade of C

**ISD 360 Communication Skills in Org 3 cr**

This course is designed to utilize theory and practice of communication in the processes of analysis, design, development, implementation and evaluation of instruction. Communication skills will be developed and applied in a practical setting.

**ISD 370 Distance and Mobile Learning 3 cr**

This course will identify and utilize innovative technologies related to distance and mobile learning in various job sectors and learning environments.

**Prerequisite:** ISD 310 Minimum Grade of C

**ISD 400 Portfolio Development 1 cr**

Students will create an online portfolio to showcase projects, assignments, and collaborations related to instructional design and performance improvement.

**Prerequisite:** ISD 310 Minimum Grade of C

**ISD 410 Org/Coordination Training 3 cr**

This course is designed to develop knowledge and competencies in the coordination of large-scale, comprehensive training programs.

**Prerequisite:** ISD 320 Minimum Grade of C and ISD 340 Minimum Grade of C

**ISD 420 Cultural Factors in IDD & HPI 3 cr**

This course will focus on the interaction of multicultural aspects of learning and teaching. Students will enhance their cognitive and affective awareness and understanding, as well as their personal acceptance of differences associated with the learning/teaching process. The ultimate goal is to prepare multiculturally competent designers of instruction for a global society.

**ISD 430 Psych of Learning in Organ-W 3 cr**

The course covers major theoretical perspectives in organizational psychology based on empirical research and case studies. Students will explore learning theory, group dynamics, and change in different types of learning organizations.

**ISD 440 Human Develop. Interventions 3 cr**

Students will learn and apply various human development theories and interpersonal skills related to the effective design of training interventions to improve learning and performance. A special area of emphasis will focus on students' own development experiences.

**ISD 450 Human Performance Tech 3 cr**

This course includes conducting various types of analysis in order to solve human performance problems by design on non-instructional interventions.

**Prerequisite:** ISD 340 Minimum Grade of C

**ISD 480 Learn Train & Perf Project 3 cr**

Students will complete a supervised field project on a topic related to instructional design and/or performance improvement.

**ISD 490 Special Topics 3 cr**

This course will allow faculty to work with students to explore current topics related to instructional design and performance improvement. Scholarly articles and current trends will be the basis for the designated learning outcome and end product.

**Prerequisite:** ISD 310 Minimum Grade of C and ISD 350 Minimum Grade of C and ISD 360 Minimum Grade of C

**ISD 495 Internship 3 cr**

The internship is a supervised learning experience in an actual or similar setting in which instructional design or performance improvement related professionals are employed.

**Prerequisite:** EH 102 Minimum Grade of C

**ISD 581 Digital Media Tools 3 cr**

This course helps students learn to use computers to design instruction.

**ISD 582 Evaluation of Digital Media 3 cr**

An advanced course in the development, use and evaluation of multimedia instruction.

**ISD 583 Interactive Video 3 cr**

This course involves digital editing and includes basic instruction in shooting, lighting and composing video sequences.

**ISD 584 Animation 3 cr**

An introductory course that provides students with an opportunity to acquire the skills necessary to develop animated interactive modules for use in instruction.

**ISD 585 Integr Tech in Teaching 3 cr**

The purpose of this course is to enable students with some technology background in computers to focus the use of a variety of technologies onto a specific content area of instruction. Students will demonstrate cognitive competency of curriculum integration, instructional design, and production techniques. Specific attention will be given to videodisc technology, AV and computer technology.

**ISD 590 Sp Top - 3 cr**

Topics of contemporary interest in the area of Educational Media will be presented, discussed and investigated.

**ISD 594 Dir St and Research 1-3 cr**

Students explore problems and issues of special interest or significance in Instructional Design and Development. Not more than three semester hours may be accepted toward degree programs

**ISD 595 Internship - Masters 1-6 cr**

The internship is a supervised learning experience in an actual or similar setting to that in which instructional designers or media administrators are employed

**ISD 598 Research and Dev Project 1-6 cr**

A supervised field project, study or investigation on a topic related to Instructional Design and Development. Students will conduct an investigation which applies skills learned during the Instructional Design and Development Masters program.

**ISD 599 Thesis 1-3 cr**

A student selects a project, study or investigation related to the area of specialization in Instructional Design and Development. The project forms a basis for the thesis. A thesis committee provides direction during the investigation and during the writing of the thesis.

**ISD 600 Learning Tools 1 cr**

This one-credit-hour course is designed to introduce students to some of the basic media tools that will help them with their coursework and in the work place. The course will typically be a series of two-hour class periods scheduled at somewhat regular intervals.

**ISD 601 Sem Instruct Design-Dev 3 cr**

Discussion and investigation of particular topics related to Instructional Design and Development.

**ISD 602 Writing For Instruction 3 cr**

Course serves as an overview and review of essential written communication skills needed by instructional design professionals.

**ISD 610 Trends and Issues in IDD 3 cr**

Discussion and investigation of history, current trends, and issues in instructional design and their implications for education and training.

**ISD 611 Macro Lvl Trning & Perform Sys 3 cr**

Course provides an overview of concepts and current issues related to the design and development of training and performance systems at the macro-level. Rather than focusing on specific, small-scale instructional or non-instructional interventions, students in this course will study learning and performance from a broad organizational perspective.

**Prerequisite:** ISD 621 Minimum Grade of B and ISD 641 Minimum Grade of B

**ISD 612 Alternate Instructional Models 3 cr**

A comprehensive course detailing conventional and alternative instructional-design models. It is intended for advanced IDD students to further develop their skills and knowledge about ID models and to formulate their own epistemological beliefs as to how ID should occur.

**Prerequisite:** ISD 622 Minimum Grade of B

**ISD 613 Instructional Strategies 3 cr**

In this course, students explore the use of an assortment of instructional strategies to meet diverse learning needs.

**ISD 614 Human Cognition for IDD 3 cr**

A survey course of the cognitive science literature that is especially relevant for instructional designers and human performance technologists. The course covers major theoretical perspectives in cognitive science and has students read original empirical research. The goal is to enable IDD students to utilize the cognitive science literature in their careers.

**Prerequisite:** EPY 502 Minimum Grade of B

**ISD 620 Research in Instr Tech 3 cr**

Students collaborate with a graduate faculty member who is conducting research in the area of instructional design and development. May be repeated for credit.

**ISD 621 Instructional Design 3 cr**

Introductory course that focuses on a recognized model of instructional design. Includes emphasis on instructional analysis, instructional objectives, performance assessment, instructional strategies and sequences, and formative evaluation.

**ISD 622 Adv Instructional Design 3 cr**

Application of advanced instructional design models and procedures for needs assessment, instructional development, and evaluation in various instructional and learning environments using current learning tools.

**Prerequisite:** ISD 621 Minimum Grade of B

**ISD 623 Adv Research Methodology 3 cr**

A comprehensive course detailing advanced research methods and research. This course is specifically geared toward advanced IDD students who wish to develop the skills to properly design, propose, carry out, and critique scholarly research. The course covers the specifics of advanced research design and methods through a thorough analysis of empirical research. The goal is to equip IDD students with the research design skills to become successful scholars and researchers in their field.

**Prerequisite:** IDE 510 Minimum Grade of B or IDE 620 Minimum Grade of B

**ISD 640 Needs Assessment 3 cr**

The course focus is on conceptualization of needs analysis related to instructional and performance improvement issues in selected settings. Students collaboratively apply a needs assessment model to determine needs, causes, and solutions and report findings and recommendations.

**ISD 641 Performance Systems Tech 3 cr**

This course provides students with practical methods of analyzing and solving human performance problems. Emphasis is placed on development of both non-instructional and instructional interventions.

**ISD 642 Project Coordination 3 cr**

This course will develop knowledge and competencies in the coordination of large instructional projects. It is designed to enhance skills in the basic functions of instructional project coordination: planning, organizing, controlling, and directing.

**ISD 650 Computer-Based Training 3 cr**

A course for persons interested in the use of the computer to present instructional materials to students. Current learning theory as it pertains to authoring will be discussed.

**ISD 651 Learning Theory and Technology 3 cr**

This course will present techniques for the integration of instructional design theory and practice into the newer delivery systems including those using video and digitized media.

**ISD 652 Technology-Based Instruction 3 cr**

This course is a continuation of ISD 651. It concentrates on the additional skills and software necessary to develop and produce an original interactive instructional product.

**ISD 653 Developing Online Instruction 3 cr**

Developing online instruction using course management tools, multi-media technologies, and instructional design principles.

**Prerequisite:** ISD 621 Minimum Grade of B

**Cross-Listed:** IDE 640

**ISD 655 Print and Screen Courseware 3 cr**

Designing, producing and applying print and screen courseware. An analysis of graphic and instructional design principles and technologies, alternatives to conventional prose, learned capabilities, readability, formulate, and resource constraint analysis. Students design, develop, and apply print and screen courseware in instructional modules.

**ISD 656 Training Interventions 3 cr**

Practical experience in designing and implementing facilitator-led training in various large-scale organizations.

**ISD 657 Teaching in Higher Education 3 cr**

Theory and practice of pedagogy in higher education. Principles of the analysis, design, development, implementation, and evaluation of instruction will be addressed and then applied in a practical setting with a mentor instructor.

**ISD 680 Emerging Technologies 3 cr**

Course introduces students to emerging technological breakthroughs in education and training settings especially emphasizing the effects of future technologies.

**ISD 682 Impact Emerging Technologies 3 cr**

This course examines the impact of new digital technologies in education and training and prepares educators to use digital approaches in their institution.

**ISD 694 Dir St and Research - 3 cr**

Students explore problems and issues of special interest or significance in Instructional Design. Not more than three semester hours may be accepted toward degree program.

**ISD 695 Internship - Doctoral 1-6 cr**

The internship is a supervised learning experience in an actual or similar setting to that which instructional designers or media administrators are employed.

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
CHEN, YUXIN (yuxinchen@southalabama.edu)	Counseling & Instructional Sci	Assistant Professor	BA, Tianjin Normal University MA, University of Iowa PHD, Indiana University-Bloomington
DING, LU (luding@southalabama.edu)	Counseling & Instructional Sci	Assistant Professor	BS, Wuhan Inst. for Physical Educ MA, Wuhan Inst. for Physical Educ PHD, University of Georgia
GASTON, JOSEPH PICKETT (jgaston@southalabama.edu)	Counseling & Instructional Sci	Assistant Professor	BA, University of South Alabama MAT, Spring Hill College EDS, University of West Florida EDD, University of West Florida
GETCH, YVETTE QUALLS (ygetch@southalabama.edu)	Counseling & Instructional Sci	Professor	BS, Florida State University MED, University of Arkansas- Fayette PHD, University of Arkansas- Fayette
KIM, SOHEE (skim@southalabama.edu)	Counseling & Instructional Sci	Assistant Professor	BA, Sungshin Women's University MED, Sungshin Women's University PHD, Oklahoma State University
MCCARTY, DANNY LANE (mccarty@southalabama.edu)	Counseling & Instructional Sci	Assistant Professor	BA, University of South Alabama MS, University of South Alabama PHD, University of Arkansas- Fayette
MOORE, PAMELA RICHARDSON (prmoore@southalabama.edu)	Counseling & Instructional Sci	Asst Prof of Instruction	BA, University of Mobile MED, Alabama State University EDS, University of West Florida EDD, University of West Florida MED, Alabama State University
TITTLER, MEREDITH V. (mtittler@southalabama.edu)	Counseling & Instructional Sci	Assistant Professor	BA, Clark University MS, Iowa State University PHD, Iowa State University
UPTON, AMY WASSERMAN (amyupton@southalabama.edu)	Counseling & Instructional Sci	Asst Prof of Instruction	BA, Old Dominion University MSED, Old Dominion University PHD, Old Dominion University
WILLIAMS, DAVID SHELDON (dwilliams@southalabama.edu)	Counseling & Instructional Sci	Part-Time Instructor	BA, University of Mobile MA, Univ of Alabama-Birmingham PHD, University of South Alabama
ZHA, SHENGHUA (shzha@southalabama.edu)	Counseling & Instructional Sci	Associate Professor	BA, Huazhong Univ of Science and T MA, Shanghai Jiao Tong Univ PHD, University of Missouri-Columb

# Clinical Mental Health Counseling (MS)

## Degree Requirements

The program described below is designed to provide for the acquisition of skills and competencies needed by counselors working in an agency setting.

A grade of "B" or better is required in all coursework counting towards the degree. Students must also pass a comprehensive exam: The Counselor Education Comprehensive Exam (CECE). Students who are not enrolled for three consecutive semesters must complete all admissions requirements again and be reviewed by the program admissions committee.

Counselor educators are ethically required to ensure that students meet academic requirements and demonstrate clinical competencies. Satisfactory progress will be predicated on a combination of factors such as academic success, clinical competence, adherence to ethical standards, and appropriate interpersonal functioning. Students who do not demonstrate satisfactory competence within any of these critical areas of professional performance may be terminated from the program. Core faculty will evaluate students on a continuing basis to determine students' satisfactory progression through the program. Below, the student review and retention policies and procedures are outlined followed by the required coursework. Other policies, procedures, and guidelines are addressed in the Counselor Education Graduate Student Handbook.

### Candidate Review and Retention Policy

The Counselor Education faculty in the Department of Counseling & Instructional Sciences at the University of South Alabama is responsible for preparing candidates to become **competent** and **ethical** counseling professionals. In addition to assessing academic performance, candidates' personal characteristics, level of interpersonal skills, and professional behavior will be evaluated on an ongoing basis throughout the program by the counseling faculty. At least once a year, faculty members review all candidates in the program at a special faculty meeting, and students who do not meet program expectations will be notified and provided written feedback on their academic and professional performance. Professional behavior expectations, the retention policy, and remediation procedures are reviewed by faculty at the new student orientation. In addition, candidates sign an informed consent form (see Appendix A in the Counselor Education Graduate Student Handbook) documenting that they have read, reviewed, and understand these policies and procedures upon entering their first semester of the program.

### Initial Remediation Procedures

Candidates identified as demonstrating academic or personal problems that interfere with their professional performance undergo further review by the faculty. Candidates with minor concerns (e.g., seeming distracted throughout the semester, exhibiting low levels of participation in class, demonstrating difficulty receiving constructive feedback, failure to demonstrate adequate counselor dispositions) will be asked to meet with their faculty advisor to go discuss concerns and review their dispositions based on the specific reported behaviors(s). The faculty advisor and/or program coordinator will review the completed **Counseling Program Student Disposition Rating Scale**. In many cases,

the candidate and faculty advisor come to an agreement on what needs to occur to improve reported behaviors and dispositions. Students are informed that further action will be taken (remediation plan) if concerning behaviors continue and dispositions do not improve.

In some cases, candidates may be asked by their advisor, the core counseling faculty, and/or the program coordinator to complete a remediation plan. Remediation plans are indicated for significant dispositional issues, student handbook violations, failure to secure or retain practicum/internship placement, plagiarism, or other significant issues. If a remediation plan is indicated, the following steps are taken:

- The advisor or program coordinator will discuss the remediation plan with the candidate during their meeting. This meeting may include the advisor and the program coordinator. If the program coordinator is the student's advisor, then an additional core counseling faculty member may attend the meeting.
- A remediation plan is developed (either during or after the meeting) and this plan is shared with the candidate after which both candidate, advisor, and program coordinator will sign the plan to demonstrate their mutual understanding of the candidate's current progress, professional development, and the actions necessary on the part of the candidate to continue in the counseling program. Often, the advisor and/or the program coordinator meet with the student to go over the written remediation plan prior to the student signing the plan. The purpose of the meeting is to discuss the remediation plan and answer questions the candidate may have about the plan.
- The candidate is provided three options for signing the remediation plan.
  - I understand the above remediation plan and consent to enacting this plan with the Counselor Education program faculty.
  - I understand the above remediation plan and consent to enacting this plan with the Counselor Education program faculty, but I would like to provide a written rebuttal to place in my student file.
  - I do not consent to the remediation plan and request an appeal to the next level of university administration, e.g. Associate Dean or Dean of the College.

If the candidate does not consent to the remediation plan and requests an appeal to the next level of administration, the candidate will be directed to the handbook and the appeal procedures policies as outlined in the student handbook "The Lowdown" at <http://www.southalabama.edu/lowdown/>

If a candidate does not successfully complete the initial remediation plan or, if at any time during the course of the program, the faculty becomes aware of substandard or unprofessional behavior or performance, unethical behavior, and/or illegal acts, the candidate will be subjected to the following formal remediation process:

**Conference with a Faculty Committee:** In cases of alleged misconduct, the committee will make every effort to maintain confidentiality of all parties in the process. Information about the case is generally not communicated to non-involved parties, and communications regarding the matter are on a need-to-know basis. If, however, informational material relative to the case is subpoenaed through a court process or is required to be divulged in some other type of investigation, then it would

not be deemed a breach of confidentiality and the requested material would be void of its confidentiality. Neither the student nor the faculty involved shall have representation, including legal representation, during the presentation of the case or during the appeals process.

The candidate will be asked to meet with two faculty members, typically the candidate's advisor and the faculty member who raised the concern, to discuss the candidate's performance. If the candidate's advisor is the one with the concern, then another faculty member, preferably one familiar with the candidate, will be asked to be on the committee. The conference shall be conducted to examine the details of the case. Prior to the conference, the department chair will ensure that the candidate and all committee members have copies of the Counselor Education Candidate Dispositions and Candidate Review and Retention policy as outlined in this handbook.

If a mutually satisfactory remediation plan is achieved during the conference, the process will end, and no further action will be taken. A record of the outcome of the conference will be filed in the department chair and dean's office. If the outcome of the conference results in dismissal of the case, the faculty members are responsible for taking necessary steps for removing blocks on registration.

If a successful resolution is not achieved at the conference, the committee will determine a recommended penalty. After the review of the candidate, the committee will confirm their decision by vote. For cases in which the Committee recommends a penalty, the penalty may range up to and including dismissal from the university.

#### Appeals Process

After a decision is rendered by the Faculty Committee, an appeal may be requested. Grounds for an appeal are the alleged lack of due process in the case or alleged discrimination against the student. For an appeal to be considered, it must be based upon:

1. Arbitrary or capricious actions by a member of the faculty, the Faculty Committee, and/or the advisor.
2. Substantial failure on the part of the Faculty Committee to follow the procedures outlined above.

The appeals process follows the Academic Standards Policy as set forth by the Graduate School. Please refer to these policies as outlined the student handbook "The Lowdown" at <http://www.southalabama.edu/lowdown> (<http://www.southalabama.edu/lowdown/>)

#### Academic Standards and Appeals Policy

The counseling program in the Counseling & Instructional Sciences Department complies with the Academic Standards Policy as set forth by the Graduate School and the policies on general and grade grievance, student academic conduct, and sexual offense of the University of South Alabama. Please refer to these policies as outlined the student handbook "The Lowdown" at <http://www.southalabama.edu/lowdown> (<http://www.southalabama.edu/lowdown/>)

## Clinical Mental Health Counseling Requirements

Code	Title	Hours
<b>Required Major Professional Core</b>		
CED 560	Diagnosis/Treatment Planning (Spring only)	3
CED 562	Addictions Counseling (Spring only)	3
CED 566	Multicultural Counseling (Spring only)	3
CED 571	Foundations of CMHC (Fall only)	3
CED 572	Princ and Theories of Couns (Fall only)	3
CED 574	Group Couns Theory and Process (Spring only)	3
CED 576	Supv Practicum in Couns (Summer only)	3
CED 584	Sem Ethical and Legal Issues (Fall only)	3
CED 586	Counseling Skills and Process (Spring only)	3
CED 588	Career Devel, Assess, & Interv (Fall only)	3
CED 592	Crisis & Trauma Counseling (Fall only)	3
CED 597	Internship in CMHC (6 semester hours. required; 600 contact hours, Fall & Spring)	6
<b>Required Related Professional Courses</b>		
IDE 510	Educ Research and Evaluation	3
EPY 521	Human Dev and Behavior	3
EPY 555	Tests-Measurement and Eval	3
<b>Approved Electives</b>		
Select 12 hours		12
<b>Total Hours</b>		<b>60</b>

## Clinical Mental Health Counseling Graduate Certificate Degree Requirements

The Graduate Certificate in Clinical Mental Health Counseling at USA requires a minimum of five courses (15 hours) with grades of "A" or "B". The student may choose from a list of courses to meet requirements for the certificate that provides specific training in the individual's area of counseling emphasis. The student will work with the program director/ and or advisor to develop the best plan possible to meet career goals.

Counselor educators are ethically required to ensure that students meet academic requirements and demonstrate clinical competencies. Satisfactory progress will be predicated on a combination of factors such as academic success, clinical competence, adherence to ethical standards, and appropriate interpersonal functioning. Students who do not demonstrate satisfactory competence within any of these critical areas of professional performance may be terminated from the program. Core faculty will evaluate students on a continuing basis to determine students' satisfactory progression through the program. Other policies, procedures, and guidelines are addressed in the Counselor Education Graduate Student Handbook.

Students who are not enrolled for three consecutive semesters must complete all admissions requirements again and be reviewed by the program admissions committee.

Comprehensive Examination: Counselor Preparation Comprehensive Examination (CPCE).

# Educational Media (M.Ed.) - Library Media

## Degree Requirements

The Master of Education degree program in Education Media with a certificate in Library Media is designed to prepare students to plan, design, and administer library/media centers and qualify students to serve as School Library Media Specialists in a P-12 educational setting. This program is offered entirely online with two options:

Upon successful completion of the nationally recognized and accredited program, graduates may be able to qualify for certification in states other than Alabama. For certification as a library media specialist by the State Department of Education, one must have completed a basic program in a teaching field. Eligibility for certification requires two years of appropriate professional experience. See specific requirements for each program. The initial certificate is valid for five years.

Satisfactory progress in the program will be predicated on a combination of factors such as academic success, demonstration of competence in requisite skills, adherence to ethical standards, and appropriate interpersonal functioning. Students who do not demonstrate satisfactory competence with any of these critical areas of professional performance may be terminated from the program. Core faculty will evaluate students on a continuing basis to determine students' satisfactory progression through the program.

## Master of Education Degree with Certification in Library Media

Students entering this program must have valid baccalaureate-level or master's level professional educator certification in a teaching field. Program requirements include:

1. Completing a minimum of 30 semester hours as outlined below, with a minimum grade-point average of 3.25 on all work attempted. A minimum grade of "B" is required for all EDM courses, and a satisfactory performance is required in each of the internship experiences.
2. Passing a written comprehensive and portfolio examination.
3. Passing the PRAXIS II test for Library Media Specialist.

Code	Title	Hours
<b>Educational Media Core Courses (<a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/counseling-instructional-sciences/footnote1/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/counseling-instructional-sciences/footnote1/</a>)<sup>1</sup></b>		
EDM 510	Microcomputing Systems in Ed	3
EDM 530	Workshop in Ed Media	3
EDM 540	Curr Media for Children & Yth	3
EDM 580	Information Literacy	3
EDM 581	Media Center Management	3
EDM 583	Library Media Programs	3
<b>Internship</b>		
EDM 595A	Internship A (see footnote table below (p. 439)) <sup>2</sup>	1
EDM 595B	Internship B (see footnote table below (p. 439)) <sup>3</sup>	1
EDM 595C	Internship C (see footnote table below (p. 439)) <sup>4</sup>	1
See additional information below		
<b>Instructional Support Courses</b>		
Select one of the following:		3

EPY 502	Psy Prin Learning	
EDF 515	Multicultural Education	
Advisor Approved Elective		
IDE 510	Educ Research and Evaluation	3
SPE 500	Nat-Needs of Exc Chld and Yth (see footnote table below (p. 439)) <sup>5</sup>	3
or EDU 567	Multicultural Exp in Schools	
<b>Total Hours</b>		<b>30</b>

## Footnote

- <sup>1</sup> With the exception of EDM 510, enrollment is limited to Educational Media majors only.
- <sup>2</sup> Prerequisite EDM 581
- <sup>3</sup> Prerequisite EDM 580
- <sup>4</sup> Prerequisite EDM 583
- <sup>5</sup> If a survey course in Special Education was previously taken at the undergraduate or graduate level, EDU 567 must be taken in lieu of SPE 500.

## Alabama Class "A" Certification in Library Media

To be eligible for admission to this program, students must have a valid Alabama master's level certification in a teaching field or a valid master's level certification in another area of instructional support and must have completed the equivalent graduate course work listed under Instructional Support Courses for the master's degree (9 semester hours).

Additional requirements for admission are found on the Program webpage at <https://www.southalabama.edu/colleges/ceps/cins/edmedia-med.html>

To apply - click here (<https://southalabama.liaisoncas.com/applicant-ux/#/login>) to get to the admissions login page.

Program completion requirements include:

1. Completing the Educational Media Core (21 semester hours) as outlined below, with a minimum grade point average of 3.25 in all core courses and a satisfactory performance in each of the internship experiences.
2. Passing a written comprehensive and portfolio examination.
3. Passing the PRAXIS II test for Library Media Specialist.

Code	Title	Hours
<b>Educational Media Core Courses (<a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/counseling-instructional-sciences/footnote2/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/counseling-instructional-sciences/footnote2/</a>)<sup>1</sup></b>		
EDM 510	Microcomputing Systems in Ed	3
EDM 530	Workshop in Ed Media	3
EDM 540	Curr Media for Children & Yth	3
EDM 580	Information Literacy	3
EDM 581	Media Center Management	3
EDM 583	Library Media Programs	3
<b>Internship</b>		
EDM 595A	Internship A (see footnote table below (p. 440)) <sup>2</sup>	1
EDM 595B	Internship B (see footnote table below (p. 440)) <sup>3</sup>	1
EDM 595C	Internship C (see footnote table below (p. 440)) <sup>4</sup>	1

See additional information below

**Total Hours** 21

### Footnote

<sup>1</sup> With the exception of EDM 510, enrollment is limited to Educational Media majors only.

<sup>2</sup> Prerequisite EDM 581

<sup>3</sup> Prerequisite EDM 580

<sup>4</sup> Prerequisite EDM 583

In addition, an ALSDE-Approved diversity course is required if not previously taken with the Class A certification.

Students will be required to accumulate a total of 300 contract hours during the three internships: A, B, and C (100 hours in each). Of the 300 contact total hours, 150 must be accumulated in a P-12 school library. Although it is preferred that all internship hours are accumulated in a P-12 school library, other settings may be approved such as a public or university library. Internship A MUST be conducted in a school library. Of the 300 total hours, at least 100 must be at the elementary level (K-6) and at least 100 at the secondary level (7-12); the remaining 100 may be at the level(s) of choice. It is the students' responsibility to initiate the internship experiences by: identifying potential sites and obtaining on-site administrative approval. Final approval of internship arrangements will be made by program faculty. The supervising library media specialist must be certified, currently employed as a media specialist, and have at least three successful years as a media specialist.

## Educational Media and Technology (MS)

### Degree Requirements

The University of South Alabama Master of Science degree in Educational Technology, a completely online program, prepares graduates to design, evaluate, and implement educational technologies. Through coursework and practical experiences, students will learn to use a diverse set of technological tools for the design and development of effective instruction. Students will also evaluate technological tools and resources designed to enhance teaching and learning and collaborate with educators and others to use technology to enhance learner experiences and outcomes.

### Requirements for Degree

To qualify for the Master's Degree in Educational Technology, candidates must satisfactorily complete the following program with a minimum grade of "B" or better on all course work. Students must successfully complete a digital comprehensive exam portfolio which includes a thesis paper and an instructional technology project. The digital comprehensive exam portfolio may only be submitted two times.

### Requirements for the M.S. Degree in Educational Media and Technology

(30 semester hours minimum)

Code	Title	Hours
<b>Instructional Technology Core Courses</b>		
EDM 510	Microcomputing Systems in Ed	3
EDM 520	Research in Ed Tech	3
EDM 580	Information Literacy	3

EDM 584	Educational Technology Design	3
EDM 590	Sp Top -	3
EDM 591	Trends and Issues in Ed Tech	3
ISD 581	Digital Media Tools	3
<b>Instructional Support Courses</b>		
EPY 502	Psy Prin Learning	3
Electives		3
<b>Total Hours</b>		<b>27</b>

## Educational Media and Technology Graduate Certificate

### Degree Requirements

The Graduate Certificate for Educational Media and Technology requires a minimum of 6 courses (18 hours)

Code	Title	Hours
EDM 520	Research in Ed Tech	3
EDM 584	Educational Technology Design	3
EDM 590	Sp Top -	3
ISD 621	Instructional Design	3
ISD 642	Project Coordination	3
ISD 651	Learning Theory and Technology	3
<b>Total Hours</b>		<b>18</b>

## Human Performance Improvement Graduate Certificate

### Degree Requirements

The Graduate Certificate for Human Performance Improvement requires a minimum of five courses (15 hours). Requirements for the certificate include:

Code	Title	Hours
<b>Core Courses</b>		
ISD 641	Performance Systems Tech	3
ISD 640	Needs Assessment	3
IDE 645	Adv Human Perform Improvement	3
Select one of the following:		3
ISD 621	Instructional Design	
ISD 642	Project Coordination	
IDE 660	Program Research and Eval	
<b>Required Capstone Course</b>		
ISD 611	Macro Lvl Trning & Perform Sys	3
<b>Total Hours</b>		<b>15</b>

### Criteria

To be eligible, the student must meet the master's admission and applicant requirements of the IDD master's program. These include the following: a) hold a bachelor's degree or equivalent from a regionally accredited institution, and b) have a cumulative junior/senior undergraduate GPA of 2.5 or higher or 2.75 GPA or higher on the last 64 undergraduate credit hours.

## Application Procedures and Requirements

The students would make application to the certificate program via University admissions application process and submit documents and fees as required by the Human Performance Improvement certificate program.

Requirements for admission are found on the Program webpage at <https://www.southalabama.edu/colleges/ceps/cins/hpi-cert.html>

Final admission decision involves evaluation of the following: grade-point average, letters of reference, applicant's statement of career goal(s) and purpose(s), professional experience, and program enrollment and availability.

Applicants are responsible to ensure that all materials arrive within the deadline. Incomplete applications will not be considered. Applications will be retrieved for review when all materials are received. An IDD program faculty admission committee will review applications, make admissions decisions and a written communication from the university will notify applicants about admissions decisions.

### Requirements for Certificate Program

A minimum GPA of 3.0 on all program of study courses and all work attempted is required. A maximum of two Cs can be counted. No grades of D or F may be counted. If a third C or any grade below is earned, the student will be dismissed from the program.

Those enrolled in the Certificate program may also elect to pursue the master's degree and be allowed to apply the courses toward their degree program once admitted and upon approval of the IDD faculty admissions committee.

Students enrolled in an IDD graduate program may opt to complete a certificate program to earn the certificate in addition to completing their degree program.

## Instructional Design and Development (MS) Degree Requirements

The Master of Science degree program in Instructional Design and Development provides students with the information and skill training to analyze instructional tasks, to design and deliver instructional programs, and to perform evaluative procedures on instructional products and services. The job market potential for graduates of the program includes the management of in-service education in business and industry, health-related institutions and agencies, military agencies, institutions of higher education, K-12 education, and related self-employed activities.

1. Each student will be assigned a major professor and will complete a course-of-study form by the end of the first semester of study.
2. A program committee will be appointed to work with the student.
3. A Master's Comprehensive Examination will be completed by each student during the student's last semester.

The Master's program in Instructional Design and Development (IDD) has both on-campus and on-line courses. Although not all courses are taught in both formats, students are able to complete the Master's program in one format or the other, or a combination of on-campus and on-line courses. Using the Internet and other distance learning technologies, the IDD on-line program provides an educational opportunity for those who

choose to use similar technology that they might employ for delivering educational and training courses after graduation.

Flexibility is the key to the program, and students can complete courses via the Internet following their individual learning schedules during the semester. Students are able to interact directly with their instructor and classmates to obtain subject information, to work on course and team assignments, and to complete assessments via the Internet. In addition, students have direct access to the University Library and advising services.

For more detailed information, please visit the ID&D website at <https://www.southalabama.edu/colleges/ceps/cins/> or contact: Telephone (251) 380-2861

## Admission Requirements

Applications for the Instructional Design and Development program are reviewed throughout the year.

Requirements for admission are found on the Program webpage at <https://www.southalabama.edu/colleges/ceps/cins/idd/idd-ms.html>

To apply - click here (<https://www.southalabama.edu/departments/admissions/graduate.html>) to get to the graduate admissions page.

Final admission decision involves evaluation of the following: grade-point average, scores on the GRE, letters of reference, applicant's statement of career goal(s) and purpose(s), professional experience, and program enrollment and availability.

## Internship

Many Instructional Design and Development students complete an internship of a minimum of 240 contact hours. Students must complete all foundational core courses prior to enrolling for the internship. The internship component is designed to give students practical experience in design, implementation, and/or evaluation of instructional systems and must have prior approval of the internship coordinator and the student's advisor.

## Requirements for Degree

To qualify for the Master's Degree in Instructional Design and Development, candidates must satisfactorily complete the following program, maintain a minimum GPA of 3.0 on all program of study courses and all work attempted. A maximum of two Cs can be counted. No grades of D or F may be counted. If a third C or any grade below is earned, the student will be dismissed from the program. Students must complete a written course of study by the end of their first semester in the program.

Students must successfully complete a 1-hour oral comprehensive exam. The exam may be taken only two times.

## Requirements for the M.S. Degree in Instructional Design and Development Program

(33 minimum credit hours)

Code	Title	Hours
<b>Foundational Core Courses</b>		
ISD 610	Trends and Issues in IDD	3
ISD 613	Instructional Strategies	3
ISD 621	Instructional Design	3
ISD 641	Performance Systems Tech	3

EPY 502	Psy Prin Learning	3
IDE 510	Educ Research and Evaluation	3
IDE 660	Program Research and Eval	3
<b>Additional Requirements</b>		
ISD 581	Digital Media Tools	3
ISD 611	Macro Lvl Trning & Perform Sys	3
ISD 653	Developing Online Instruction	3
<b>Field Courses</b>		
Select a minimum of three hours from the following:		3
ISD 595	Internship - Masters	
ISD 598	Research and Dev Project	
ISD 599	Thesis	
<b>Total Hours</b>		<b>33</b>

## Instructional Design and Development (Ph.D.)

### Degree Requirements

The Doctor of Philosophy degree in Instructional Design and Development consists of components in instructional systems design, instructional technology, learning theory, and research and evaluation. Program emphases are: applying instructional systems design procedures in educational program development; developing instructional models for a variety of subject matter areas and educational settings; matching instructional strategies to student learning styles; evaluating, selecting, and integrating new technologies into instructional systems; and utilizing formative and summative evaluation and research in the development and improvement of instructional systems. Graduates of the program will be prepared to function in school districts, colleges and universities, business and industry, health care organizations, and the military with responsibility for planning, implementing, and evaluating instructional programs.

### Admission Requirements

Applicants for the doctoral program with a Bachelor's degree or without a Master's degree in Instructional Design and Development from a program deemed to be equivalent by the admissions committee will be required to complete the Foundational Core courses in the Master's degree in IDD and take a qualifying exam on the Foundational Core. Students must satisfy all Foundational Core requirements and maintain a minimum GPA of 3.0 on all program of study courses and all work attempted. A maximum of two Cs can be counted. No grades of D or F may be counted. If a third C or any grade below is earned, the student will be dismissed from the program. The student must pass the qualifying examination. In addition, the applicant's progress and preparation for advanced work will be reviewed by a committee that will make a decision for or against admission to the regular Ph. D. program.

Applicants with a Master's degree in Instructional Design and Development or equivalent may be admitted to the regular Ph.D. program. After transcript review, however, the admission committee may require additional coursework and/or successful completion of the Master's comprehensive exam. Any additional pre-requisite coursework will be indicated in the acceptance letter.

The Admissions Committee will select the most highly qualified candidates to be considered for admission to the program. A positive

effort will be made to identify and recruit minority students into the program.

Requirements for admission are found on the Program webpage at <https://www.southalabama.edu/colleges/ceps/cins/idd/idd-phd.html>

To apply - click here (<https://www.southalabama.edu/departments/admissions/graduate.html>) to get to the graduate admissions page.

The admission decision involves evaluation of the following: the grade-point average on undergraduate and graduate course work, scores on the GRE or the MAT, letters of recommendation, professional experience, the applicant's statement of purpose, and the program's current enrollment. Final decisions regarding admission will be based on the applicant's personal and professional qualifications as well as the program's ability to accommodate additional doctoral students. Upon acceptance by the College of Education and Professional Studies, the applicant will be recommended for admission. Admissions will notify all applicants in writing of the disposition of their applications.

Information about the Ph.D. program should be requested from:

The Coordinator, Instructional Design and Development Program  
UCOM 3800, College of Education and Professional Studies  
The University of South Alabama  
Mobile, Alabama 36688-0002  
(Telephone: (251) 380-2861)

All documents for admission review (i.e., transcripts, test scores or letters of recommendation) must be official and mailed from the home institutions or testing agency directly to the Office of Admissions. Once submitted, documents become the property of the University of South Alabama.

### Program

The Doctor of Philosophy degree program in Instructional Design and Development is designed to provide persons with skills required in planning, implementing, and evaluating instructional programs in a variety of educational settings. The program consists of four major components:

1. the instructional design and development foundation core
2. research methods and statistics
3. supporting coursework
4. completion of a dissertation

A minimum of 60 semester hours of approved graduate course work is required in the program. Refer to the current Instructional Design and Development doctoral handbook for specific requirements.

The requirements for each of the components in the program in Instructional Design and Development are described below. (Any additional requirements will be determined by the student's doctoral advisory committee.)

Requirements for the Ph.D. in instructional design and development program (60 semester hours)

To qualify for the Doctor of Philosophy Degree in Instructional Design and Development candidates must maintain a minimum GPA of 3.0 on all program of study courses and all work attempted. A maximum of two Cs can be counted. No grades of D or F may be counted. If a third C or any grade below is earned, the student will be dismissed from the program.

## Requirements

Code	Title	Hours
Students who have not already completed a master's degree in Instructional Design & Development must take the following ISD Foundation Courses:		
ISD 610	Trends and Issues in IDD	3
ISD 613	Instructional Strategies	3
ISD 621	Instructional Design	3
ISD 641	Performance Systems Tech	3
EPY 502	Psy Prin Learning	3
IDE 510	Educ Research and Evaluation	3
<b>Instructional Core</b>		
EPY 602	Advanced Theories of Learning	3
or ISD 614	Human Cognition for IDD	
ISD 612	Alternate Instructional Models	3
ISD 622	Adv Instructional Design	3
IDE 660	Program Research and Eval	3
ISD 640	Needs Assessment	3
ISD 651	Learning Theory and Technology	3
ISD 653	Developing Online Instruction	3
ISD 695	Internship - Doctoral	3
<b>Research Core</b>		
Select a minimum of 15 hours from the following:		15
IDE 620	Quantitative Methods I	
IDE 621	Quantitative Methods II	
IDE 630	Quantitative Methods III	
ISD 623	Adv Research Methodology	
IDE 631	Intro Qual/Mixed Methods Res	
IDE 635	Adv Measurement and Eval	
IDE 694	Dir St and Research	
<b>Supporting Coursework</b>		
Select 12 hours of supporting coursework (Courses must be approved by doctoral advisory committee)		12
<b>Research/Dissertation</b>		
Instructional Core and Research Core comprehensive examinations are required before enrolling in research/dissertation hours. No more than 9 research/dissertation hours count toward the semester hours requirement		9
<b>Total Hours</b>		<b>78</b>

## Continuous Enrollment

Doctoral students must be continuously enrolled for one semester hour or more to remain active in the program. After admission to candidacy and until graduation, students must enroll each academic term for a minimum of one semester hour of IDE 799, Research and Dissertation. A minimum of 9 hours of dissertation credit is required.

Failure to enroll for any hours during any semester will result in a student being removed from the program. Students who voluntarily withdraw from the program may be considered for readmission. The student will be reviewed by the Admissions Committee under standards in effect at the time the student applies for readmission. The student will need to demonstrate that he or she is current with the research literature in the field. This may require additional work on the part of the candidate.

## Residency

Students in the program will complete a minimum of one year of residency during their doctoral studies. Residency is defined as enrollment as a full-time student for a period of two consecutive semesters. Residency is a requirement for admission to candidacy.

## Examinations

Doctoral students are required to successfully complete two major examinations before admission to candidacy.

## Research Core Examination

This Research Core Examination is a one-day examination consisting of a written portion and the analysis of a data set using a computer program of the student's choice. The purpose of the examination is to verify that the student has developed an understanding of research, measurement, evaluation and statistical skills.

## Instructional Core Examination

The Instructional Core Examination is a written and oral examination. The purpose of the two-day written portion is to assure that all Instructional Design and Development candidates are prepared in the core areas of the discipline. The two-hour oral examination is intended to review and extend the topics covered in the written parts of the examination. The written exam must be passed in order to sit for the oral exam. The Instructional Core Exam may be taken only two times.

## Candidacy

Students will be admitted to candidacy for the degree of Doctor of Philosophy in Instructional Design and Development after successful completion of the following program requirements:

1. doctoral advisory committee appointed;
2. program of study established;
3. residency established;
4. Research Core Examination;
5. Instructional Core Examination; and
6. dissertation topic approved.

## Transfer Credit

A maximum of 30 semester hours of graduate credit closely related to the required curriculum may be counted toward the Ph.D. plan of study. The credit is approved only after completion of a minimum of nine (9) semester hours of graduate credit at the University of South Alabama and the student must be in regular status. Recommendations concerning transfer credit will be made by the Doctoral Advisory Committee in light of a student's total program of study. All proposed transfer credit must be approved by the Director of Graduate Studies and the student's Doctoral Advisory Committee. Only courses with "A" or "B" grades are acceptable for transfer and must be from a regionally accredited institution.

## IDD Doctoral Student Handbook

The Instructional Design and Development Doctoral Student Handbook provides additional information about the program. The latest version of the handbook is available from the Professional Studies department secretary or on-line. In addition to basic information about the program, the IDD Doctoral Handbook includes specific information on requirements doctoral students must complete.

# Instructional Design and Development Graduate Certificate

## Degree Requirements

Code	Title	Hours
ISD 613	Instructional Strategies	3
ISD 621	Instructional Design	3
ISD 622	Adv Instructional Design	3
ISD 642	Project Coordination	3
ISD 653	Developing Online Instruction	3
<b>Total Hours</b>		<b>15</b>

To be eligible, the student must meet the master's admission and applicant requirements of the IDD master's program. These include the following:

1. hold a bachelor's degree or equivalent from a regionally accredited institution, and
2. have a cumulative junior/senior undergraduate GPA of 2.5 or higher or 2.75 GPA or higher on the last 64 undergraduate credit hours.

## Application Procedures and Requirement

The students would make application to the certificate program via University admissions application process and submit documents and fees as required by the IDD certificate program.

Requirements for admission are found on the Program webpage at <https://www.southalabama.edu/colleges/ceps/cins/idd/idd-cert.html>

To apply - click here (<https://www.southalabama.edu/departments/admissions/graduate.html>).

Final admission decision involves evaluation of the following: grade-point average, letters of reference, applicant's statement of career goal(s) and purpose(s), professional experience, and program enrollment and availability.

Applicants are responsible to ensure that all materials arrive within the deadline. Incomplete applications will not be considered. Applications will be retrieved for review when all materials are received.

An IDD program faculty admission committee will review applications, make admissions decisions and a written communication from the university will notify applicants about admissions decisions.

## Requirements For Certificate Programs

A minimum GPA of 3.0 on all program of study courses and all work attempted is required. A maximum of two Cs can be counted. No grades of D or F may be counted. If a third C or any grade below is earned, the student will be dismissed from the program.

Those enrolled in the Certificate program may also elect to pursue the master's degree and be allowed to apply the courses toward their degree program once admitted and upon approval of the IDD faculty admissions committee.

Students enrolled in an IDD graduate program may opt to complete a certificate program to earn the certificate in addition to completing their degree program.

# School Counseling (M.Ed.)

## Degree Requirements

The program described below is designed to provide for the acquisition of skills and competencies needed by counselors working in educational settings.

The Alabama State Department of Education (ALSDE) now offers an expanded certification option for CACREP- accredited programs. Requirements under this option include "completion of a school counseling program that is accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP), a passing score on the Praxis II test #0421, Professional School Counseling, and attainment of passing scores on the National Counseling Examination for Licensure and Certification. Note that certification in a teaching field or another area of instructional support is not required for admission to a CACREP-accredited program in school counseling".

A grade of "B" or better is required in all coursework toward the degree. Students must also pass a Comprehensive Examination: The Counselor Education Comprehensive Examination (CECE). Students who are not enrolled for three consecutive semesters must complete all admissions requirements again and be reviewed by the program admissions committee.

Counselor educators are ethically required to ensure that students meet academic requirements and demonstrate clinical competencies. Satisfactory progress will be predicated on a combination of factors such as academic success, clinical competence, adherence to ethical standards, and appropriate interpersonal functioning. Students who do not demonstrate satisfactory competence within any of these critical areas of professional performance may be terminated from the program. Core faculty will evaluate students on a continuing basis to determine students' satisfactory progression through the program. Below, the student review and retention policies and procedures are outlined, followed by the required coursework. Other policies, procedures, and guidelines are addressed in the Counselor Education Graduate Student Handbook.

## Candidate Review and Retention Policy

The Counselor Education faculty in the Department of Counseling & Instructional Sciences at the University of South Alabama is responsible for preparing candidates to become **competent** and **ethical** counseling professionals. In addition to assessing academic performance, candidates' personal characteristics, level of interpersonal skills, and professional behavior will be evaluated on an ongoing basis throughout the program by the counseling faculty. At least once a year, faculty members review all candidates in the program at a special faculty meeting, and students who do not meet program expectations will be notified and provided written feedback on their academic and professional performance. Professional behavior expectations, the retention policy, and remediation procedures are reviewed by faculty at the new student orientation. In addition, candidates sign an informed consent form (see Appendix A in the Counselor Education Graduate Student Handbook) documenting that they have read, reviewed, and understand these policies and procedures upon entering their first semester of the program.

## Initial Remediation Procedures

Candidates identified as demonstrating academic or personal problems that interfere with their professional performance undergo further review by the faculty. Candidates with minor concerns (e.g., seeming distracted throughout the semester, exhibiting low levels of participation in class, demonstrating difficulty receiving constructive feedback, failure to demonstrate adequate counselor dispositions) will be asked to meet with their faculty advisor to go discuss concerns and review their dispositions based on the specific reported behaviors(s). The faculty advisor and/or program coordinator will review the completed **Counseling Program Student Disposition Rating Scale**. In many cases, the candidate and faculty advisor come to an agreement on what needs to occur to improve reported behaviors and dispositions. Students are informed that further action will be taken (remediation plan) if concerning behaviors continue and dispositions do not improve.

In some cases, candidates may be asked by their advisor, the core counseling faculty, and/or the program coordinator to complete a remediation plan. Remediation plans are indicated for significant dispositional issues, student handbook violations, failure to secure or retain practicum/internship placement, plagiarism, or other significant issues. If a remediation plan is indicated, the following steps are taken:

- The advisor or program coordinator will discuss the remediation plan with the candidate during their meeting. This meeting may include the advisor and the program coordinator. If the program coordinator is the student's advisor, then an additional core counseling faculty member may attend the meeting.
- A remediation plan is developed (either during or after the meeting) and this plan is shared with the candidate after which both candidate, advisor, and program coordinator will sign the plan to demonstrate their mutual understanding of the candidate's current progress, professional development, and the actions necessary on the part of the candidate to continue in the counseling program. Often, the advisor and/or the program coordinator meet with the student to go over the written remediation plan prior to the student signing the plan. The purpose of the meeting is to discuss the remediation plan and answer questions the candidate may have about the plan.
- The candidate is provided three options for signing the remediation plan.
  - I understand the above remediation plan and consent to enacting this plan with the Counselor Education program faculty.
  - I understand the above remediation plan and consent to enacting this plan with the Counselor Education program faculty, but I would like to provide a written rebuttal to place in my student file.
  - I do not consent to the remediation plan and request an appeal to the next level of university administration, e.g. Associate Dean or Dean of the College.

If the candidate does not consent to the remediation plan and requests an appeal to the next level of administration, the candidate will be directed to the handbook and the appeal procedures policies as outlined in the student handbook "The Lowdown" at <http://www.southalabama.edu/lowdown> (<http://www.southalabama.edu/lowdown/>)

If a candidate does not successfully complete the initial remediation plan or, if at any time during the course of the program, the faculty becomes aware of substandard or unprofessional behavior or performance,

unethical behavior, and/or illegal acts, the candidate will be subjected to the following formal remediation process:

**Conference with a Faculty Committee:** In cases of alleged misconduct, the committee will make every effort to maintain confidentiality of all parties in the process. Information about the case is generally not communicated to non-involved parties, and communications regarding the matter are on a need-to-know basis. If, however, informational material relative to the case is subpoenaed through a court process or is required to be divulged in some other type of investigation, then it would not be deemed a breach of confidentiality and the requested material would be void of its confidentiality. Neither the student nor the faculty involved shall have representation, including legal representation, during the presentation of the case or during the appeals process.

The candidate will be asked to meet with two faculty members, typically the candidate's advisor and the faculty member who raised the concern, to discuss the candidate's performance. If the candidate's advisor is the one with the concern, then another faculty member, preferably one familiar with the candidate, will be asked to be on the committee. The conference shall be conducted to examine the details of the case. Prior to the conference, the department chair will ensure that the candidate and all committee members have copies of the Counselor Education Candidate Dispositions and Candidate Review and Retention policy as outlined in this handbook.

If a mutually satisfactory remediation plan is achieved during the conference, the process will end, and no further action will be taken. A record of the outcome of the conference will be filed in the department chair and dean's office. If the outcome of the conference results in dismissal of the case, the faculty members are responsible for taking necessary steps for removing blocks on registration.

If a successful resolution is not achieved at the conference, the committee will determine a recommended penalty. After the review of the candidate, the committee will confirm their decision by vote. For cases in which the Committee recommends a penalty, the penalty may range up to and including dismissal from the university.

#### Appeals Process

After a decision is rendered by the Faculty Committee, an appeal may be requested. Grounds for an appeal are the alleged lack of due process in the case or alleged discrimination against the student. For an appeal to be considered, it must be based upon:

1. Arbitrary or capricious actions by a member of the faculty, the Faculty Committee, and/or the advisor.
2. Substantial failure on the part of the Faculty Committee to follow the procedures outlined above.

The appeals process follows the Academic Standards Policy as set forth by the Graduate School. Please refer to these policies as outlined in the student handbook "The Lowdown" at <http://www.southalabama.edu/lowdown> (<http://www.southalabama.edu/lowdown/>)

#### Academic Standards and Appeals Policy

The counseling program in the Counseling & Instructional Sciences Department complies with the Academic Standards Policy as set forth

by the Graduate School and the policies on general and grade grievance, student academic conduct, and sexual offense of the University of South Alabama. Please refer to these policies as outlined the student handbook "The Lowdown" at <http://www.southalabama.edu/lowdown> (<http://www.southalabama.edu/lowdown/>)

Code	Title	Hours
<b>Major Instructional Support Area</b>		
CED 560	Diagnosis/Treatment Planning	3
CED 565	Found of Prof School Couns	3
CED 566	Multicultural Counseling	3
CED 569	Child Counseling	3
CED 572	Princ and Theories of Couns	3
CED 574	Group Couns Theory and Process	3
CED 576	Supv Practicum in Couns	3
CED 582	Data-Driven School Counseling	3
CED 584	Sem Ethical and Legal Issues	3
CED 586	Counseling Skills and Process	3
CED 588	Career Devel, Assess, & Interv	3
CED 591	Advocacy, Collab. & Consult.	3
CED 595	Internship - School Counseling (6 semester hours required; 600 contact hours)	6
School Counselors are required to successfully complete the PRAXIS II Subject Test prior to enrolling in internship		
<b>Related Studies in Educational Foundations</b> <sup>1</sup>		
EPY 521	Human Dev and Behavior	3
EPY 555	Tests-Measurement and Eval	3
<b>Research in Education Area</b>		
IDE 510	Educ Research and Evaluation	3
Electives (A preapproved three course sequenced elective cognate is required)		
School Counselors are required under the CACREP Certification Option to successfully complete the National Counselor Exam prior to applying for certification		
<b>Total Hours</b>		<b>60</b>

<sup>1</sup> Under the SDE option, SPE 500 Must be taken for 3 additional hours by students who have not previously satisfied the special education requirement.

## Health, Kinesiology, And Sport Department Information

(251) 460-7131

Department of Health, Kinesiology, and Sport website  
<http://www.southalabama.edu/colleges/ceps/hks> (<http://www.southalabama.edu/colleges/ceps/hks/>)

Title	Name
Chair	Neil A. Schwarz
Professors	Holden
Associate Professors	Forester, Hauff, Hudson, Keshock, Schwarz, Woltring
Assistant Professor	Bates, Colquhoun, Keller, Parkes, Stratton

Senior Instructors	Montgomery
Instructors	Botsis

The Department of Health, Kinesiology, and Sport offers state and nationally-accredited undergraduate programs of study in Physical Education (P-12), Health Education (6-12), and a combined Health (6-12) and Physical Education (P-12) program that lead to Alabama Class B Educator Preparation and Certification. Graduate programs of study are offered in Physical Education (P-12) and Health Education (6-12) that lead to Alabama Class A Educator Preparation and Certification.

The Department offers a totally online graduate program in Sport Management and an optional totally online graduate program in Health Promotion. Undergraduate and graduate programs are available in Exercise Science and Health Promotion, including a doctoral degree in Exercise Science and Performance Nutrition. Undergraduate programs are offered in Recreational Therapy and Sport Management and Recreation Studies with concentrations in Sport Administration or Coaching Administration. The Department also provides a physical activity instructional program for all university students through courses in physical fitness, lifetime sports, dance, and martial arts. An undergraduate Coaching Certificate program is also offered by the department as well as minors in Sport Management and Recreational Studies, Performance Nutrition, and Health and Wellness.

### **Requirements for Admission to Candidacy in Teacher-Certification Programs (Health and/or Physical Education)**

All students must apply in the Advising Center (UCOM 3360), for admission to teacher candidacy. This is normally done during the final semester of the sophomore year or first semester of the junior year. All previously listed requirements of the University and College must be met prior to application.

Teacher Candidacy Admission Requirements for Physical Education (P-12) & Health (6-12) majors, & merged Health (6-12) and Physical Education (P-12).

### **Hours**

60 semester hours (48 must be in General Education). A minimum of 12 semester hours must be taken at USA.

### **GPA Requirements**

- 2.5 Minimum Overall USA GPA (All work attempted at USA).
- 2.5 Minimum Program GPA (All courses used on this Advising Sheet, including transfer work).
- 2.5 Minimum Professional Studies GPA (All courses used in the Professional Studies area, including transfer work).
- 2.5 Minimum Teaching Field GPA (All courses used in the Teaching Field, including transfer work).
- No grade below a "C" will be accepted in Professional Studies courses.

### **Course Requirements**

- Course requirements for PE P-12 Majors:

Code	Title	Hours
CA 110	Public Speaking	3
EH 101	English Composition I	3
EH 102	English Composition II	3
BMD 110	Introduction to A & P I	4
or BMD 251	Human Anatomy & Physiology I	
EDM 310	Microcomputing Systems	3

EDU 400	Edu Except Child and Youth	3
EPY 351	Human Growth & Development	3
KIN 100	Concepts of Health and Fitness	3
KIN 201	Orientation to Kinesiology	3
KIN 166	Movement-Rhythms and Dev Act	3

- Course requirements for merged Health (6-12) and Physical Education (P-12):

Code	Title	Hours
CA 110	Public Speaking	3
EH 101	English Composition I	3
EH 102	English Composition II	3
BMD 110 or BMD 251	Introduction to A & P I Human Anatomy & Physiology I	4
EDM 310	Microcomputing Systems	3
EDU 400	Edu Except Child and Youth	3
EPY 351	Human Growth & Development	3
KIN 100	Concepts of Health and Fitness	3
KIN 201	Orientation to Kinesiology	3
HS 262	Personal Health	3
KIN 263	Intro to Nutrition	3

- Course requirements for Health 6-12 Majors:

Code	Title	Hours
CA 110	Public Speaking	3
EH 101	English Composition I	3
EH 102	English Composition II	3
BMD 110 or BMD 251	Introduction to A & P I Human Anatomy & Physiology I	4
EDM 310	Microcomputing Systems	3
EDU 400	Edu Except Child and Youth	3
EPY 351	Human Growth & Development	3
KIN 100	Concepts of Health and Fitness	3
KIN 201	Orientation to Kinesiology	3
HS 170	First Aid	1
HS 262	Personal Health	3
KIN 263	Intro to Nutrition	3

### Other Requirements

- Proof of clear SDE fingerprinting/background check and professional liability insurance.
- Completion of the Dispositions Survey and a signed teacher Candidacy application form.
- Completion of a satisfactory departmental interview with your assigned advisor. Recommendation of advisor, department chairperson and approval of the Candidacy Committee.
- Sufficient physical ability and emotional stability to perform as a teacher.

### Application/Admission Information

- Candidacy applications are due the semester in which the student completes all candidacy requirements. The intent is for students to apply for Candidacy AND meet with their content area advisor prior to registration to enable appropriate planning decisions for upcoming semesters.

- Apply for Candidacy in the Advising Center (UCOM 3360)
- The College of Education and Professional Studies Candidacy Committee may recommend, defer or deny admission to the program.

Admission to Candidacy will remain deferred until all requirements have been met and grades are submitted at the end of the term. Once grades are available and all requirements are met, the Office of Student Services will notify students via their official JAG e-mail account when they have been admitted to Candidacy. Students will then be able to register for Candidacy courses.

### Requirements for Admission to Candidacy for Non-Teacher Certification Programs

Exercise Science majors are not required to apply for candidacy.

Health Promotion, Recreational Therapy, and Sport Management and Recreation Studies students must apply for admission to a program during the semester immediately following the completion of 60 semester hours of credit provided they meet the requirements listed below. Courses in progress during the semester the student makes application for candidacy may be used in the candidacy application process.

Admission to a non-teacher certification program requires that:

1. The student:
  - a. declare a specialization
  - b. take any necessary tests
  - c. submit to any needed evaluations
  - d. be available for necessary interviews
2. The student's application receives approval from the advisor and departmental chair. The application must be submitted to the College of Education and Professional Studies Advising Center by the second week of the semester in which the student is eligible to be admitted.
3. The student's application receives approval from the Undergraduate Candidacy Committee
4. The student's application receives the approval of the Dean or Associate Dean of the College of Education and Professional Studies

Candidacy requirements are summarized on Departmental Advising Sheets.

The following are the criteria to be considered by the Undergraduate Candidacy Committee:

1. Completion of 60 semester hours of coursework, 48 of which must be in General Studies.
  2. A minimum overall grade-point average of 2.2 in the major/ specialization (including transfer work) and a grade-point average of 2.2 on all work attempted at the University of South Alabama.
  3. Sufficient physical ability and emotional stability to perform successfully as a professional. These and other factors could be determined in a departmental interview.
  4. Recommendation of the advisor and department chair.
  5. Completion of any departmental prerequisite courses:
- Health Promotion majors must complete:

Code	Title	Hours
EH 101	English Composition I	3
EH 102	English Composition II	3
KIN 100	Concepts of Health and Fitness	3
KIN 201	Orientation to Kinesiology	3

HS 170	First Aid	1
HS 262	Personal Health	3
KIN 263	Intro to Nutrition	3
BMD 110	Introduction to A & P I	4
or BMD 251	Human Anatomy & Physiology I	
BMD 111	Introduction to A & P II	4
or BMD 252	Human Anatomy & Physiology II	
CA 110	Public Speaking	3

Any departmental prerequisite courses, in addition to the above.

- Recreational Therapy majors must complete:

Code	Title	Hours
CA 110	Public Speaking	3
EH 101	English Composition I	3
EH 102	English Composition II	3
BMD 251	Human Anatomy & Physiology I	4
RTH 295	Intro to Therapeutic Rec	3
RTH 298	Practicum in Ther Rec	3

Any departmental prerequisite courses, in addition to the above

- Sport Management and Recreation Studies majors must complete:

Code	Title	Hours
CA 110	Public Speaking	3
EH 101	English Composition I	3
EH 102	English Composition II	3
KIN 278	Sport, Performance, & Exercise Psychology	3
SM 276	Introduction to Sport Mgt	3
SM 286	Sport Governance and Policy	3
SM 391	Leadership in SMRS	3

Any departmental prerequisite courses, in addition to the above

The Undergraduate Candidacy Committee may recommend the admission of the student to the program, defer admission, or reject the student's application.

### **Internships in Non-Teacher Certification Programs (Exercise Science, Health, Recreational Therapy, Sport Management and Recreation Studies)**

Students enrolled in one of the following non-teaching majors: Health Promotion, Recreational Therapy, or Sport Management and Recreation Studies, must be admitted to candidacy in their program and attain senior status prior to enrollment in an internship. Exercise Science students must complete KIN 476 (Exercise Physiology) prior to enrollment in an internship. All internships must be completed at departmentally-approved sites, and must be planned and approved in advance of the experience. No other academic courses may be taken during the internship without permission of the academic advisor. Health Promotion and Exercise Science students enroll in KIN 495, Recreational Therapy students enroll in RTH 495, and Sport Management and Recreation Studies students enroll in SM 495. See advisor for details and internship planning.

## **Graduate**

The Department of Health, Kinesiology, and Sport offers:

- The **Master of Education (M.Ed.)** degree with specializations in:

- Physical Education, Teacher Certification
- Health Education, Teacher Certification
- These programs are planned to lead to Alabama Class A Teacher Certification. An Alabama Class B certificate or the equivalent is required for students seeking the Master's level (Class A) certification.

- The **Master of Science (M.S.)** degree in:

- Exercise Science
- Health Promotion (Fully Online Program)
- Sport Management (Fully Online Program)

- The **Doctor of Philosophy (Ph.D.)** degree in:

- Exercise Science and Performance Nutrition

## **Undergraduate Programs**

### **Bachelor's Degrees**

- Exercise Science (BS) (<http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/exercise-science-bs/>)
- Exercise Science (BS) - Health And Fitness Concentration (p. 459)
- Exercise Science (BS) - Pre-Professional Concentration (p. 462)
- Health (BS) - Health Education 6-12 Teacher Certification (p. 467)
- Health (BS) - Health Promotion (p. 470)
- Health-Physical Ed (BS) - Physical Education P-12 and Health Education 6-12 Teacher Certification (p. 474)
- Physical Education (BS) - P-12 Teacher Certification (p. 477)
- Recreational Therapy (BS) (p. 482)
- Sport Management and Recreation Studies (BS) - Coaching Administration (p. 485)
- Sport Management and Recreation Studies (BS) - Sport Administration (p. 489)

### **Minors**

- Health & Wellness Minor (p. 467)
- Performance Nutrition Minor (p. 477)
- Sport Management and Recreation Studies Minor (p. 492)

### **Certificates**

- Coaching Certificate (p. 459)

## **Graduate Programs**

### **Master's Degrees**

- Exercise Science (MS) (p. 481)
- Health Promotion (MS) (p. 482)
- Physical Education (M.Ed.) - Health Education 6-12 Teacher Certification (p. 480)
- Physical Education (M.Ed.) - P-12 Teacher Certification (p. 481)
- Sport Management (MS) (p. 485)

### **Doctoral Degrees**

- Exercise Science and Performance Nutrition (Ph.D.) (p. 465)

## Courses

### Health and Safety (HS)

#### HS 170 First Aid 1 cr

The scope, needs, and limitations of first aid with laboratory training in the techniques and methods of injury care. Opportunity for American Red Cross or American Heart Association first aid and CPR certification.

#### HS 262 Personal Health 3 cr

Current health issues as related to the individual with emphasis on sociological, psychological, and economic factors.

#### HS 340 Health in the Sec Classroom 3 cr

A study of instructional practice and application in the secondary health classroom. Pre-requisite: Admission to teacher candidacy required.

**Corequisite:** HS 430

#### HS 351 Safety Education 3 cr

Traffic safety and safety at home, work, school, and play. Organization of safety education programs in the school and community. Methods and materials for teaching safety.

#### HS 352 Traffic Safety Education 3 cr

A survey of the highway transportation system and traffic problems designed to give the driver education teacher an opportunity to develop an understanding of the scope and background of the various agencies and systems involved in the management of vehicular traffic at the national, state, and local level.

#### HS 353 Driver Education I 3 cr

History, principles, problems and the inventory of skills in driver education.

#### HS 361 School Comm Health-Impl Curric 3 cr

Contemporary school health and public health issues. Epidemiological concepts and methods. Governmental and volunteer health agencies. Curriculum development based on epidemiological data. Incorporates reading into the curriculum.

#### HS 362 Drug Education 3 cr

A survey of substance abuse issues. Attention is given to specific drug classifications, use and abuse patterns, prevention, treatment, and future implications.

#### HS 365 HPE Curr/Methods-Elem Teachers 3 cr

The development and implementation of appropriate health and physical education curriculum for elementary teachers. Content knowledge and the application of methodological and assessment strategies are adapted for appropriate learning environments.

#### HS 429 School Lab Experiences-Health 3 cr

Professional laboratory observation and participation in health settings at local public schools. Prerequisite: Admission to teacher candidacy.

**Corequisite:** HS 460

#### HS 430 School Lab Exp- Health II 0 cr

Professional Laboratory observation and participation in classroom health settings at a local public schools. Requires Admission to Teacher Candidacy.

**Corequisite:** HS 340

#### HS 451 Driver Education II 3 cr

Methods and techniques, teaching aids, teaching resources and materials, and program and curriculum construction. Practical experience in teaching students to drive.

#### HS 452 Simulation in Driver Education 3 cr

Simulation as an audio-visual instructional method and designed to complement and supplement other instructional techniques used in the driver education program to prepare individuals to function safely and effectively in today's traffic.

#### HS 453 Range-Lab Prog in Driver Ed 3 cr

An examination of the aims, objectives, and role of laboratory programs in driver education. Directed laboratory experiences will be provided.

#### HS 460 Methods in Health Ed - W 3 cr

Topic selection and teaching unit preparation. Presentation and classroom practice of teaching methodologies. Practical mini-teaching experiences in local schools. Field experiences required. HE (6-12) and PE (P-12) majors only. Prerequisite: Admission to teacher candidacy. Co-requisite: HS 429.

**Corequisite:** HS 429

#### HS 463 Human Sexuality: Health Ed Per 3 cr

An exploration of human sexuality with implications for health education.

#### HS 473 Problems in Health Education 3 cr

Special problems are assigned to individuals and to groups of students.

#### HS 475 Public Health 3 cr

A study of public health organizations and available community health resources, including the official and non-official health agencies at various levels. An examination of causative community factors in disease, community diagnosis of and programs to combat these conditions.

**Cross-Listed:** HS 462

#### HS 490 Sp Top - 3 cr

A varying content course treating several aspects of Health Education. May be repeated for credit when course content varies.

#### HS 494 Directed Studies 1-3 cr

Directed research. No more than two directed studies can be counted toward the bachelor's degree and Class B certification. HPELS advisor approval required.

#### HS 510 Current Health Issues 3 cr

Identification, exploration, and definition of current health issues such as drug abuse, mental health, aging, death and dying, human sexuality, chronic and communicable diseases.

#### HS 560 Methods in Health Edu 3 cr

Development, selection, and implementation of classroom teaching strategies and classroom techniques in the Health Sciences area.

**Cross-Listed:** HS 520

#### HS 562 Drug Use and Abuse 3 cr

A study of the drug spectrum including legal and illegal drug use and abuse. Discussion of education and preventive strategies.

#### HS 565 Community Health 3 cr

An introductory course in Community Health. Includes a survey of contemporary health problems of both communities and schools. A review of school and community health programs.

#### HS 567 Aging and Health 3 cr

An overview of the normal aging process, including physical, psychological and social changes, myths, diseases, related community resources, and the team approach to meeting needs.

**HS 575 Public Health 3 cr**

A study of public health organizations and available community health resources, including the official and non-official health agencies at various levels. An examination of causative community factors in disease, community diagnosis of and programs to combat these conditions.

**Kinesiology (KIN)****KIN 100 Concepts of Health and Fitness 3 cr**

An introductory course designed to show students to contributions of physical activity, nutrition, weight control, stress control, environmental conditions, and injury prevention to preventive health. Students learn how to evaluate themselves, their physical and nutritional needs and how to design individual programs for healthy living.

**Cross-Listed:** PE 100

**KIN 166 Movement-Rhythms and Dev Act 3 cr**

Movement exploration experiences, developmental games, rhythmic and dance activities are explained, developed and practiced. Clinical or field experience required.

**Cross-Listed:** PE 166

**KIN 201 Orientation to Kinesiology 3 cr**

An overview of the field of Health, Physical Education, and Exercise Science. An introduction to the Department of HKS followed by survey of philosophical and historical aspects, and professional preparations standards of the specific fields.

**Cross-Listed:** PE 201

**KIN 231 ARC Lifeguard Training 3 cr**

Prepares the student for American Red Cross Lifeguard, CPR for the professional rescuer, and first aid certification. Emphasis is placed on emergency action plans, lifeguarding techniques and all forms of victim rescue. Prerequisites: Strong swimmers ONLY.

**Cross-Listed:** PE 231

**KIN 263 Intro to Nutrition 3 cr**

The study of human nutrition and nutrients in food and of their ingestion, digestion, absorption, transport, metabolism, interaction, and storage. emphasis is placed on energy balance, weight control, nutrition across the life span, food safety, food insecurity, and the links between food, nutrition and health.

**KIN 278 Sport, Performance, & Exercise Psychology 3 cr**

A study of the psychological and sociological aspects of sport and the relationship to human behavior.

**Cross-Listed:** PE 278

**KIN 282 Intro to Athletic Training 3 cr**

Survey of the basic techniques and practices of athletics training. Study includes prevention, recognition, care, and treatment of athletic injuries. Development of basic athletic training skills in the use of preventive and protective techniques of adhesive tape applications.

**Cross-Listed:** PE 282

**KIN 351 Sports Skills 3 cr**

The development of skills and the understanding of fundamentals and strategies in selected individual, dual, and team sports. Field experiences required. Proof of background check, fingerprinting and liability insurance is required. PE (P-12) majors only. Instructor permission is required.

**Cross-Listed:** PE 351

**KIN 363 Sports Nutrition - W 3 cr**

Basic nutritional principles are covered. Includes assessment of individual and/or group diets. The course is designed to optimize sport performance and/or body composition.

**Prerequisite:** (HS 263 Minimum Grade of D or KIN 263 Minimum Grade of D) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**KIN 370 Basic Motor Learning 3 cr**

Study of the psychological, experimental, and social aspects of learning in the psychomotor domain.

**Cross-Listed:** PE 370

**KIN 372 Coaching Gymnastics 3 cr**

History, theory, and fundamentals of coaching and officiating gymnastics.

**Cross-Listed:** PE 372

**KIN 373 Coaching Volleyball 3 cr**

History, theory, and fundamentals of coaching and officiating volleyball.

**Cross-Listed:** PE 373

**KIN 374 Coaching Soccer 3 cr**

History, theory, and fundamentals of coaching and officiating soccer.

**Cross-Listed:** PE 374

**KIN 375 Coaching Football 3 cr**

History, theory, and fundamentals of coaching and officiating football.

**Cross-Listed:** PE 375

**KIN 376 Coaching Basketball 3 cr**

History, theory, and fundamentals of coaching and officiating basketball.

**Cross-Listed:** PE 376

**KIN 377 Coaching Baseball 3 cr**

History, theory, and fundamentals of coaching and officiating baseball.

**Cross-Listed:** PE 377

**KIN 378 Coaching Track and Field 3 cr**

History, theory, and fundamentals of coaching and officiating track and field.

**Cross-Listed:** PE 378

**KIN 380 Kinesiology 3 cr**

Theory and application of the mechanical and anatomical principles of human movement.

**Prerequisite:** BMD 114 Minimum Grade of D or BMD 110 Minimum Grade of C or BMD 251 Minimum Grade of C

**Cross-Listed:** PE 380

**KIN 381 Eval and Measurement in HPE 3 cr**

Statistical procedures, evaluation, and interpretation, and use of tests and other measurement devices in health and physical education.

**Cross-Listed:** PE 381

**KIN 429 School Lab Experience-PE 3 cr**

Professional laboratory experiences involving observation and participation at local public schools. Admission to teacher candidacy required.

**Corequisite:** KIN 452

**Cross-Listed:** PE 429

**KIN 450 Student Teaching-Hlth and PE 9 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the 6-12 Health Education and P-12 Physical Education programs. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Admission to teacher candidacy and completion of program and college prerequisites required.

**Prerequisite:** 5551 154 and 5091 149 and KIN 351 Minimum Grade of C and KIN 452 Minimum Grade of C and KIN 429 Minimum Grade of S and HS 460 Minimum Grade of C and HS 429 Minimum Grade of S and HS 340 Minimum Grade of C and HS 430 Minimum Grade of S

**Cross-Listed:** PE 450

**KIN 452 Methods of Teaching PE-W 3 cr**

Organizing materials and developing methods of teaching physical education in elementary, middle, and high schools. Field experiences required. Practical mini-teaching experiences in peer labs and local schools. Prerequisite: Admission to teacher candidacy. Co-requisite: KIN 429.

**Corequisite:** KIN 429

**Cross-Listed:** PE 452

**KIN 460 Student Teaching Secondary 1-9 cr**

Observation and supervised teaching with opportunity for study and discussion of problems encountered in secondary schools. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Admission to teacher candidacy and completion of program and college prerequisites required.

**Prerequisite:** 5551 154 and HS 460 Minimum Grade of C and HS 340 Minimum Grade of C and HS 430 Minimum Grade of S

**Cross-Listed:** PE 460

**KIN 461 PE for Atypical Child-Youth 3 cr**

Principles and techniques for adapting physical education activities for children with special needs. Field experience required.

**Cross-Listed:** PE 461

**KIN 462 Biochemical and Molecular Exer 3 cr**

An advanced study of the biochemical and molecular aspects of exercise involving the bioenergetic pathways responsible for energy production. Concepts of cellular signaling pathways and gene expression associated with adaptations of skeletal muscle to exercise training are studied.

**Prerequisite:** KIN 476 Minimum Grade of D

**KIN 463 Nutrition 3 cr**

An in-depth study of educational concepts related to digestion, absorption, transportation and utilization of nutrients.

**Prerequisite:** KIN 263 Minimum Grade of D

**Cross-Listed:** KIN 563

**KIN 470 Student Teaching P-12 Program 1-12 cr**

Observation and supervised teaching with opportunity for study and discussion of problems encountered in the P-12 program. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Admission to teacher candidacy and completion of program and college prerequisites required.

**Prerequisite:** 5091 149 and KIN 351 Minimum Grade of C and KIN 452 Minimum Grade of C and HS 460 Minimum Grade of C

**Cross-Listed:** PE 470

**KIN 471 Exercise Management for Chronic Diseases & Disabilities 3 cr**

This course is designed to provide a problem-oriented approach to exercise testing and prescription/programming for populations with chronic diseases or related disabilities.

**Prerequisite:** (KIN 476 Minimum Grade of D and KIN 476L Minimum Grade of D)

**KIN 473 Problems in Health and PE 3 cr**

Special problems in health and physical education are assigned to individuals and to groups of students.

**Prerequisite:** 5091 149 and KIN 351 Minimum Grade of C and KIN 452 Minimum Grade of C and KIN 460 Minimum Grade of C

**Cross-Listed:** PE 473

**KIN 474 Sport and Fitness Conditioning 3 cr**

Study of the theory, principles, methods, and techniques in the development, implementation, and evaluation of various strength and conditioning programs designed to enhance athletic performance and improve physical fitness. The conditioning needs of various populations with disease and degenerative conditions will be examined.

**Prerequisite:** (PE 102 (may be taken concurrently) Minimum Grade of D and KIN 380 (may be taken concurrently) Minimum Grade of D) and (BMD 110 Minimum Grade of C or BMD 114 Minimum Grade of D or BMD 251 Minimum Grade of C)

**Cross-Listed:** PE 474

**KIN 475 Org-Admin Hlth and PE-W 3 cr**

Planning, policies, administrative/management functions and duties in health and physical education programs.

**Cross-Listed:** PE 475

**KIN 476 Exercise Physiology 3 cr**

The study of the body's physiological responses and adaptations to exercise and training.

**Prerequisite:** (KIN 100 Minimum Grade of C and HS 170 Minimum Grade of C and BMD 251 Minimum Grade of C and BMD 252 Minimum Grade of C)

**Cross-Listed:** PE 476

**KIN 476L Exercise Physiology Lab 1 cr**

Laboratory component associated with KIN 476 that must be taken concurrently. Hands-on, practical experiences involving basic laboratory techniques and procedures used in exercise physiology are utilized in this course. It will emphasize the importance of following laboratory protocols and appropriately evaluating and interpreting results from health and fitness assessments.

**Prerequisite:** (KIN 100 Minimum Grade of C and HS 170 Minimum Grade of C and BMD 251 Minimum Grade of C and BMD 252 Minimum Grade of C)

**Corequisite:** KIN 476

**KIN 477 Water Safety Instructor 3 cr**

Trains prospective candidates for American Red Cross Water Safety Instructor certification. Candidates will learn how to teach all levels of swimming and basic diving to students of all ages. How to organize classes, use lesson plans and practice teaching skills. Prerequisite: Proficient swimmer in all seven strokes. See Instructor for specific skill requirements.

**Cross-Listed:** PE 477

**KIN 478 Coaching Theory 3 cr**

Introduction to profession of coaching. Topics include: physical, mental and organizational preparation, teaching strategies (individual and team aspects), legal liability, officiating, and national guidelines.

**Cross-Listed:** PE 478

**KIN 479 Fit Assess-Exercise Prescript 3 cr**

Through didactic study and laboratory participation, the student will develop to knowledge base and clinical skills to assess physical fitness and plan exercise prescriptions for apparently healthy individuals.

**Prerequisite:** KIN 476 Minimum Grade of D or PE 476 Minimum Grade of D

**Cross-Listed:** PE 479

**KIN 479L Fit Assess-Exc Prescript Lab 1 cr**

Laboratory component associated with KIN 479 that must be taken concurrently. Hands-on, practical experiences involving techniques and procedures used in selecting and administering exercise and fitness assessments, evaluating and interpreting results, and drafting exercise prescriptions for apparently healthy populations are provided.

**Prerequisite:** (KIN 476 Minimum Grade of D and KIN 476L Minimum Grade of D)

**Corequisite:** KIN 479

**KIN 480 Therapeutic Exercise 3 cr**

Theory, current research, principles, application and techniques of rehabilitation used to treat injuries to athletes and the physically active across the life span are studied. Psychological and physical parameters of rehabilitation and exercise conditioning are presented.

**Cross-Listed:** PE 480

**KIN 482 Advanced Athletic Training 3 cr**

Advanced and contemporary topics, issues, and applications in athletic training. Admission to candidacy required.

**Prerequisite:** KIN 380 Minimum Grade of D

**Cross-Listed:** PE 482

**KIN 483 Clinical Exercise Testing and Prescription 3 cr**

The development of competencies necessary to administer graded exercise tests and prescribe appropriate exercise programs for various populations, based upon clinical observations and physiological data.

**Prerequisite:** (KIN 479 Minimum Grade of D and KIN 479L Minimum Grade of D)

**KIN 484 Apps in Sports Conditioning 3 cr**

Through didactic study and physical activity participation, the student will develop the knowledge base and skills in fundamental and advanced exercise theory and techniques in sport and fitness conditioning with application to program design and periodization of training.

**Prerequisite:** (KIN 474 Minimum Grade of D or PE 474 Minimum Grade of D) and (KIN 380 Minimum Grade of D or PE 380 Minimum Grade of D)

**Cross-Listed:** PE 484

**KIN 486 Advanced Exercise Physiology 3 cr**

Detailed analysis of the underlying principles of the physiological and biochemical responses of the human body to exercise and adaptations to exercise training.

**Prerequisite:** PE 476 Minimum Grade of C or KIN 476 Minimum Grade of D

**KIN 490 Special Topics 3 cr**

A varying content course treating different aspects of health, kinesiology, and sport. May be repeated for credit when courses content varies.

**Cross-Listed:** PE 490

**KIN 494 Directed Studies 1-3 cr**

Directed research and/or project. No more than two directed studies can be counted towards the bachelor's degree, HKS advisor approval required.

**Cross-Listed:** PE 494

**KIN 495 Internship 1-12 cr**

Observation and supervised practicum experiences in a professional setting. May be repeated for credit not to exceed 12 hours. HKS advisor approval required.

**Prerequisite:** (KIN 476 Minimum Grade of D)

**Cross-Listed:** PE 495

**KIN 499 Senior Honors Thesis-H 3-6 cr**

Experiences in planning, conducting, and reporting a research project relevant to the fields of Health, Kinesiology, and Sport. The project, mentored by HKS faculty, is required for Honors recognition and may be repeated for up to six credit hours. Prerequisites: Participant in Honors Program and approval of Department and Project Chairs required.

**Cross-Listed:** PE 498

**KIN 500 Admin of Hlth & Phys Ed & Sprt 3 cr**

A study of the principles, techniques, and methods used in management and supervision of health and physical education and sport in schools and colleges.

**Cross-Listed:** HPE 500

**KIN 503 Evaluation of Teach and Learn 3 cr**

Measurement and evaluation of student progress and teaching effectiveness in the psychomotor domain.

**Cross-Listed:** HPE 503

**KIN 505 Research Methods - HKS 3 cr**

This course provides opportunities for critical interdisciplinary evaluation of current research trends and controversies, research methodology and evaluation with emphasis on the elements of the research process, and the examination of landmark research studies in the fields of Health, Kinesiology, and Sport.

**Cross-Listed:** HPE 505

**KIN 506 Physical Education Curriculum 3 cr**

An overview of the physical education curriculum, its foundations, critical issues, and modern trends. It explores curriculum content areas of scheduling administration, teaching methods, and various standards and procedures for evaluation.

**Cross-Listed:** HPE 506

**KIN 516 Exercise Physiology 3 cr**

Advanced study of the theories, current research, and underlying principles of the physiological responses and adaptations of the human body to exercise and training.

**Cross-Listed:** HPE 516

**KIN 521 Motor Learning 3 cr**

Theories and applications of the foundations of learning motor skills and presented.

**Cross-Listed:** HPE 521

**KIN 530 Seminar in Health and Phys Ed 3 cr**

Professional growth through in-depth experiences in the presentation of problems and formal papers, with emphasis on guided discussions and research criticism.

**Cross-Listed:** HPE 530

**KIN 540 Cardiovas Resps Adapt Excerc 3 cr**

Concentrated study of cardiovascular and respiratory systems including their structure, regulation, and integration with emphasis on physiological responses and adaptations to exercise and training, optimization of performance, overtraining and environmental influences, and aerobic exercise program design.

**Cross-Listed:** HPE 540

**KIN 550 Perceptual-Motor Dev Children 3 cr**

Designed to give the classroom teacher, special educator and physical educator a background in perceptual-motor development and training in infants and children.

**Cross-Listed:** HPE 550

**KIN 552 Methods of Teaching PE 3 cr**

Organizing materials and developing methods of teaching physical education in elementary, middle, and high schools. Field experience required. Practical mini-teaching experiences in peer labs and local schools.

**KIN 562 Biochem & Molec Exer & Nutr 3 cr**

This graduate level course is designed to provide study of the oxidative and non-oxidative pathways which provide energy during acute exercise within skeletal muscle. Emphasis will be placed on how these biochemical pathways utilize major fuel molecules (fat, carbohydrate, protein) to produce energy for work; how these pathways adapt to exercise training; and how the pathways are affected by exercise intensity, duration, and feeding state. The course will also include topics regarding lactate formation and utilization, whole-body metabolism, lipolysis within adipose cells, and blood glucose maintenance. Further, an overview of molecular biology concepts of gene transcription and protein synthesis in relation to exercise adaptation will be integrated into the course.

**KIN 563 Nutrition 3 cr**

An in-depth study of educational concepts related to digestion, absorption, transportation and utilization of nutrients.

**KIN 571 Exer Mgt Chronic Disease/Disab 3 cr**

This course is designed to provide a problem-oriented approach to exercise testing and prescription/programming for special needs populations.

**Cross-Listed:** HPE 571

**KIN 572 Neuromuscular & Biomechanical Principles in Exercise 3 cr**

An examination of the relationship of fundamental neuromuscular and mechanical principles of human movement as applied to sport performance, fitness, and injury prevention through observation of common activities.

**Cross-Listed:** HPE 572

**KIN 574 Sport and Fitness Conditioning 3 cr**

Advanced study of the scientific theory, principles, methods, and techniques in the development, implementation, and evaluation of various strength and conditioning programs designed to enhance athletic performance. Instructor permission is required.

**KIN 579 Fitness Assessment-Exer Presc 3 cr**

Fitness Assessment and Exercise Prescription reviews the advanced principles of exercise testing and prescription for at risk and health adult populations including health appraisal, risk assessment, and interpretation of data. Assessment results are utilized in designing training programs and recommending lifestyle changes for enhancing health, fitness, and performance. The ACSM Exercise Guidelines are emphasized. This course is dually listed with an equivalent 400 level course (KIN 479). Instructor permission is required.

**Cross-Listed:** HPE 579

**KIN 583 Clinical Ex Test & Prescript 3 cr**

The development of competencies necessary to administer graded exercise tests and prescribe appropriate exercise programs for various populations, based upon clinical observations and physiological data.

**Cross-Listed:** HPE 570, KIN 570

**KIN 590 Special Topics- 3-6 cr**

A varying-content course treating various aspects of health, kinesiology, and sport. May be repeated for credit when course content varies.

**Cross-Listed:** HPE 595

**KIN 594 Directed Study and Research 1-3 cr**

Students explore, through directed study and research, problems and issues of special interest or significance in Health, Kinesiology, and Sport. Not more than three semester hours of any departmental 594 courses can be accepted toward a degree program.

**Cross-Listed:** HPE 594

**KIN 595 Internship 3-6 cr**

A supervised learning experience in a health, kinesiology, or sport setting. Provides the student an opportunity to apply theories and concepts learned during the graduate program. No more than six semester hours may be taken. HKS advisor approval required.

**Cross-Listed:** HPE 595

**KIN 599 Thesis 1-9 cr**

A student selects a project, study, or investigation in health and/or kinesiology. Such project forms the basis for the thesis. A committee will give guidance during the investigation and the writing of the thesis.

**Cross-Listed:** HPE 599

**KIN 601 Biomech Found Human Movement 3 cr**

This course is designed to provide students with an understanding of how to use various technologies in a biomechanics lab for measuring kinematics. Along with making measurements, students will also learn how to perform the calculations involved in analysis.

**Cross-Listed:** HPE 601

**KIN 602 Techniques of Supervision PE 3 cr**

Course is designed to familiarize the student with the principles, problems, and techniques, involved in supervision.

**Cross-Listed:** HPE 602

**KIN 603 Adv Measurement-Eval in HKS 3 cr**

Measurement and evaluation in the areas of strength, body composition, flexibility, endurance, general motor capacity, perceptual motor-functions, and anthropometrics.

**Cross-Listed:** HPE 603

**KIN 681 Current Topics in Exercise Science and Performance Nutrition 3 cr**

Advanced study of current scientific literature in the area of exercise science and performance nutrition. A significant amount of reading and critical analysis of the most current peer-reviewed publications within the field is required. Emphasis is placed on demonstrating an understanding of the rationale for each study, methods and statistical analyses employed, and the results reported along with their application within the broader field of study.

**KIN 694 Directed Study and Research 1-3 cr**

Through directed study and research, problems and issues of special interest or significance in health and/or kinesiology are explored. No more than three semester hours of any department 694 courses can be accepted toward a degree program.

**Cross-Listed:** HPE 694

**KIN 695 Internship 3-9 cr**

A supervised field study investigation in a candidate's work setting. The student will conduct an investigation, apply concepts and skills learned during the program.

**Cross-Listed:** HPE 695

**KIN 699 Research Project 1-6 cr**

A supervised research project or investigation. The student will conduct a research project or investigation applying concepts and skills applicable to Health, Kinesiology, and Sport. May be taken more than one semester; total cannot exceed six semester hours.

**Cross-Listed:** HPE 699

**KIN 799 Dissertation 1-6 cr**

With the guidance of a faculty mentor and committee, doctoral students will select and carry out a research project, study, or investigation in exercise science and/or performance nutrition. such project forms the basis for the dissertation. The student will demonstrate the ability to become an independent researcher by successfully completing the project and formally presenting and defending a written dissertation to their committee.

**PE-Activity Courses (PE)****PE 101 PE Activity - 1 cr**

Instruction and practice of basic sport and activity skills. A varying content course that gives students choices from designated semester offerings. May be repeated for credit.

**PE 102 Weight Training 1 cr**

A progressive resistance training course designed to improve muscular strength and endurance. May be repeated for credit.

**PE 103 PE Activity - 1 cr**

Instruction and practice of sport and activity skills. A varying content course that gives students choices from designated semester offerings. May be repeated for credit. An additional fee will be charged for these activities.

**PE 104 PE Activity - 1 cr**

Instruction and practice of basic sport and activity skills. A varying content course that gives students choices from designated semester offerings. May be repeated for credit. An additional fee will be charged for these activities.

**PE 105 PE Activity - 1 cr**

Instruction and practice of basic sport and activity skills. A varying content course that gives students choices from designated semester offerings. May be repeated for credit. An additional fee will be charged for these activities.

**PE 106 Gymnastics 1 cr**

Instruction and practice in gymnastic skills. A varying content course treating different skill levels in gymnastics. May be repeated for credit.

**PE 107 PE Activity - 1 cr**

Instruction and practice of basic sport and activity skills. A varying content course that gives students choices from designated semester offerings. May be repeated for credit. An additional fee will be charged for these activities.

**PE 108 Ballroom Dancing 1 cr**

Knowledge, skills, and techniques associated with various forms of ballroom dancing through demonstration, practice and partnering.

**PE 109 Swing Dancing 1 cr**

Knowledge, skills, and techniques associated with various forms of swing dancing through demonstration, practice, and partnering.

**PE 110 Dance - 1 cr**

Instruction and practice in dance. A varying content course treating different types of dance such as but not limited to social, folk, square, and dance performance. May be repeated for credit.

**PE 112 Latin Dancing 1 cr**

Knowledge, skills, and techniques associated with various forms of Latin dancing through demonstration, practice, and partnering.

**PE 113 Creative Dance 1 cr**

An introduction to dance as an art form; the vocabulary for movement as a means of self-expression. May be repeated for credit.

**PE 114 Aerobics 1 cr**

Aerobic exercise is a physical fitness program that offers complete and effective conditioning. It involves jogging, jumping, lunging, kicking, and stretching to music.

**PE 115 Ballroom and Swing Dancing 1 cr**

Knowledge, skills, and techniques associated with various forms of ballroom and swing dancing through demonstration, practice and partnering.

**PE 116 Cajun and Swing Dancing 1 cr**

Knowledge, skills, and techniques associated with various forms of Cajun and Swing dancing through demonstration, practice, and partnering.

**PE 117 Ballet 1 cr**

Instruction and practice in ballet. A varying content course treating the different skill levels of ballet with emphasis on correct body placement through barre and centre exercises. May be repeated for credit.

**PE 118 Jazz Dancing 1 cr**

Instruction and practice in jazz dancing. A varying content course treating the various skill levels of jazz with emphasis on correct body placement through isolation and locomotor techniques. May be repeated for credit.

**PE 119 Modern Dance 1 cr**

Instruction and practice in modern dance. A varying content course with exposure to various skill levels and modern dance styles. May be repeated for credit.

**PE 120 Tennis - Basic 1 cr**

Instruction and practice in beginning and intermediate tennis. May be repeated for credit.

**PE 121 Golf - Basic 1 cr**

Instruction and practice in beginning golf. May be repeated for credit.

**PE 122 Bowling 1 cr**

Instruction and practice in beginning bowling. Requires special fee. May be repeated for credit.

**PE 123 Archery 1 cr**

Instruction and practice in beginning archery. May be repeated for credit.

**PE 124 Latin and Swing Dancing 1 cr**

Knowledge, skills, and techniques associated with various forms of Latin and Swing dancing through demonstration, practice, and partnering.

**PE 125 Badminton 1 cr**

Instruction and practice in beginning and intermediate badminton. May be repeated for credit.

**PE 126 Ballroom and Latin Dancing 1 cr**

Knowledge, skills, and techniques associated with various forms of Ballroom and Latin dancing through demonstration, practice, and partnering.

**PE 127 Country West/Partner Dancing 1 cr**

Knowledge, skills, and techniques associated with various forms of Country Western/Partner dancing through demonstration, practice, and partnering.

**PE 128 Dance Performance 1 cr**

Knowledge, skills, and techniques associated with various forms of Dance Performance through demonstration and practice.

**PE 129 Folk and Square Dancing 1 cr**

Knowledge, skills, and techniques associated with various forms of Folk and Square dancing through demonstration, practice, and partnering.

**PE 130 Beginning Swimming 1 cr**

Instruction and practice in beginning swimming and water safety. Participation fee required. May be repeated for credit.

**PE 131 Intermediate Swimming 1 cr**

Instruction and practice in intermediate swimming and water safety. Participation fee required. May be repeated for credit.

**PE 132 Step Aerobics 1 cr**

A physical activity class which includes the instruction and practice of step aerobics. The course is designed to improve cardiovascular and muscular endurance and improve coordination.

**PE 133 Muscle Toning and Conditioning 1 cr**

Muscle Toning and Conditioning is a physical activity course in which the student, through active participation, will develop knowledge and skills sufficient to tone the body and improve cardiorespiratory fitness using weights, body bars, resistance tubes, and other equipment.

**PE 134 Karate I 1 cr**

A beginning course in Karate designed to develop physical fitness, self-discipline, the fundamentals and techniques of blocking, punching, striking, kicking, and stances.

**PE 135 Karate II 1 cr**

An intermediate course in Karate designed as a continuation of Karate I with the introduction of additional blocks, kicks, and footwork. Self-discipline and physical fitness continue to be stressed.

**PE 136 Karate III 1 cr**

An advanced course in Karate designed as a continuation of Karate II with the addition of more advanced and versatile concepts of speed, distance, timing, and footwork. Vigorous training methods are used and self-discipline is stressed.

**PE 138 Tai Chi 1 cr**

Tai Chi training presents basic concepts and techniques to enhance physical fitness and develop mental discipline for stress reduction and personal wellness.

**PE 139 Yoga 1 cr**

The purpose of this course is to introduce the basic concepts of yoga theory, to teach safe yoga posture, and to help participants in developing balance and fitness, as well as manage stress wisely.

**PE 141 Softball 1 cr**

Instruction and practice in softball. May be repeated for credit.

**PE 142 Volleyball 1 cr**

Instruction and practice in volleyball. May be repeated for credit.

**PE 143 Basketball 1 cr**

Instruction and practice in basketball. May be repeated for credit.

**PE 144 Soccer 1 cr**

Instruction and practice in soccer. May be repeated for credit.

**PE 145 Jogging 1 cr**

Instruction and practice in the activity of jogging designed to improve cardiovascular endurance.

**PE 146 Bicycling 1 cr**

An introductory course to bicycling for leisure and fitness emphasizing the selection and care of bicycles, safety concerns, apparel, route selection, bike handling skills, and development of a bicycle fitness program.

**PE 147 Racquetball 1 cr**

Instruction and practice in racquetball. May be repeated for credit.

**PE 148 Intermediate Golf 1 cr**

Instruction and practice in intermediate golf. Demonstrable beginner golf skills necessary.

**PE 149 Ultimate Frisbee 1 cr**

Fundamental skills, rules, and strategies with frisbees with opportunities for participation.

**PE 155 Martial Arts - 1 cr**

Instruction and practice in various forms of Martial Arts. A varying-content course treating different skill levels of karate, judo, kung-fu etc. Requires special fee. May be repeated for credit.

**PE 157 ICA - Varsity Sports 1 cr**

Restricted to members of South Alabama intercollegiate athletic teams by special permission of the respective coaches. Includes but not limited to basketball, soccer, baseball, track, golf, tennis, and volleyball. May be repeated for credit with exception of Education majors.

**PE 158 Life Skills - Student Athletes 1 cr**

This course is designed to help the student acquire specific tools and life skills necessary to be a successful student-athlete on the field, in the classroom, and in life. Modeled after the NCAA Champs/Life Skills program, the course explores and develops proficiency in the areas of: academic excellence, athletic excellence, personal development, career development, and community service. The structure will be a combination of class lectures, group discussions, speakers, and activities. Prerequisites: Students enrolled in PE 158 must be an NCAA varsity student-athlete at the University of South Alabama.

**Recreational Therapy (RTH)****RTH 194 Leisure Crafts 3 cr**

Adapting various crafts media for use in recreational programs. Design and execution of creative crafts with emphasis on use of indigenous materials.

**Cross-Listed:** LS 194

**RTH 292 Outdoor Recreation-Adventure 3 cr**

A classroom introduction to a wide range of outdoor recreation pursuits with an emphasis on safety, minimum impact, and "how to get started" in outdoor activities like backpacking, canoeing, rafting, car camping, hiking, and others.

**Cross-Listed:** LS 292

**RTH 295 Intro to Therapeutic Rec 3 cr**

Introduces students to the field of therapeutic recreation including the history, foundations, and philosophy of the field. In addition, characteristics and leisure needs of numerous special populations will be introduced.

**Cross-Listed:** LS 295

**RTH 298 Practicum in Ther Rec 3 cr**

Supervised practical experience that provides observation, participation, and application of therapeutic recreation and leisure studies concepts. Includes classroom instruction and exploration of career opportunities. Minimum 90-hours of practical experience required.

**Cross-Listed:** LS 298

**RTH 375 Mgmt in Therapeutic Recreation 3 cr**

Management and organization of therapeutic recreation programs including professional and agency standards, staff development, internship and credential requirements, fiscal planning, continuous quality improvement, equipment maintenance, advocacy, and public relations.

**Prerequisite:** RTH 295 Minimum Grade of D or LS 295 Minimum Grade of D

**Cross-Listed:** LS 375

**RTH 395 Therapeutic Rec Process (W) 3 cr**

This course introduces the comprehensive program planning process and the elements of assessment and documentation in a variety of therapeutic recreation service settings. A field work component may be required.

**Prerequisite:** RTH 295 Minimum Grade of D or LS 295 Minimum Grade of D

**Cross-Listed:** LS 395

**RTH 397 Recreational Therapy Interventions with Older Adults 3 cr**

This course is an intergenerational experience combining theory and practice in aging and recreation. Students utilize the therapeutic recreation process (assessment, program planning, implementation and evaluation) with older adults who have special needs, to promote health, wellness, and rehabilitation.

**Cross-Listed:** LS 397

**RTH 465 TR Prog Des & Interventions I 3 cr**

This course provides an examination of Therapeutic Recreation interventions and the role of research and theory in influencing practice. Course topics include: activity analysis, programming techniques, scope of service, intervention descriptions, historical perspectives, current research, and theoretical foundations related to TR intervention. A field work component of 40 hours is required that will allow students to gain experience implementing TR programs.

**Prerequisite:** (RTH 295 Minimum Grade of D and RTH 298 Minimum Grade of C) or (LS 295 Minimum Grade of D and LS 298 Minimum Grade of C)

**Cross-Listed:** LS 465

**RTH 466 TR Prog Des & Interventions II 3 cr**

This course examines modalities and issues in therapeutic recreation practice with the primary emphasis on leisure education, scope of service, nature of populations served, systematic programming, activity analysis and documentation of results. The course also addresses contemporary problems and issues in therapeutic recreation, and acquiring knowledge of medical terminology and therapeutic drugs.

**Prerequisite:** (LS 295 Minimum Grade of D and LS 298 Minimum Grade of C) or (RTH 295 Minimum Grade of D and RTH 298 Minimum Grade of C)

**Cross-Listed:** LS 466

**RTH 467 TR for Phys Disabilities 3 cr**

This course will familiarize the student with the etiology, characteristics, and course of treatment provided to individuals with various physically disabling conditions, and promote awareness of the role of therapeutic recreation in the physical rehabilitation process. A field work component of 40 hours is required.

**Cross-Listed:** LS 467

**RTH 468 Facilitation Techniques in TR 3 cr**

Study of the concepts and intervention techniques used in the application and process aspects of therapeutic recreation. Content includes evidence-based practice, planning and leading interventions, instructional techniques, counseling theory and practice, implementing groups, communication techniques, and facilitation techniques. A practical leaning component is included.

**Cross-Listed:** LS 468

**RTH 469 TR for Pysch Impairments 3 cr**

This course will familiarize students with etiology, characteristics, and course of treatment provided to individuals with psychological impairments and developmental disabilities and promote awareness of the role of therapeutic recreation in the habilitation/rehabilitation process. A field work component of 40 hours is required.

**Cross-Listed:** LS 469

**RTH 471 Evaluation & Research in HKS-W 3 cr**

This course offers an overview of the research and evaluation process in health, kinesiology, and sport. The first part of the course will emphasize the scope, meaning, and basic concepts of scientific research including aspects of research design. The second part of the course will focus on the application of the basic skills in a practical context in the environment of health, kinesiology, and sport.

**Cross-Listed:** LS 471

**RTH 479 Leisure and Aging 3 cr**

This course will provide an overview of the changes affecting the psychomotor, cognitive and affective domains of the aged; implications of leisure and retirement; and institutional and community settings that provide leisure services for the older adult.

**Cross-Listed:** LS 479

**RTH 490 Special Topics 1-3 cr**

Selected topics in recreational therapy. Topics will vary according to needs and interests of students. Course may be repeated for credit when content varies.

**Cross-Listed:** LS 490

**RTH 492 Outdoor Ed and Interpretation 3 cr**

Theories, philosophies, and principles of outdoor education with emphasis on the development of interpretive programs.

**Cross-Listed:** LS 492

**RTH 495 Internship in Rec Therapy 3-12 cr**

Supervised experiences in an assigned recreation therapy or related agency. HKS advisor approval required.

**Cross-Listed:** LS 498

**RTH 569 Leisure and Society 3 cr**

An exploration of the economic, religious, political, and socio-cultural factors which influence leisure behavior in modern society.

**Cross-Listed:** LS 569

**RTH 570 Procedures in TR I 3 cr**

Procedures in Therapeutic Recreation I was designed to prepare the graduate student for the more complex areas of present day professional issues and service provision including: an in-depth analysis of historical and philosophical influences, therapy and facilitation techniques, quality management, ethics, standards of practice, clinical supervision, healthcare reimbursement and professional credentialing.

**Cross-Listed:** LS 570

**RTH 571 Procedures In TR II 3 cr**

This course is designed to familiarize the graduate student with the therapeutic recreation process. Content areas will include analysis of assessment procedures, sources and processes, treatment planning, interdisciplinary procedures, medical record documentation, activity-based interventions, and evaluation of program effectiveness.

**Cross-Listed:** LS 571

**RTH 573 Issues and Trends in TR 3 cr**

An in-depth examination of current issues and trends in recreational therapy with respect to their impact on the profession and society.

**Cross-Listed:** LS 573

**RTH 576 Conceptual Foundations of TR 3 cr**

Designed to introduce the student to the field of therapeutic recreation including philosophy, history, current issues and trends, administration and program development. The course will also provide an overview of various disabling conditions.

**Cross-Listed:** LS 576

**RTH 585 Mgmt in Recreational Therapy 3 cr**

An in-depth examination into the research, foundations, and functions in the delivery of recreational therapy, including current practices in management of fiscal procedures, budgeting, and grants.

**Cross-Listed:** LS 585

**RTH 590 Special Topics 3 cr**

A varying-content course treating various aspects of Leisure Studies. May be repeated for credit when course content varies.

**Cross-Listed:** LS 590

**RTH 592 Outdoor Rec - Adventure Prog 3 cr**

Study and practicum in popular adventure activities (e.g, shooting sports, angling, backpacking, orienteering, rock climbing, canoeing). Emphasis on attitudes, skills, environmental awareness, teaching methodology, and principles of group leadership as they relate to adventuresome activities.

**Cross-Listed:** LS 592

**RTH 595 Internship in Recreational The 3-9 cr**

An individually planned practicum experience in an approved recreational therapy setting. Requires a minimum of 150 work hours per 3 hours of credit. HPELS advisor approval required.

**Cross-Listed:** LS 580

**RTH 596 Special Projects 3 cr**

An individually planned experience whereby a student conceptualizes and researches a special problem relevant to the leisure services profession. Students will share their experiences in a weekly seminar (non-thesis option).

**Cross-Listed:** LS 596

**Sport Management (SM)****SM 191 Intro to Sport Mgt/Rec Studies 3 cr**

An introduction to the Sport Management and Recreation Studies professions; its history and philosophies. Includes an orientation to community agencies.

**Cross-Listed:** LS 191

**SM 276 Introduction to Sport Mgt 3 cr**

A study of the activities, organizations, and businesses involved in producing, facilitating, and organizing sport, fitness, and recreation related products and services.

**Cross-Listed:** LS 276

**SM 280 Hospitality Services 3 cr**

A study of hotel/motel resort services. Includes an overview of recreation services, food and beverage, guest services, marketing, housekeeping, maintenance, and fiscal concerns.

**Cross-Listed:** LS 280

**SM 286 Sport Governance and Policy 3 cr**

A detailed analysis of power, decision making, oversight and control methods for sport and recreation programs at the community, scholastic, collegiate, professional, and international sport levels. Includes governance and authority of regulatory concerns related to legal, risk/safety, social, political, economic, geographical, and managerial policies, procedures and practices.

**SM 297 Campus Recreation 3 cr**

Planning, organization, and leadership of intramural recreation and community sport activities.

**Cross-Listed:** LS 297

**SM 300 Global Tourism 3 cr**

Examination of the impact of recreational socio-cultural, economic, physical environment and governmental factors on leisure travelers within the global tourism industry.

**Cross-Listed:** LS 300

**SM 384 Sport Marketing 3 cr**

An examination of marketing and media concepts and theories applied to the sport industry. Content areas include basic marketing, target marketing and segmentation, advertising and sponsorships, event marketing and promotions, branding, public relations, social media, consumer behavior research, sponsorship proposals, and sport marketing plans.

**Cross-Listed:** LS 384

**SM 391 Leadership in SMRS 3 cr**

Theories, principles, and philosophies of leadership as applied to sport management and recreation studies. Also includes a study of programming principles and techniques.

**Cross-Listed:** LS 391

**SM 394 Sport and Business Finance 3 cr**

This course provides undergraduate students with an introduction to investment valuation and key financial concepts of sport related entities. Students will develop revenue generating insight and budgeting knowledge of actual situations occurring in the sport and recreation industry. Topical areas covered include capital budgeting, facility financing, corporate sponsorship, salary structures, franchise valuations, and personal business transactions.

**Cross-Listed:** LS 394

**SM 472 Legal Issues in Sports/Rec - W 3 cr**

This course introduces students to the legal liabilities, negligence, contractual agreements, and risk management issues pertaining to the areas of sport, recreation, and physical activity.

**Cross-Listed:** LS 472

**SM 480 Private/Commercial Operations 3 cr**

A survey of private and commercial operations including a study of resort operations.

**Cross-Listed:** LS 480

**SM 481 Tourism & Resort Development 3 cr**

Tourism and recreational travel; nature of resort development and its effect on generating tourist flow to and within regions. Economic importance of both tourism and resort development.

**Cross-Listed:** LS 481

**SM 483 Issues in HKS 3 cr**

A study of major trends, problems, and issues in various areas of health, kinesiology, and sport.

**Cross-Listed:** LS 483

**SM 486 Sport/Rec Facility Plan/Design 3 cr**

This course will familiarize students with the basic methodologies, objectives, and principles applied to the design and strategic planning of sport and recreation service facilities. It includes the examination and implementation of guidelines used to create a facility planning brief.

**Cross-Listed:** LS 486

**SM 490 Special Topics 3 cr**

Selected topics in sport management. Topics will vary according to needs and interests of students. Course may be repeated for credit when content varies.

**SM 495 Internship in Sport Management 3-12 cr**

Supervised experiences in a sport management or related agency work setting. HKS advisor approval required.

**Cross-Listed:** LS 498

**SM 496 Sport and Rec Resource Mgt 3 cr**

A study of event and facility resource management in sport and recreation. Applies the functions of management to the supervision, operation, development, evaluation, and financing of sport and recreation facilities in public and private environments.

**Cross-Listed:** LS 496

**SM 572 Sport Event Law and Risk Mgmt 3 cr**

Analytical understanding of legal issues and risk management trends as they relate to sport event management. Legal systems, human resource management, operations management, and liability of managing sport events and facilities will be emphasized.

**SM 575 Sport Ldshp and Org Behavior 3 cr**

This course explores the essential functions of leadership in the management of sport organizations and sport events. Effective leadership in event operations will be studied, in addition to historical and current perspectives of organizational behavior. Students will gain an advanced understanding of practical leadership applications.

**SM 584 Sport Event Marketing-Media 3 cr**

Study of the unique features of sport event marketing and media. Examines the strategies and activities of organizations to promote and produce sporting events.

**SM 585 Soc-Ethic Issues in Sport Mgmt 3 cr**

A variety of social and ethical issues within the sport industry are presented. A value based approach to sport event decision making is emphasized using real-world examples and the application of ethical theories.

**SM 586 Sport Event and Facility Mgmt 3 cr**

Designed to provide students the opportunity to learn multiple aspects of sports event management and the operations of sports facilities. Emphasis toward how to plan, manage, implement and evaluate sports events at various host site venues.

**SM 587 Sport Business and Finance 3 cr**

This course provides sport managers with the skills to make effective financial management decisions in sport event settings. Students will apply appropriate investment, revenue generating, and budgeting concepts unique to the sport industry.

**SM 591 Travel and Tourism 3 cr**

A survey course designed to provide students with an overview of travel and tourism as an area of study. Discussions will center on tourism at the macro (regional and national) level. Tourist behavior, the social, environmental and economic impact of tourism will be highlighted.

**Cross-Listed:** LS 591

**SM 594 Directed Study and Research 3 cr**

Students explore through directed study and research, problems and issues of special interest or significance in sport management. Not more than three semester hours of SM 594 can be accepted toward a degree program. Program advisor approval required.

**SM 595 Internship in Sport Management 3-6 cr**

A supervised learning experience in a sport management or related agency work setting. Provides the student with an opportunity to apply theories and concepts learned during the graduate program. No more than six semester hours of SM 595 can be accepted toward a degree program. Program advisor approval required.

**SM 599 Thesis 1-6 cr**

Independent research by the student under the sponsorship of the graduate faculty. Approved formal research prospectus and approval by thesis committee chair required.

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
ALLEN, ALINE BOTSIS (abotsis@southalabama.edu)	Health, Kinesiology and Sport	Instructor	BS, University of South Alabama MS, University of South Alabama
BATES, CAROLYN MICHELLE (bates@southalabama.edu)	Health, Kinesiology and Sport	Assistant Professor	BS, University of Southern Miss MS, Clemson University PHD, University of South Alabama
COLQUHOUN, RYAN JAMES (rcolquhoun@southalabama.edu)	Health, Kinesiology and Sport	Assistant Professor	BS, Florida Atlantic U-Boca Raton MS, University of South Florida PHD, Oklahoma State University
FORESTER, BROOKE E. (bforester@southalabama.edu)	Health, Kinesiology and Sport	Associate Professor	BS, University of South Alabama MED, University of South Alabama PHD, Florida State University
HAUFF, CAITLYN ROSEANN (chauff@southalabama.edu)	Health, Kinesiology and Sport	Associate Professor	BS, Baldwin-Wallace University MS, Georgia Southern University PHD, University of Wisconsin-Milwau

HOLDEN, SHELLEY LYNN (sholden@southalabama.edu)	Health, Kinesiology and Sport	Professor	BS, University of South Alabama MED, University of South Alabama EDD, University of West Florida
HUDSON, GEOFFREY MARCUS (ghudson@southalabama.edu)	Health, Kinesiology and Sport	Associate Professor	BS, University of Alabama MA, University of Alabama PHD, Baylor University
KESHOCK, CHRISTOPHER M. (ckeshock@southalabama.edu)	Health, Kinesiology and Sport	Associate Professor	BSBA, Ashland University MBA, University of Central Missouri PHD, Florida State University
MONTGOMERY, SUSAN L (montgomery@southalabama.edu)	Health, Kinesiology and Sport	Instructor	BS, University of Montevallo MS, University of Tennessee-Knox
PARKES, CRAIG A (cparkes@southalabama.edu)	Health, Kinesiology and Sport	Assistant Professor	BA, University of Wolverhampton MS, Ithaca College EDD, University of NC- Greensboro
SCHWARZ, NEIL ANDREW (neilschwarz@southalabama.edu)	Health, Kinesiology and Sport	Associate Professor	BS, Louisiana State University MS, University of South Alabama PHD, Baylor University
STRATTON, MATTHEW THOMAS (matthewstratton@southalabama.edu)	Health, Kinesiology and Sport	Assistant Professor	BS, University of New Mexico MS, Kennesaw State University PHD, Texas Tech University
WOLTRING, MITCHELL T. (mitchellwoltring@southalabama.edu)	Health, Kinesiology and Sport	Assistant Professor	BS, Minnesota St University-Mankato  MS, Middle Tennessee State U PHD, Middle Tennessee State U

## Coaching Certificate Degree Requirements

The University of South Alabama Coaching Certificate is a 21 hour academic program that can be completed in two years. The program is intended to give students with coaching aspirations significant course work in coaching theory, sport behavior, basic athletic injury care, sport specific coaching strategies, and team management.

Program Requirements: Satisfactory completion of 21 hours with a minimum GPA of 2.0 required for certificate.

Combining the Coaching Certificate with the Class B Teaching Certificate prepares the individual for coaching in the high school setting.

### Coaching Certificate

Code	Title	Hours
KIN 100	Concepts of Health and Fitness	3
KIN 278	Sport, Performance, & Exercise Psychology	3
KIN 282	Intro to Athletic Training	3
KIN 478	Coaching Theory	3
Select three electives from the following:		9
KIN 373	Coaching Volleyball	
KIN 374	Coaching Soccer	
KIN 375	Coaching Football	
KIN 376	Coaching Basketball	
KIN 377	Coaching Baseball	
KIN 378	Coaching Track and Field	
<b>Total Hours</b>		<b>21</b>

## Exercise Science (BS) - Health And Fitness Concentration

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements (45 hours)</b>		
Select General Education Requirements (p. 460)		
<b>Major Requirements</b>		
<i>Exercise Science Major Core (51 hours)</i>		
A. Complete the following:		
BMD 251	Human Anatomy & Physiology I	4
BMD 252	Human Anatomy & Physiology II	4
HS 170	First Aid	1
KIN 100	Concepts of Health and Fitness	3
KIN 263	Intro to Nutrition	3
KIN 278	Sport, Performance, & Exercise Psychology	3
KIN 363	Sports Nutrition - W	3
KIN 370	Basic Motor Learning	3
KIN 380	Kinesiology	3
KIN 474	Sport and Fitness Conditioning	3
KIN 475	Org-Admin Hlth and PE-W	3
or SM 472	Legal Issues in Sports/Rec - W	
KIN 476	Exercise Physiology	4
& 476L	and Exercise Physiology Lab	
KIN 479	Fit Assess-Exercise Prescript	4
& 479L	and Fit Assess-Exc Prescript Lab	
KIN 480	Therapeutic Exercise	3
or HS 475	Public Health	
KIN 486	Advanced Exercise Physiology	3

ST 210	Stat Reason and Application	3
Elective 100-499	BLY, BMD, CH, EMS, HS, KIN, MA, OT, PE, PSY, RTH, SM	4
<i>Health And Fitness Concentration (24 hours)</i>		
A. Select three of the following:		9
HS 262	Personal Health	
KIN 201	Orientation to Kinesiology	
KIN 282	Intro to Athletic Training	
KIN 471	Exercise Management for Chronic Diseases & Disabilities	
KIN 483	Clinical Exercise Testing and Prescription	
KIN 484	Apps in Sports Conditioning	
B. Complete the following:		
KIN 495	Internship	9
Electives 200-499	BMD, CH, EMS, HS, KIN, OT, PSY, RTH, SM	3
<b>Minor Requirements</b>		
A minor is not required for this degree program		0
<b>Total Hours</b>		<b>75</b>

## General Education Requirements

Code	Title	Hours
<b>Area I – Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II – Humanities &amp; Fine Arts</b>		
A. Complete the following:		
CA 110	Public Speaking	3
B. Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/footnote2/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/footnote2/</a> ) <sup>1</sup>		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
C. Select one of the following:		3
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	
D. Select three hours of the following:		3
AFR 101	Intro to African Amer Studies	
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARH 203	Survey of Non-Western Art	
ARS 101	Art Appreciation	
CLA 110	Intro Anc Greek Roman Culture	

DRA 110	Introduction to Theatre
EH 215	Brit Lit before 1785
EH 216	Brit Lit after 1785
EH 225	Am Lit before 1865
EH 226	Am Lit after 1865
EH 235	World Lit before 1650
EH 236	World Lit after 1650
LG 101	Introductory Latin I
LG 102	Introductory Latin II
LG 111	Introductory French I
LG 112	Introductory French II
LG 121	Introductory Chinese I
LG 122	Introductory Chinese II
LG 131	Introductory Spanish I
LG 132	Introductory Spanish II
LG 141	Intro Classical Greek I
LG 142	Intro Classical Greek II
LG 151	Introductory German I
LG 152	Introductory German II
LG 153	Accelerated Intro German
LG 171	Introductory Russian I
LG 172	Introductory Russian II
LG 173	Accelerated Intro Russian
LG 201	Intermediate Latin I
LG 202	Intermediate Latin II
LG 211	Intermediate French I
LG 212	Intermediate French II
LG 213	Accelerated Inter French - H
LG 221	Intermediate Chinese I
LG 222	Intermediate Chinese II
LG 231	Intermediate Spanish I
LG 232	Intermediate Spanish II
LG 234	Inter Spanish Accel -H
LG 241	Interm Classical Greek I
LG 242	Interm Classical Greek II
LG 251	Intermediate German I
LG 252	Intermediate German II
LG 271	Intermediate Russian I
LG 272	Intermediate Russian II
LG 273	Intensive Second Year Russian
LGS 101	Introductory Japanese I
LGS 102	Introductory Japanese II
LGS 106	Introductory Arabic I
LGS 107	Introductory Arabic II
LGS 110	Intro American Sign Language I
LGS 111	Intro American Sign Lang II
LGS 171	Introductory Korean I
LGS 172	Introductory Korean II
LGS 201	Intermediate Japanese I
LGS 202	Intermediate Japanese II
LGS 206	Intermediate Arabic I
LGS 207	Intermediate Arabic II

LGS 210	Intermediate ASL I
LGS 211	Intermediate ASL II
MUL 101	Introduction to Music
PHL 110	Introduction to Philosophy
PHL 120	Critical Thinking
PHL 121	Introduction to Logic
PHL 131	Introduction to Ethics
PHL 231	Social Ethics
PHL 240	Western Philosophy: Classical
REL 100	Intro to the Study of Religion
REL 200	Old Testament/Hebrew Bible
REL 201	Survey of the New Testament

**Area III – Natural Sciences & Mathematics**

A. Select 3-4 hours from the following: 3-4

MA 110	Finite Mathematics
MA 112	Precalculus Algebra
MA 113	Precalculus Trigonometry
MA 115	Precal Algebra-Trigonometry
MA 120	Calculus and Its Applications
MA 125	Calculus I
MA 126	Calculus II
MA 227	Calculus III
MA 237	Linear Algebra I
MA 238	Differential Equations I

B. Select 8 hours from the following: 8

BLY 121 & 121L	General Biology I and General Biology I Lab
BLY 122 & 122L	General Biology II and General Biology II Laboratory
CH 131 & 131L	General Chemistry I and General Chemistry I Lab

**Area IV – History, Social & Behavioral Sciences (<http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/footnote2/>)<sup>1</sup>**

A. Select one of the following: 3

HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 121	World Civilization I
HY 122	World Civilization II
HY 135	US History to 1877
HY 136	US History since 1877

B. Select three of the following: 9

AN 100	Intro to Cultural Anthropology
AN 101	Intro Archaeology-Bio Anthro
CA 100	Intro to Communication
CA 211	Interpersonal Comm
CJ 105	Introduction to Criminal Justice
ECO 215	Prin of Microeconomics
ECO 216	Prin of Macroeconomics
GEO 114	People, Places, Environment
GEO 115	World Regional Geography
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II

HY 121	World Civilization I
HY 122	World Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
IS 100	Global Issues
IST 201	Seasons of Life
NAS 101	Intro Native American Studies
PSC 130	Intro to US Government
PSY 120	Introduction to Psychology
PSY 250	Life Span Development
SY 109	Introductory Sociology
SY 112	Social Problems

**Area V**

A. Complete the following:

PE 102	Weight Training	1
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B. Complete the following:

PE 101 - PE 157		3
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**Total Hours 45-46**

**Footnote**

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II - EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV - HY 101 & HY 102 or HY 121 & HY 122 or HY 135 & HY 136).

All undergraduates must complete two designated writing credit (W) courses, at least one of which must be in the student's major or minor

**Additional Information**

Minimum Grade Point Averages Required for Graduation: 2.20 Major GPA, 2.20 USA GPA

**Graduation Plan**

(120 Hours)

The Graduation Plan is an example of course progression. Individual student plans may vary. Students should consult with an academic advisor to create a personalized plan.

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CA 110	Public Speaking	3
EH 101	English Composition I	3
Math	Area III, A <sup>1</sup>	3
Science	Area III, B <sup>1</sup>	3
Science Lab	Area III, B <sup>1</sup>	1
KIN 100	Concepts of Health and Fitness	3
		<b>Hours 16</b>
<b>Spring</b>		
EH 102	English Composition II	3
HS 262	Personal Health	3
or KIN 201	or Orientation to Kinesiology	
or KIN 282	or Intro to Athletic Training	
Humanities & Fine Arts	Area II, C <sup>1</sup>	3
Science	Area III, B <sup>1</sup>	3
Science Lab	Area III, B <sup>1</sup>	1

Social & Behavioral Sciences	Area IV, B <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
BMD 251	Human Anatomy & Physiology I	4
HS 170	First Aid	1
PE 102	Weight Training	1
Elective 100-499	BLY, BMD, CH, EMS, HS, KIN, MA, OT, PE, PSY, RTH, SM	3
History	Area IV, A <sup>1</sup>	3
Humanities & Fine Arts	Area II, B <sup>1</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
BMD 252	Human Anatomy & Physiology II	4
KIN 263	Intro to Nutrition	3
PSY 120	Introduction to Psychology (Area IV, B) <sup>1,2</sup>	3
PE 101-PE 157	PE Activity Course	1
Humanities & Fine Arts	Area II, D <sup>1</sup>	3
<b>Hours</b>		<b>14</b>
<b>Third Year</b>		
<b>Fall</b>		
KIN 370	Basic Motor Learning	3
KIN 380	Kinesiology	3
ST 210	Stat Reason and Application	3
History, Social & Behavioral Sciences	Area IV, B <sup>1</sup>	3
Elective 200-499	BMD, CH, EMS, HS, KIN, OT, PSY, RTH, SM	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
KIN 278	Sport, Performance, & Exercise Psychology	3
KIN 474	Sport and Fitness Conditioning	3
KIN 475	Org-Admin Hlth and PE-W	3
KIN 476 & 476L	Exercise Physiology and Exercise Physiology Lab	4
KIN 480 or HS 475	Therapeutic Exercise or Public Health	3
<b>Hours</b>		<b>16</b>
<b>Fourth Year</b>		
<b>Fall</b>		
KIN 201 or HS 262 or KIN 282 or KIN 471 or KIN 484	Orientation to Kinesiology or Personal Health or Intro to Athletic Training or Exercise Management for Chronic Diseases & Disabilities or Apps in Sports Conditioning	3
KIN 363	Sports Nutrition - W	3
KIN 479 & 479L	Fit Assess-Exercise Prescript and Fit Assess-Exc Prescript Lab	4
KIN 495	Internship	3
PE 101-PE 157	PE Activity Course	1
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
KIN 484 or HS 262 or KIN 201 or KIN 282 or KIN 471 or KIN 483	Apps in Sports Conditioning or Personal Health or Orientation to Kinesiology or Intro to Athletic Training or Exercise Management for Chronic Diseases & Disabilities or Clinical Exercise Testing and Prescription	3
KIN 486	Advanced Exercise Physiology	3
KIN 495	Internship	6
PE 101-PE 157	PE Activity Course	1

PE 101-PE 157	PE Activity Course	1
<b>Hours</b>		<b>14</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> See General Education Requirements  
<sup>2</sup> Recommended Course

**Notes:**

- (W) Writing-Intensive Course

Many courses in the Health, Kinesiology, and Sport Department (HS, KIN, PE, SM) are also offered in the Maymester and Summer Semesters.

## Exercise Science (BS) - Pre-Professional Concentration Degree Requirements

Code	Title	Hours
<b>General Education Requirements (45 hours)</b>		
Select General Education Requirements (p. 463)		
<b>Major Requirements</b>		
<i>Exercise Science Major Core (51 hours)</i>		
A. Complete the following:		
BMD 251	Human Anatomy & Physiology I	4
BMD 252	Human Anatomy & Physiology II	4
HS 170	First Aid	1
KIN 100	Concepts of Health and Fitness	3
KIN 263	Intro to Nutrition	3
KIN 278	Sport, Performance, & Exercise Psychology	3
KIN 363	Sports Nutrition - W	3
KIN 370	Basic Motor Learning	3
KIN 380	Kinesiology	3
KIN 474	Sport and Fitness Conditioning	3
KIN 475 or SM 472	Org-Admin Hlth and PE-W Legal Issues in Sports/Rec - W	3
KIN 476 & 476L	Exercise Physiology and Exercise Physiology Lab	4
KIN 479 & 479L	Fit Assess-Exercise Prescript and Fit Assess-Exc Prescript Lab	4
KIN 480 or HS 475	Therapeutic Exercise Public Health	3
KIN 486	Advanced Exercise Physiology	3
ST 210	Stat Reason and Application	3
Elective 100-499	BLY, BMD, CH, EMS, HS, KIN, MA, OT, PE, PSY, RTH, SM	4
<i>Pre-Professional Concentration (24 hours)</i>		
A. Complete the following:		
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
B. Choose from the following: 3-4		
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	
Elective 200-499	BMD, EMS, HS, KIN, PSY, RTH, SM	

## C. Choose from the following: 4-5

PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab
BLY 213	Microbiology
BMD 210	Microbiology in Healthcare

## D. Choose from the following: 4-5

PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab
CH 201 & 201L	Organic Chemistry I and Organic Chemistry I Lab
Elective 200-499	HS, KIN, RTH, SM

## E. Choose from the following: 3-7

KIN 495	Internship
Electives 300-499	HS, KIN, OT, PSY, RTH, SM

**Minor Requirements**

A minor is not required for this degree program 0

**Total Hours** 120**General Education Requirements**

Code	Title	Hours
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**Area I – Written Composition**

A. Complete the following:

EH 101	English Composition I	3
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B. Complete the following:

EH 102	English Composition II	3
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**Area II – Humanities & Fine Arts**

A. Complete the following:

CA 110	Public Speaking	3
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B. Select one of the following: (<http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/footnote2/>)<sup>1</sup>

EH 215	Brit Lit before 1785
EH 216	Brit Lit after 1785
EH 225	Am Lit before 1865
EH 226	Am Lit after 1865
EH 235	World Lit before 1650
EH 236	World Lit after 1650

C. Select one of the following: 3

ARH 100	Survey of Art
ARH 103	Art History I
ARH 123	Art History II
ARS 101	Art Appreciation
DRA 110	Introduction to Theatre
MUL 101	Introduction to Music

D. Select three hours of the following: 3

AFR 101	Intro to African Amer Studies
ARH 100	Survey of Art
ARH 103	Art History I
ARH 123	Art History II
ARH 203	Survey of Non-Western Art
ARS 101	Art Appreciation

CLA 110	Intro Anc Greek Roman Culture
DRA 110	Introduction to Theatre
EH 215	Brit Lit before 1785
EH 216	Brit Lit after 1785
EH 225	Am Lit before 1865
EH 226	Am Lit after 1865
EH 235	World Lit before 1650
EH 236	World Lit after 1650
LG 101	Introductory Latin I
LG 102	Introductory Latin II
LG 111	Introductory French I
LG 112	Introductory French II
LG 121	Introductory Chinese I
LG 122	Introductory Chinese II
LG 132	Introductory Spanish II
LG 131	Introductory Spanish I
LG 141	Intro Classical Greek I
LG 142	Intro Classical Greek II
LG 151	Introductory German I
LG 152	Introductory German II
LG 153	Accelerated Intro German
LG 171	Introductory Russian I
LG 172	Introductory Russian II
LG 173	Accelerated Intro Russian
LG 201	Intermediate Latin I
LG 202	Intermediate Latin II
LG 211	Intermediate French I
LG 212	Intermediate French II
LG 213	Accelerated Inter French - H
LG 221	Intermediate Chinese I
LG 222	Intermediate Chinese II
LG 231	Intermediate Spanish I
LG 232	Intermediate Spanish II
LG 234	Inter Spanish Accel -H
LG 241	Interm Classical Greek I
LG 242	Interm Classical Greek II
LG 251	Intermediate German I
LG 252	Intermediate German II
LG 271	Intermediate Russian I
LG 272	Intermediate Russian II
LG 273	Intensive Second Year Russian
LGS 101	Introductory Japanese I
LGS 102	Introductory Japanese II
LGS 106	Introductory Arabic I
LGS 107	Introductory Arabic II
LGS 110	Intro American Sign Language I
LGS 111	Intro American Sign Lang II
LGS 171	Introductory Korean I
LGS 172	Introductory Korean II
LGS 201	Intermediate Japanese I
LGS 202	Intermediate Japanese II
LGS 206	Intermediate Arabic I

LGS 207	Intermediate Arabic II
LGS 210	Intermediate ASL I
LGS 211	Intermediate ASL II
MUL 101	Introduction to Music
PHL 110	Introduction to Philosophy
PHL 120	Critical Thinking
PHL 121	Introduction to Logic
PHL 131	Introduction to Ethics
PHL 231	Social Ethics
PHL 240	Western Philosophy: Classical
REL 100	Intro to the Study of Religion
REL 200	Old Testament/Hebrew Bible
REL 201	Survey of the New Testament

**Area III – Natural Sciences & Mathematics**

A. Select 3-4 hours from the following: 3-4

MA 110	Finite Mathematics
MA 112	Precalculus Algebra
MA 113	Precalculus Trigonometry
MA 115	Precal Algebra-Trigonometry (see footnote table below (p. 464)) <sup>2</sup>
MA 120	Calculus and Its Applications
MA 125	Calculus I
MA 126	Calculus II
MA 227	Calculus III
MA 237	Linear Algebra I
MA 238	Differential Equations I

B. Complete the following: 8

BLY 121 & 121L	General Biology I and General Biology I Lab
BLY 122 & 122L	General Biology II and General Biology II Laboratory

**Area IV – History, Social & Behavioral Sciences (<http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/footnote2/>)<sup>1</sup>**

A. Select one of the following: 3

HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 121	World Civilization I
HY 122	World Civilization II
HY 135	US History to 1877
HY 136	US History since 1877

B. Select three of the following: 9

AN 100	Intro to Cultural Anthropology
AN 101	Intro Archaeology-Bio Anthro
CA 100	Intro to Communication
CA 101	Intro to Media
CJ 105	Introduction to Criminal Justice
ECO 215	Prin of Microeconomics
ECO 216	Prin of Macroeconomics
GEO 114	People, Places, Environment
GEO 115	World Regional Geography
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II

HY 121	World Civilization I
HY 122	World Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
IS 100	Global Issues
IST 201	Seasons of Life
NAS 101	Intro Native American Studies
PSC 130	Intro to US Government
PSY 120	Introduction to Psychology (see footnote table below (p. 464)) <sup>2</sup>
PSY 250	Life Span Development (see footnote table below (p. 464)) <sup>2</sup>
SY 109	Introductory Sociology
SY 112	Social Problems

**Area V**

A. Complete the following:

PE 102	Weight Training	1
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B. Complete the following:

PE 101 - PE 157	3
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**Total Hours 45-46****Footnote**

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 121 & HY 122 or HY 135 & HY 136)

<sup>2</sup> Recommended Course

All undergraduates must complete two designated writing credit (W) courses, at least one of which must be in the student's major or minor

**Additional Information**

- Minimum Grade Point Average Required for Graduation: 2.20 Major GPA, 2.20 USA GPA

**Graduation Plan**

(120 Total Hours)

The Graduation Plan is an example of course progression. Individual student plans may vary. Students should consult with an academic advisor to create a personalized plan.

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
BLY 121 & 121L	General Biology I and General Biology I Lab (Area III, B) <sup>1</sup>	4
CA 110	Public Speaking	3
EH 101	English Composition I (Area I, A)	3
History	Area IV, A <sup>1</sup>	3
KIN 100	Concepts of Health and Fitness	3
		<b>Hours 16</b>
<b>Spring</b>		
BLY 122 & 122L	General Biology II and General Biology II Laboratory (Area III, B) <sup>1</sup>	4
EH 102	English Composition II (Area I, B) <sup>1</sup>	3
MA 115	Precal Algebra-Trigonometry (Area III, A; adds an additional credit hour) <sup>1,2</sup>	4

PE 102	Weight Training	1
PSY 120	Introduction to Psychology (Area IV, B) <sup>1, 2</sup>	3
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
BMD 251	Human Anatomy & Physiology I	4
HS 170	First Aid	1
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab	5
PSY 250	Life Span Development (Area IV, B) <sup>1, 2</sup>	3
Humanities & Fine Arts	Area II, B <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
BMD 252	Human Anatomy & Physiology II	4
KIN 263	Intro to Nutrition	3
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab	5
Humanities & Fine Arts	Area II, D <sup>1</sup>	3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
KIN 370	Basic Motor Learning	3
KIN 476 & 476L	Exercise Physiology and Exercise Physiology Lab	4
History, Social & Behavioral Sciences	Area IV, B <sup>1</sup>	3
PE 101 - PE 157	PE Activity Course	1
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
KIN 278	Sport, Performance, & Exercise Psychology	3
KIN 380	Kinesiology	3
Humanities & Fine Arts	Area II, C <sup>1</sup>	3
PE 101 - PE 157	PE Activity Course	1
<b>Hours</b>		<b>14</b>
<b>Fourth Year</b>		
<b>Fall</b>		
KIN 474	Sport and Fitness Conditioning	3
KIN 475 or SM 472	Org-Admin Hlth and PE-W (Exercise Science Major Core, C) or Legal Issues in Sports/Rec - W	3
KIN 480 or HS 475	Therapeutic Exercise or Public Health	3
KIN 486	Advanced Exercise Physiology	3
ST 210	Stat Reason and Application	3
PE 101 - PE 157	PE Activity Course	1
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
KIN 363	Sports Nutrition - W	3
KIN 479 & 479L	Fit Assess-Exercise Prescript and Fit Assess-Exc Prescript Lab	4
Elective 100-499	BLY, BMD, CH, EMS, HS, KIN, MA, OT, PSY, RTH, SM	3
Elective 300-499	HS, KIN, PSY, RTH, SM	3
PE 101 - PE 157	PE Activity Course	1
<b>Hours</b>		<b>14</b>
<b>Total Hours</b>		<b>121</b>

**Notes:**

- (W) Writing-Intensive Course

## Exercise Science and Performance Nutrition (Ph.D.)

### Degree Requirements

#### Doctor Of Philosophy In Exercise Science And Performance Nutrition

The Doctor of Philosophy (Ph.D.) Program in Exercise Science and Performance Nutrition provides trainees with a blend of formal coursework and the mastery of laboratory skills in order to design and implement high-quality research within the broad scope of exercise and nutritional sciences. The Ph.D. degree is awarded to students who demonstrate the ability to be independent researchers involving nutrition and/or exercise as they relate to human performance improvement and sport, exercise adaptations, and preventing disease.

Evaluation of candidates includes a comprehensive examination consisting of foundational knowledge of topics essential to success within the profession. Additionally, each candidate develops and completes a formal dissertation involving a research problem that contributes new knowledge to the field. The candidate serves as the principal investigator in an independent capacity with oversight from a research mentor and committee.

The Ph.D. program in Exercise Science and Performance Nutrition emphasizes experiential learning in laboratory and classroom settings to foster the development of well-rounded graduates capable of effective teaching, mentorship, and ethical research practices leading to preparation for a wide variety of positions, which may include academia, industry, and/or government entities.

#### Requirements For Admission

To apply to the Ph.D. in Exercise Science and Performance Nutrition degree program, please visit the University of South Alabama (USA) Graduate School website.

In addition to the general admission requirements of the USA Graduate School, admission requirements for the Exercise Science and Performance Nutrition Ph.D. program are:

1. A **master's degree in a related field** (i.e., exercise science, kinesiology, nutrition, physiology, or similar) from an accredited institution of higher education. Students with a degree outside of the discipline and/or deficiency in relevant coursework may be required to successfully complete additional prerequisite courses prior to admission.
2. **GPA Requirement:** A minimum overall grade point average (GPA) of 3.25 on a 4.0 scale on all graduate coursework.
3. A brief **personal statement** (1 to 2 pages) describing the applicant's research experience, related skills, and academic and career goals.
4. **One letter of recommendation (faculty advisor preferred)** attesting to the applicant's potential for developing into an independent researcher **and contact information for three references** (may include the letter writer).
5. A **writing sample (thesis/manuscript preferred)** as evidence of the candidate's capacity for scholarly written communication.

<sup>1</sup> See General Education Requirements

<sup>2</sup> Recommended Course

6. **Commitment from a program faculty member** to serve as a mentor to supervise the applicant's doctoral training and research.
7. A GRE score is not required. Voluntary submission of GRE scores will be accepted and considered with the application materials. An overall GRE score of 310 or greater along with an Analytical Writing score of 4.0 or greater can be used to replace the writing sample requirement.
8. **International Students:** If the applicant does not have a master's degree from a U.S.-accredited institution of higher education, a GRE score is required. Any additional admission requirements set forth by the USA Graduate School for international applicants must be met.
9. An **interview** with one or more program faculty member.

Admission is competitive and the decision is based on a review of all submitted admission materials.

### Program Requirements

To qualify for the Ph.D. in Exercise Science and Performance Nutrition, a minimum of 60 semester hours of approved graduate credit is required and the following program of study must be completed with a grade of "B" or better in all course work.

Code	Title	Hours
<b>Core Courses</b>		<b>15</b>
KIN 540	Cardiovas Resps Adapt Excerc	
KIN 601	Biomech Found Human Movement	
KIN 603	Adv Measurement-Eval in HKS	
KIN 681	Current Topics in Exercise Science and Performance Nutrition	
KIN 694	Directed Study and Research	
<b>Support Courses</b>		<b>12</b>
KIN 505	Research Methods - HKS	
KIN 699	Research Project	
IDE 620	Quantitative Methods I	
or ST 540	Stat in Research I	
IDE 621	Quantitative Methods II	
or ST 545	Stat in Research II	
<b>Electives (choose from the following)</b>		<b>18</b>
KIN 516	Exercise Physiology	
KIN 521	Motor Learning	
KIN 562	Biochem & Molec Exer & Nutr	
KIN 563	Nutrition	
KIN 571	Exer Mgt Chronic Disease/Disab	
KIN 572	Neuromuscular & Biomechanical Principles in Exercise	
KIN 574	Sport and Fitness Conditioning	
KIN 579	Fitness Assessment-Exer Presc	
KIN 583	Clinical Ex Test & Prescript	
KIN 590	Special Topics-	
Advisor-Approved Elective		
<b>Dissertation</b>		<b>15</b>
KIN 799	Dissertation	
<b>Total Hours</b>		<b>60</b>

### Academic Standards

Student must maintain a cumulative 3.0 GPA in order to be in good standing. Failure to maintain a cumulative 3.0 GPA will result in the student being placed on academic probation. The Director of Graduate Programs may recommend the dismissal of a student who does not maintain good academic standing or is not making sufficient progress.

### Graduate Assistantships

Graduate assistantships are available on a competitive basis and are awarded on the recommendation of the Department of Health, Kinesiology, and Sport.

### Comprehensive Examinations

Doctoral students must pass a comprehensive examination. The format of the examination will be determined by the comprehensive examination committee. Normally the examination is based on the required coursework. Failure to pass the comprehensive examination within three attempts will result in dismissal from the program.

### Candidacy

A doctoral student is admitted to candidacy upon successful completion of the comprehensive examination. Candidacy indicates the student has completed the required coursework and is eligible to begin the dissertation research project.

### Dissertation Hours And Defense

Doctoral candidacy is required to enroll in KIN 799 Dissertation. While only 15 hours of KIN 799 may be counted toward the degree, a student must continuously enroll in at least 1 credit hour of dissertation during the fall and spring semesters until the dissertation is successfully defended. Failure to enroll continuously without the written approval of the Graduate Program Director may lead to dismissal from the program.

A doctoral candidate must successfully defend a dissertation prospectus. The final oral defense of the dissertation is scheduled after the dissertation study has been completed and prepared in written form. Revisions to the written dissertation may be required for final approval by the dissertation committee and as a result of a review by the Graduate School.

### Transfer Credit

A maximum of 18 semester hours of graduate credit earned at an approved graduate school may be counted toward the Ph.D. program. Transfer credit may be approved after the completion of nine (9) semester hours of credit at the University of South Alabama. Transfer credit must be approved by the Health, Kinesiology, and Sport Department Chair and Graduate Program Director with the recommendation of the student's advisor.

### Time Limit

All requirements for the PhD degree must be completed within seven (7) calendar years from the date of matriculation as an Exercise Science and Performance Nutrition Ph.D. student. This seven calendar year constraint also applies to all transfer credits.

After reaching candidacy, a student has a maximum of 3 years to complete the dissertation. A student may apply to the Graduate Program Director for an extension to complete the degree.

## Health & Wellness Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

Code	Title	Hours
Core Requirements (10 credits):		
HS 170	First Aid	1
HS 262	Personal Health	3
KIN 263	Intro to Nutrition	3
KIN 100	Concepts of Health and Fitness	3
or KIN 278	Sport, Performance, & Exercise Psychology	
Additional credits from the following:		9
HS 351	Safety Education	
HS 361	School Comm Health-Impl Curric	
HS 362	Drug Education	
HS 463	Human Sexuality: Health Ed Per	
HS 475	Public Health	
HS 494	Directed Studies	
KIN 363	Sports Nutrition - W	
KIN 380	Kinesiology	
KIN 381	Eval and Measurement in HPE	
KIN 475	Org-Admin Hlth and PE-W	
KIN 477	Water Safety Instructor	
KIN 495	Internship	
RTH 397	Recreational Therapy Interventions with Older Adults	
SM 472	Legal Issues in Sports/Rec - W	
<b>Total Hours</b>		<b>19</b>

See HKS academic advisor for help with course selection.

## Health (BS) - Health Education 6-12 Teacher Certification

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 467)		45-48
<b>Major Requirements</b>		
<i>Professional Studies</i>		
A. Complete the following:		
EDM 310	Microcomputing Systems	3
EDU 400	Edu Except Child and Youth	3
EPY 351	Human Growth & Development	3
EDU 363	Tchg Adpive Cur Thru Beh/Clstrm (see footnote table below (p. 467)) <sup>1</sup>	3
HS 340	Health in the Sec Classroom (see footnote table below (p. 467)) <sup>1</sup>	3
HS 430	School Lab Exp- Health II (see footnote table below (p. 467)) <sup>1</sup>	0

HS 429	School Lab Experiences-Health (see footnote table below (p. 467)) <sup>1</sup>	3
HS 460	Methods in Health Ed - W (see footnote table below (p. 467)) <sup>1</sup>	3
KIN 460	Student Teaching Secondary (see footnote table below (p. 467)) <sup>1</sup>	6
ST 210	Stat Reason and Application	3

#### Teaching Field

A. Complete the following:

Select one from the following: 4

BMD 110 Introduction to A & P I

BMD 251 Human Anatomy & Physiology I

Select one from the following: 4

BMD 111 Introduction to A & P II

BMD 252 Human Anatomy & Physiology II

HS 170 First Aid 1

HS 262 Personal Health 3

KIN 263 Intro to Nutrition 3

HS 351 Safety Education 3

HS 361 School Comm Health-Impl Curric 3

HS 362 Drug Education 3

HS 463 Human Sexuality: Health Ed Per 3

KIN 201 Orientation to Kinesiology 3

KIN 475 Org-Admin Hlth and PE-W 3

B. Select one from the following: 3

KIN 380 Kinesiology

KIN 474 Sport and Fitness Conditioning

KIN 476 Exercise Physiology

C. Select nine hours from 300-499 Elective HS or KIN 9

#### Minor Requirements

A minor is not required for this degree program 0

**Total Hours** 120-123

### Footnote

<sup>1</sup> Requires admission to Candidacy as a prerequisite.

### General Education Requirements

Code	Title	Hours
<b>Area I – Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II – Humanities &amp; Fine Arts</b>		
A. Complete the following:		
CA 110	Public Speaking	3
B. Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/footnote2/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/footnote2/</a> ) <sup>1</sup>		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	

EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
C. Select one of the following:		3
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	
D. Select one of the following:		3
AFR 101	Intro to African Amer Studies	
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
LG 101	Introductory Latin I	
LG 102	Introductory Latin II	
LG 111	Introductory French I	
LG 112	Introductory French II	
LG 121	Introductory Chinese I	
LG 122	Introductory Chinese II	
LG 131	Introductory Spanish I	
LG 132	Introductory Spanish II	
LG 141	Intro Classical Greek I	
LG 142	Intro Classical Greek II	
LG 151	Introductory German I	
LG 152	Introductory German II	
LG 153	Accelerated Intro German	
LG 171	Introductory Russian I	
LG 172	Introductory Russian II	
LG 173	Accelerated Intro Russian	
LG 201	Intermediate Latin I	
LG 202	Intermediate Latin II	
LG 211	Intermediate French I	
LG 212	Intermediate French II	
LG 213	Accelerated Inter French - H	
LG 221	Intermediate Chinese I	
LG 222	Intermediate Chinese II	
LG 231	Intermediate Spanish I	
LG 232	Intermediate Spanish II	
LG 234	Inter Spanish Accel -H	
LG 241	Interm Classical Greek I	
LG 242	Interm Classical Greek II	
LG 251	Intermediate German I	

LG 252	Intermediate German II	
LG 271	Intermediate Russian I	
LG 272	Intermediate Russian II	
LG 273	Intensive Second Year Russian	
LGS 101	Introductory Japanese I	
LGS 102	Introductory Japanese II	
LGS 106	Introductory Arabic I	
LGS 107	Introductory Arabic II	
LGS 110	Intro American Sign Language I	
LGS 111	Intro American Sign Lang II	
LGS 171	Introductory Korean I	
LGS 172	Introductory Korean II	
LGS 201	Intermediate Japanese I	
LGS 202	Intermediate Japanese II	
LGS 206	Intermediate Arabic I	
LGS 207	Intermediate Arabic II	
LGS 210	Intermediate ASL I	
LGS 211	Intermediate ASL II	
MUL 101	Introduction to Music	
PHL 110	Introduction to Philosophy	
PHL 120	Critical Thinking	
PHL 121	Introduction to Logic	
PHL 131	Introduction to Ethics	
PHL 231	Social Ethics	
PHL 240	Western Philosophy: Classical	
REL 200	Old Testament/Hebrew Bible	
REL 201	Survey of the New Testament	

**Area III – Natural Sciences & Mathematics**

A. Select 3-4 hours from the following:		3-4
MA 110	Finite Mathematics	
MA 112	Precalculus Algebra	
MA 113	Precalculus Trigonometry	
MA 115	Precal Algebra-Trigonometry	
MA 120	Calculus and Its Applications	
MA 125	Calculus I	
MA 126	Calculus II	
MA 227	Calculus III	
MA 237	Linear Algebra I	
MA 238	Differential Equations I	
B. Select 8-10 hours from the following:		8-10
BLY 101 & 101L	Life Science I and Life Science I Laboratory	
or BLY 121 & 121L	General Biology I and General Biology I Lab	
BLY 102 & 102L	Life Science II and Life Science II Lab	
or BLY 122 & 122L	General Biology II and General Biology II Laboratory	
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab	
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	

CH 132 & 132L	General Chemistry II and General Chemistry II Lab	
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab	
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab	
GY 111 & 111L	Physical Geology and Physical Geology Lab	
GY 112 & 112L	Earth History and Earth History Lab	
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab	
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory	
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab	
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab	
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	

**Area IV – History, Social & Behavioral Sciences (<http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/footnote2/>)<sup>1</sup>**

A. Select one of the following:		3
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 121	World Civilization I	
HY 122	World Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
B. Select three of the following:		9
AN 100	Intro to Cultural Anthropology	
AN 101	Intro Archaeology-Bio Anthro	
ECO 215	Prin of Microeconomics	
ECO 216	Prin of Macroeconomics	
GEO 114	People, Places, Environment	
GEO 115	World Regional Geography	
GS 101	Intro to Gender Studies	
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 121	World Civilization I	
HY 122	World Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
PSC 130	Intro to US Government	
PSY 120	Introduction to Psychology	
PSY 250	Life Span Development	
SY 109	Introductory Sociology	
SY 112	Social Problems	

**Area V**

A. Complete the following:		
KIN 100	Concepts of Health and Fitness	3

B. Complete the following:		
PE 101 - PE 157		1
<b>Total Hours</b>		<b>45-48</b>

**Footnote**

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 121 & HY 122 or HY 135 & HY 136).

**Additional Information**

**E-portfolio and Assessment**

Students enrolled in education classes are required to purchase a LiveText membership.

- <https://www.southalabama.edu/colleges/ceps/livetext.html>

**Teacher Candidacy – Health Education**

This major contains a professional component comprised of upper level courses (300-400 levels), as shown on the graduation plan, and are only available to students who have gained admission to Teacher Candidacy.

Admission Requirements for Teacher Candidacy:

Courses and GPA

- Courses: BMD 110 or BMD 251; CA 110, EDM 310, EDU 400, EPY 351, EH 101, EH 102, HS 170, HS 262, KIN 263, KIN 100, and KIN 201
- Hours: 60 credit hours of degree requirements completed
- Minimum Grade Point Averages: 2.5 Program, 2.5 Professional Studies, 2.5 Teaching Field, and 2.5 USA GPA (all GPAs found in degree audit). No grade below a “C” is accepted in Professional Studies.

ALSDE Background Check

- [https://www.alsde.edu/sec/ec/Pages/background\\_clearance-all.aspx](https://www.alsde.edu/sec/ec/Pages/background_clearance-all.aspx)

Application, Liability Insurance, and Interview

- Completed and scheduled in the UCOM Advising Center during the semester prior to beginning Teacher Candidacy

Prerequisites and Certification/Graduation Requirements:

- While in Teacher Candidacy, students must maintain GPAs at or above admission requirement levels
- Prior to Internship, students must pass the Health Education Praxis [https://www.ets.org/praxis/al/al\\_teacher\\_ed/](https://www.ets.org/praxis/al/al_teacher_ed/)
- Prior to certification and graduation, students must pass edTPA

**Note:** Praxis tests requirements are subject to change as prescribed by the ALSDE. Prior to registering for any Praxis exam, please verify current requirements by going directly to the ALABAMA portion of the ETS Praxis website at <http://ets.org/praxis/al> (<http://ets.org/praxis/al/>).

**Graduation Plan**

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I (CP)	3
HS 170	First Aid (CP)	1
HS 262	Personal Health (CP)	3
KIN 100	Concepts of Health and Fitness (CP)	3
Math	Area III, A <sup>1</sup>	3
Social & Behavioral Sciences	Area IV, B <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
EH 102	English Composition II (CP)	3
CA 110	Public Speaking (CP)	3
KIN 201	Orientation to Kinesiology (CP)	3
History	Area IV, A <sup>1</sup>	3
BLY 101	Life Science I (Area III, B) <sup>1,2</sup>	3
BLY 101L	Life Science I Laboratory (Area III, B) <sup>1,2</sup>	1
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
EDM 310	Microcomputing Systems (CP)	3
KIN 263	Intro to Nutrition	3
HS 361	School Comm Health-Impl Curric	3
Science	Area III, B <sup>1</sup>	3
Science Lab	Area III, B <sup>1</sup>	1
Social & Behavioral Sciences	Area IV, B <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Select one of the following:		4
BMD 110	Introduction to A & P I (CP)	
BMD 251	Human Anatomy & Physiology I (CP)	
EDU 400	Edu Except Child and Youth (CP)	3
EPY 351	Human Growth & Development (CP)	3
Social & Behavioral Sciences	Area IV, B <sup>1</sup>	3
Literature	Area II, B <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
ST 210	Stat Reason and Application	3
HS 340	Health in the Sec Classroom <sup>3</sup>	3
Select one of the following:		4
BMD 111	Introduction to A & P II	
BMD 252	Human Anatomy & Physiology II	
Humanities & Fine Arts	Area II, D <sup>1</sup>	3
Teaching Field Elective 300-499	Teaching Field, C <sup>1</sup>	3
HS 430	School Lab Exp- Health II <sup>3</sup>	0
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Teaching Field Elective 300-499	Teaching Field, C <sup>1</sup>	3
Fine Art	Area II, C <sup>1</sup>	3
HS 429	School Lab Experiences-Health <sup>3</sup>	0-3
HS 460	Methods in Health Ed - W <sup>3</sup>	3
HS 351	Safety Education	3
PE 101- PE 157	PE Activity Course	1
<b>Hours</b>		<b>13-16</b>
<b>Summer</b>		
HS 463	Human Sexuality: Health Ed Per	3

HS 362	Drug Education	3
<b>Hours</b>		<b>6</b>
<b>Fourth Year</b>		
<b>Fall</b>		
EDU 363	Tchg Adptve Cur Thru Beh/Clstrm <sup>3</sup>	3
Elective 300-499	Teaching Field, C <sup>1</sup>	3
Select one of the following:		3
KIN 380	Kinesiology (Teaching Field, B) <sup>1</sup>	
KIN 474	Sport and Fitness Conditioning (Teaching Field, B) <sup>1</sup>	
KIN 476	Exercise Physiology (Teaching Field, B) <sup>1</sup>	
KIN 475	Org-Admin Hlth and PE-W <sup>3</sup>	3
<b>Hours</b>		<b>12</b>
<b>Spring</b>		
KIN 460	Student Teaching Secondary	9
<b>Hours</b>		<b>9</b>
<b>Total Hours</b>		<b>120-123</b>

<sup>1</sup> See General Education Requirements

<sup>2</sup> Recommended course

<sup>3</sup> Required for admission to Candidacy

## Health (BS) - Health Promotion Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 471)		48-51
<b>Major Requirements</b>		
<i>Professional Studies Core</i>		
A. Complete the following:		
KIN 381	Eval and Measurement in HPE (see footnote table below (p. 471)) <sup>1</sup>	3
or ST 210	Stat Reason and Application	
KIN 475	Org-Admin Hlth and PE-W	3
KIN 495	Internship (see footnote table below (p. 471)) <sup>1</sup>	9
B. Complete the following:		
RTH 471	Evaluation & Research in HKS-W (see footnote table below (p. 471)) <sup>1</sup>	3
or SM 472	Legal Issues in Sports/Rec - W	
<i>Health Promotion Major Core</i>		
A. Complete the following:		
Select one from the following:		4
BMD 110	Introduction to A & P I	
BMD 251	Human Anatomy & Physiology I	
Select one from the following:		4
BMD 111	Introduction to A & P II	
BMD 252	Human Anatomy & Physiology II	
HS 170	First Aid	1
HS 262	Personal Health	3
KIN 263	Intro to Nutrition	3
HS 351	Safety Education	3
HS 361	School Comm Health-Impl Curric	3
HS 362	Drug Education	3
HS 463	Human Sexuality: Health Ed Per	3
HS 475	Public Health	3

KIN 201	Orientation to Kinesiology	3
KIN 278	Sport, Performance, & Exercise Psychology	3
B. Select one of the following:		3
KIN 380	Kinesiology	
KIN 474	Sport and Fitness Conditioning	
KIN 476	Exercise Physiology	
C. Select one of the following:		3
KIN 461	PE for Atypical Child-Youth	
IST 210	Introduction to Disability	
SPE 400	Edu for Except Child and Youth	
D. ACC, BLY, BMD, BUS, CH, CLS, ECO, EMS, FIN, HS, KIN 231 - KIN 499, 12 MA, MGT, MKT, PH, PSY, RTH, SM, ST, or SY		
<b>Minor Requirements</b>		
A minor is not required for this degree program		0
<b>Total Hours</b>		<b>120-123</b>

## Footnote

<sup>1</sup> Requires admission to Candidacy as a prerequisite.

## General Education Requirements

Code	Title	Hours
<b>Area I – Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II – Humanities &amp; Fine Arts</b>		
A. Complete the following:		
CA 110	Public Speaking	3
B. Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/footnote2/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/footnote2/</a> ) <sup>1</sup>		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
C. Select one of the following:		3
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	
D. Select three hours of the following:		3
AFR 101	Intro to African Amer Studies	
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARH 203	Survey of Non-Western Art	
ARS 101	Art Appreciation	

CLA 110	Intro Anc Greek Roman Culture
DRA 110	Introduction to Theatre
EH 215	Brit Lit before 1785
EH 216	Brit Lit after 1785
EH 225	Am Lit before 1865
EH 226	Am Lit after 1865
EH 235	World Lit before 1650
EH 236	World Lit after 1650
LG 101	Introductory Latin I
LG 102	Introductory Latin II
LG 111	Introductory French I
LG 112	Introductory French II
LG 121	Introductory Chinese I
LG 122	Introductory Chinese II
LG 131	Introductory Spanish I
LG 132	Introductory Spanish II
LG 141	Intro Classical Greek I
LG 142	Intro Classical Greek II
LG 151	Introductory German I
LG 152	Introductory German II
LG 153	Accelerated Intro German
LG 171	Introductory Russian I
LG 172	Introductory Russian II
LG 173	Accelerated Intro Russian
LG 201	Intermediate Latin I
LG 202	Intermediate Latin II
LG 211	Intermediate French I
LG 212	Intermediate French II
LG 213	Accelerated Inter French - H
LG 221	Intermediate Chinese I
LG 222	Intermediate Chinese II
LG 231	Intermediate Spanish I
LG 232	Intermediate Spanish II
LG 234	Inter Spanish Accel -H
LG 241	Interm Classical Greek I
LG 242	Interm Classical Greek II
LG 251	Intermediate German I
LG 252	Intermediate German II
LG 271	Intermediate Russian I
LG 272	Intermediate Russian II
LG 273	Intensive Second Year Russian
LGS 101	Introductory Japanese I
LGS 102	Introductory Japanese II
LGS 106	Introductory Arabic I
LGS 107	Introductory Arabic II
LGS 110	Intro American Sign Language I
LGS 111	Intro American Sign Lang II
LGS 171	Introductory Korean I
LGS 172	Introductory Korean II
LGS 201	Intermediate Japanese I
LGS 202	Intermediate Japanese II
LGS 206	Intermediate Arabic I

LGS 207	Intermediate Arabic II
LGS 210	Intermediate ASL I
LGS 211	Intermediate ASL II
MUL 101	Introduction to Music
PHL 110	Introduction to Philosophy
PHL 120	Critical Thinking
PHL 121	Introduction to Logic
PHL 131	Introduction to Ethics
PHL 231	Social Ethics
PHL 240	Western Philosophy: Classical
REL 100	Intro to the Study of Religion
REL 200	Old Testament/Hebrew Bible
REL 201	Survey of the New Testament

**Area III – Natural Sciences & Mathematics**

A. Select 3-4 hours from the following: 3-4

MA 110	Finite Mathematics
MA 112	Precalculus Algebra
MA 113	Precalculus Trigonometry
MA 115	Precal Algebra-Trigonometry
MA 120	Calculus and Its Applications
MA 125	Calculus I
MA 126	Calculus II
MA 227	Calculus III
MA 237	Linear Algebra I
MA 238	Differential Equations I

B. Select 8-10 hours from the following: 8-10

AN 121 & 121L	Biological Anthropology and Biological Anthropology Lab
BLY 101 & 101L	Life Science I and Life Science I Laboratory
or BLY 121 & 121L	General Biology I and General Biology I Lab
BLY 102 & 102L	Life Science II and Life Science II Lab
or BLY 122 & 122L	General Biology II and General Biology II Laboratory
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab
CH 131 & 131L	General Chemistry I and General Chemistry I Lab
CH 132 & 132L	General Chemistry II and General Chemistry II Lab
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab
GY 111 & 111L	Physical Geology and Physical Geology Lab
GY 112 & 112L	Earth History and Earth History Lab
MAS 134 & 134L	Ocean Science and Ocean Science Lab
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab

PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab

**Area IV – History, Social & Behavioral Sciences (<http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/footnote2/>)<sup>1</sup>**

A. Select one of the following: 3

HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 121	World Civilization I
HY 122	World Civilization II
HY 135	US History to 1877
HY 136	US History since 1877

B. Select three of the following: 9

AN 100	Intro to Cultural Anthropology
AN 101	Intro Archaeology-Bio Anthro
CA 100	Intro to Communication
CA 211	Interpersonal Comm
CJ 105	Introduction to Criminal Justice
ECO 215	Prin of Microeconomics
ECO 216	Prin of Macroeconomics
GEO 114	People, Places, Environment
GEO 115	World Regional Geography
GS 101	Intro to Gender Studies
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 121	World Civilization I
HY 122	World Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
IS 100	Global Issues
IST 201	Seasons of Life
NAS 101	Intro Native American Studies
PSC 130	Intro to US Government
PSY 120	Introduction to Psychology
PSY 250	Life Span Development
SY 109	Introductory Sociology
SY 112	Social Problems

**Area V**

A. Complete the following:

KIN 100	Concepts of Health and Fitness	3
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B. Complete the following:

PE 101 - PE 157		1
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C. Select one of the following: 3

CIS 150	Intro to Computer Applications
EDM 310	Microcomputing Systems

Elective with passing Computer Proficiency Exam - CIS 010

**Total Hours 48-51****Footnote**

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 121 & HY 122 or HY 135 & HY 136)

**Additional Information****Candidacy – Health Promotion**

This major contains a professional component (Candidacy) comprised of upper level courses (300-400 levels), as shown on the graduation plan, and are only available to students who have gained admission to Candidacy.

Admission Requirements for Candidacy – Health:

- Courses: BMD 110 or BMD 251, BMD 111 or BMD 252, CA 110, EH 101, EH 102, HS 170, HS 262, KIN 263, KIN 100, and KIN 201
- Hours: 60 credit hours of degree requirements completed
- Minimum Grade Point Averages: 2.20 Major GPA, 2.20 USA GPA

Students should complete a Candidacy application in the CEPS Advising Center (UCOM 3360) the semester before they plan to enroll in Candidacy classes. The advisor, department chairperson, and dean review applications and make the decision to approve, defer, or deny admission. The decision to defer occurs when requirements are in progress at the time of application and reviewers select to defer with approval pending completion of requirements.

- Courses in Candidacy: KIN 381, RTH 471 (W), SM 472 (W), KIN 495

**Graduation Plan**

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I (CP)	3
BLY 101	Life Science I (Area III, B) <sup>1,2</sup>	3
BLY 101L	Life Science I Laboratory (Area III, B) <sup>1,2</sup>	1
KIN 100	Concepts of Health and Fitness	3
Math	Area III, A <sup>2</sup>	3
Fine Arts	Area II, C <sup>2</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
EH 102	English Composition II (CP)	3
CA 110	Public Speaking (CP)	3
KIN 201	Orientation to Kinesiology (CP)	3
History	Area IV, A <sup>2</sup>	3
Science	Area III, B <sup>2</sup>	3
Science Lab	Area III, B <sup>2</sup>	1
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
Select one of the following:		4
BMD 110	Introduction to A & P I (CP)	
BMD 251	Human Anatomy & Physiology I (CP)	
HS 170	First Aid (CP)	1

HS 262	Personal Health (CP)	3
Literature	Area II, B <sup>2</sup>	3
PE 101- PE 157	PE activity course	1
PSY 120	Introduction to Psychology (Area IV, B) <sup>1,2</sup>	3

**Hours 15**

<b>Spring</b>		
Select one of the following:		4
BMD 111	Introduction to A & P II (CP)	
BMD 252	Human Anatomy & Physiology II (CP)	
KIN 263	Intro to Nutrition	3
Humanities & Fine Arts	Area II, D <sup>2</sup>	3
Social & Behavioral Sciences	Area IV, B <sup>2</sup>	3
SY 109	Introductory Sociology (Area IV, B) <sup>1,2</sup>	3

**Hours 16**

<b>Third Year</b>		
<b>Fall</b>		
KIN 278	Sport, Performance, & Exercise Psychology	3
Health Major Elective	Health Major Core, D <sup>2</sup>	3
Health Major Elective	Health Major Core, D <sup>2</sup>	3
CIS/Elective	Area V, C <sup>2</sup>	3
Select one of the following:		3
KIN 380	Kinesiology (Health Major Core, B) <sup>2</sup>	
KIN 474	Sport and Fitness Conditioning (Health Major Core, B) <sup>2</sup>	
KIN 476	Exercise Physiology (Health Major Core, B) <sup>2</sup>	

**Hours 15**

<b>Spring</b>		
Health Major Elective	Health Major Core, D <sup>2</sup>	3
HS 351	Safety Education	3
KIN 381	PE and Measurement in HPE <sup>3</sup>	3
Select one of the following:		3
KIN 461	PE for Atypical Child-Youth (Health Major Core, C) <sup>2,3</sup>	
SPE 400	Edu for Except Child and Youth (Health Major Core, C) <sup>2,3</sup>	
IST 210	Introduction to Disability (Health Major Core, C) <sup>2,3</sup>	

**Hours 12**

<b>Summer</b>		
HS 463	Human Sexuality: Health Ed Per	3
HS 475	Public Health	3
HS 362	Drug Education	3

**Hours 9**

<b>Fourth Year</b>		
<b>Fall</b>		
Health Major Elective	Health Major Core, D <sup>2</sup>	3
HS 361	School Comm Health-Imp Curric	3
RTH 471 or SM 472	Evaluation & Research in HKS-W (Professional Studies Core, B) <sup>2</sup> or Legal Issues in Sports/Rec - W	3
KIN 475	Org-Admin Hlth and PE-W <sup>3</sup>	3

**Hours 12**

<b>Spring</b>		
KIN 495	Internship	9

**Hours 9****Total Hours 120**<sup>1</sup> Recommended Course<sup>2</sup> See General Education Requirements<sup>3</sup> Required for admission to Candidacy

**Notes**

- (CP) Candidacy Prerequisite
- (W) Writing-Intensive Course

# Health-Physical Ed (BS) - Physical Education P-12 and Health Education 6-12 Teacher Certification

**Degree Requirements**

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 474)		47-50
<b>Major Requirements</b>		
<i>Professional Studies</i>		
A. Complete the following:		
EDM 310	Microcomputing Systems	3
EDU 400	Edu Except Child and Youth	3
EPY 351	Human Growth & Development	3
HS 340	Health in the Sec Classroom (see footnote table below (p. 474)) <sup>1</sup>	3
HS 430	School Lab Exp- Health II (see footnote table below (p. 474)) <sup>1</sup>	0
HS 429	School Lab Experiences-Health (see footnote table below (p. 474)) <sup>1</sup>	0-3
HS 460	Methods in Health Ed - W (see footnote table below (p. 474)) <sup>1</sup>	3
KIN 351	Sports Skills (see footnote table below (p. 474)) <sup>1</sup>	3
KIN 429	School Lab Experience-PE (see footnote table below (p. 474)) <sup>1</sup>	0-3
KIN 450	Student Teaching-Hlth and PE (see footnote table below (p. 474)) <sup>1</sup>	9
KIN 452	Methods of Teaching PE-W (see footnote table below (p. 474)) <sup>1</sup>	3
ST 210	Stat Reason and Application	3
<i>Teaching Field</i>		
A. Complete 42 hours from the following:		
Select one of the following:		4
BMD 110	Introduction to A & P I	
BMD 251	Human Anatomy & Physiology I	
Select one of the following:		4
BMD 111	Introduction to A & P II	
BMD 252	Human Anatomy & Physiology II	
HS 170	First Aid	1
KIN 263	Intro to Nutrition	3
HS 361	School Comm Health-Impl Curric	3
HS 362	Drug Education	3
HS 463	Human Sexuality: Health Ed Per	3
KIN 166	Movement-Rhythms and Dev Act	3
KIN 201	Orientation to Kinesiology	3
KIN 370	Basic Motor Learning	3
KIN 380	Kinesiology	3

KIN 461	PE for Atypical Child-Youth	3
KIN 475	Org-Admin Hlth and PE-W	3
KIN 476	Exercise Physiology	3

**Minor Requirements**

A minor is not required for this degree program	0
<b>Total Hours</b>	<b>122-131</b>

**Footnote**

<sup>1</sup> Requires admission to Candidacy as a prerequisite

**General Education Requirements**

Code	Title	Hours
<b>Area I – Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II – Humanities &amp; Fine Arts (<a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/footnote2/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/footnote2/</a>)<sup>1</sup></b>		
A. Complete the following:		
CA 110	Public Speaking	3
B. Select one of the following:		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
C. Select one of the following:		
ARH 100	Survey of Art	3
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	
D. Select three hours of the following:		
AFR 101	Intro to African Amer Studies	3
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
LG 101	Introductory Latin I	
LG 102	Introductory Latin II	
LG 111	Introductory French I	

LG 112	Introductory French II	REL 201	Survey of the New Testament	
LG 121	Introductory Chinese I	<b>Area III – Natural Sciences &amp; Mathematics</b>		
LG 122	Introductory Chinese II	A. Select 3-4 hours from the following:		3-4
LG 131	Introductory Spanish I	MA 110	Finite Mathematics	
LG 132	Introductory Spanish II	MA 112	Precalculus Algebra	
LG 141	Intro Classical Greek I	MA 113	Precalculus Trigonometry	
LG 142	Intro Classical Greek II	MA 115	Precal Algebra-Trigonometry	
LG 151	Introductory German I	MA 120	Calculus and Its Applications	
LG 152	Introductory German II	MA 125	Calculus I	
LG 153	Accelerated Intro German	MA 126	Calculus II	
LG 171	Introductory Russian I	MA 227	Calculus III	
LG 172	Introductory Russian II	MA 237	Linear Algebra I	
LG 173	Accelerated Intro Russian	MA 238	Differential Equations I	
LG 201	Intermediate Latin I	B. Select 8-10 hours from the following:		8-10
LG 202	Intermediate Latin II	BLY 101	Life Science I	
LG 211	Intermediate French I	& 101L	and Life Science I Laboratory (see footnote table below (p. 476)) <sup>2</sup>	
LG 212	Intermediate French II	or BLY 121	General Biology I	
LG 213	Accelerated Inter French - H	& 121L	and General Biology I Lab	
LG 221	Intermediate Chinese I	BLY 102	Life Science II	
LG 222	Intermediate Chinese II	& 102L	and Life Science II Lab (see footnote table below (p. 476)) <sup>2</sup>	
LG 231	Intermediate Spanish I	or BLY 122	General Biology II	
LG 232	Intermediate Spanish II	& 122L	and General Biology II Laboratory	
LG 234	Inter Spanish Accel -H	CH 101	Survey of Inorg and Org Chem	
LG 241	Interm Classical Greek I	& 101L	and Survey Inorg-Org Chem Lab	
LG 242	Interm Classical Greek II	CH 131	General Chemistry I	
LG 251	Intermediate German I	& 131L	and General Chemistry I Lab	
LG 252	Intermediate German II	CH 132	General Chemistry II	
LG 271	Intermediate Russian I	& 132L	and General Chemistry II Lab	
LG 272	Intermediate Russian II	GEO 101	Environmental Geography	
LG 273	Intensive Second Year Russian	& 101L	and Environmental Geography Lab	
LGS 101	Introductory Japanese I	GEO 102	Earth and the Environment	
LGS 102	Introductory Japanese II	& 102L	and Earth and the Environment Lab	
LGS 106	Introductory Arabic I	GY 111	Physical Geology	
LGS 107	Introductory Arabic II	& 111L	and Physical Geology Lab	
LGS 110	Intro American Sign Language I	GY 112	Earth History	
LGS 111	Intro American Sign Lang II	& 112L	and Earth History Lab	
LGS 171	Introductory Korean I	PH 101	Introduction to Astronomy	
LGS 172	Introductory Korean II	& 101L	and Introduction to Astronomy Lab	
LGS 201	Intermediate Japanese I	PH 104	Concepts of Physics	
LGS 202	Intermediate Japanese II	& 104L	and Concepts of Physics Laboratory	
LGS 206	Intermediate Arabic I	PH 114	Physics with Algebra-Trig I	
LGS 207	Intermediate Arabic II	& 114L	and Alg-Trig Based Physics I Lab	
LGS 210	Intermediate ASL I	PH 115	Physics with Algebra -Trig II	
LGS 211	Intermediate ASL II	& 115L	and Alg-Trig Based Physics II Lab	
MUL 101	Introduction to Music	PH 201	Calculus-Based Physics I	
PHL 110	Introduction to Philosophy	& 201L	and Calculus-Based Physics I Lab	
PHL 120	Critical Thinking	PH 202	Calculus-Based Physics II	
PHL 121	Introduction to Logic	& 202L	and Calculus-Based Physics II Lab	
PHL 131	Introduction to Ethics	<b>Area IV – History, Social &amp; Behavioral Sciences (<a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/footnote2/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/footnote2/</a>)<sup>1</sup></b>		
PHL 231	Social Ethics	A. Select one of the following:		3
PHL 240	Western Philosophy: Classical	HY 101	HY of Western Civilization I	
REL 200	Old Testament/Hebrew Bible			

HY 102	HY of Western Civilization II
HY 121	World Civilization I
HY 122	World Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
B. Select three of the following: 9	
AN 100	Intro to Cultural Anthropology
AN 101	Intro Archaeology-Bio Anthro
ECO 215	Prin of Microeconomics
ECO 216	Prin of Macroeconomics
GEO 114	People, Places, Environment
GEO 115	World Regional Geography
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 121	World Civilization I
HY 122	World Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
PSC 130	Intro to US Government
PSY 120	Introduction to Psychology
PSY 250	Life Span Development
SY 109	Introductory Sociology
SY 112	Social Problems

**Area V**

A. Complete the following:		
KIN 100	Concepts of Health and Fitness	3
B. Complete the following:		
HS 262	Personal Health	3
<b>Total Hours</b>		<b>47-50</b>

**Footnote**

- <sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 121 & HY 122 or HY 135 & HY 136).
- <sup>2</sup> Recommended Course

**Additional Information**  
**E-portfolio and Assessment**

Students enrolled in education classes are required to purchase a LiveText membership.

- <https://www.southalabama.edu/colleges/ceps/livetext.html>

**Teacher Candidacy – Merged Health and Physical Education**

This major contains a professional component comprised of upper level courses (300-400 levels), as shown on the graduation plan, and are only available to students who have gained admission to Teacher Candidacy.

Admission Requirements for Teacher Candidacy:

Courses and GPA

- Courses: BMD 110 or BMD 251, CA 110, EDM 310, EDU 400, EPY 351, EH 101, EH 102, HS 170, HS 262, KIN 263, KIN 100, and KIN 201
- Hours: 60 credit hours of degree requirements completed

- Minimum Grade Point Averages: 2.5 Program, 2.5 Professional Studies, 2.5 Teaching Field, and 2.5 USA GPA (all GPAs found in degree audit). No grade below a "C" is accepted in Professional Studies.

ALSDE Background Check

- [https://www.alsde.edu/sec/ec/Pages/background\\_clearance-all.aspx](https://www.alsde.edu/sec/ec/Pages/background_clearance-all.aspx)

Application, Liability Insurance, and Interview

- Completed and scheduled in the UCOM Advising Center during the semester prior to beginning Teacher Candidacy

Prerequisites and Certification/Graduation Requirements:

- While in Teacher Candidacy, students must maintain GPAs at or above admission requirement levels
- Prior to Internship, students must pass the Health and Physical Education Praxis tests [https://www.ets.org/praxis/al/al\\_teacher\\_ed/](https://www.ets.org/praxis/al/al_teacher_ed/)
- Prior to certification and graduation, students must pass edTPA

**Note: Praxis tests requirements are subject to change as prescribed by the ALSDE. Prior to registering for any Praxis exam, please verify current requirements by going directly to the ALABAMA portion of the ETS Praxis website at <http://ets.org/praxis/al> (<http://ets.org/praxis/al/>).**

**Graduation Plan**

(122 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I (CP)	3
CA 110	Public Speaking (CP)	3
KIN 100	Concepts of Health and Fitness (CP)	3
Math	Area III, A <sup>1</sup>	3
BLY 101	Life Science I (Area III, B) <sup>1,2</sup>	3
BLY 101L	Life Science I Laboratory (Area III, B) <sup>1,2</sup>	1
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
EH 102	English Composition II (CP)	3
KIN 263	Intro to Nutrition	3
KIN 166	Movement-Rhythms and Dev Act	3
KIN 201	Orientation to Kinesiology (CP)	3
Science	Area III, B <sup>1</sup>	3
Science Lab	Area III, B <sup>1</sup>	1
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
EDM 310	Microcomputing Systems (CP)	3
Select one of the following:		4
BMD 110	Introduction to A & P I (CP)	
BMD 251	Human Anatomy & Physiology I (CP)	
HS 262	Personal Health (CP)	3
HS 361	School Comm Health-Impl Curric	3
Literature	Area II, B <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Select one of the following:		4
BMD 111	Introduction to A & P II	
BMD 252	Human Anatomy & Physiology II	
EDU 400	Edu Except Child and Youth (CP)	3

EPY 351	Human Growth & Development (CP)	3
KIN 351	Sports Skills	3
History	Area IV, A <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
ST 210	Stat Reason and Application	3
Humanities & Fine Arts	Area II, D <sup>1</sup>	3
HS 170	First Aid	1
Social & Behavioral Sciences	Area IV, B <sup>1</sup>	3
KIN 475	Org-Admin Hlth and PE-W	3
HS 340	Health in the Sec Classroom <sup>3</sup>	3
HS 430	School Lab Exp- Health II <sup>3</sup>	0
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
HS 429	School Lab Experiences-Health <sup>3</sup>	0-3
HS 460	Methods in Health Ed - W <sup>3</sup>	3
KIN 380	Kinesiology	3
KIN 370	Basic Motor Learning	3
KIN 461	PE for Atypical Child-Youth	3
Social & Behavioral Sciences	Area IV, B <sup>1</sup>	3
<b>Hours</b>		<b>15-18</b>
<b>Summer</b>		
HS 463	Human Sexuality: Health Ed Per	3
HS 362	Drug Education	3
<b>Hours</b>		<b>6</b>
<b>Fourth Year</b>		
<b>Fall</b>		
KIN 476	Exercise Physiology	3
KIN 429	School Lab Experience-PE <sup>3</sup>	0-3
KIN 452	Methods of Teaching PE-W <sup>3</sup>	3
Social & Behavioral Sciences	Area IV, B <sup>1</sup>	3
Fine Arts	Area II, C <sup>1</sup>	3
<b>Hours</b>		<b>12-15</b>
<b>Spring</b>		
KIN 450	Student Teaching-Hlth and PE	9
<b>Hours</b>		<b>9</b>
<b>Total Hours</b>		<b>122-128</b>

<sup>1</sup> See General Education Requirements

<sup>2</sup> Recommended Course

<sup>3</sup> Required for admission to Candidacy

#### Notes:

- (CP) Candidacy Prerequisite
- (W) Writing-Intensive Course

## Performance Nutrition Minor

### Degree Requirements

Code	Title	Hours
Core Requirements (12 credits):		
KIN 263	Intro to Nutrition	3
KIN 363	Sports Nutrition - W	3
KIN 462	Biochemical and Molecular Exer	3
KIN 476	Exercise Physiology	3

Additional credits from the following:		6
KIN 463	Nutrition	
KIN 490	Special Topics	
KIN 494	Directed Studies	
BMD 212	Introduction to Food Science	
BMD 321	Biochemistry I-Molecular Biol	
BMD 322	Biochemistry II-Metabolism	

**Total Hours** **18**

See HKS academic advisor for help with course selection.

## Physical Education (BS) - P-12 Teacher Certification

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 478)		49-54
<b>Major Requirements</b>		
<i>Professional Studies</i>		
A. Complete the following:		
EDM 310	Microcomputing Systems	3
EDU 400	Edu Except Child and Youth	3
EPY 351	Human Growth & Development	3
HS 361	School Comm Health-Impl Curric	3
HS 429	School Lab Experiences-Health (see footnote table 0-3 below (p. 478)) <sup>1</sup>	0-3
KIN 429	School Lab Experience-PE (see footnote table 0-3 below (p. 478)) <sup>1</sup>	0-3
KIN 452	Methods of Teaching PE-W (see footnote table below (p. 478)) <sup>1</sup>	3
KIN 470	Student Teaching P-12 Program (see footnote table below (p. 478)) <sup>1</sup>	9
ST 210	Stat Reason and Application	3
<i>Teaching Field</i>		
A. Select one from the following:		
BMD 110	Introduction to A & P I	
BMD 251	Human Anatomy & Physiology I	
HS 170	First Aid	1
KIN 263	Intro to Nutrition	3
HS 362	Drug Education	3
HS 460	Methods in Health Ed - W	3
KIN 166	Movement-Rhythms and Dev Act	3
KIN 201	Orientation to Kinesiology	3
KIN 282	Intro to Athletic Training	3
KIN 351	Sports Skills	3
KIN 370	Basic Motor Learning	3
KIN 380	Kinesiology	3
KIN 461	PE for Atypical Child-Youth	3
KIN 475	Org-Admin Hlth and PE-W	3
KIN 476	Exercise Physiology	3
KIN 478	Coaching Theory	3

### Minor Requirements

A minor is not required for this degree program	0
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<b>Total Hours</b>	<b>120-131</b>
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## Footnote

<sup>1</sup> Requires admission to Candidacy as a prerequisite.

## General Education Requirements

Code	Title	Hours	
<b>Area I – Written Composition</b>			
A. Complete the following:			
EH 101	English Composition I	3	
B. Complete the following:			
EH 102	English Composition II	3	
<b>Area II – Humanities &amp; Fine Arts (<a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/footnote2/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/footnote2/</a>)<sup>1</sup></b>			
A. Complete the following:			
CA 110	Public Speaking	3	
B. Select one of the following:			
EH 215	Brit Lit before 1785	3	
EH 216	Brit Lit after 1785		
EH 225	Am Lit before 1865		
EH 226	Am Lit after 1865		
EH 235	World Lit before 1650		
EH 236	World Lit after 1650		
C. Select one of the following:			
ARH 100	Survey of Art	3	
ARH 103	Art History I		
ARH 123	Art History II		
ARS 101	Art Appreciation		
DRA 110	Introduction to Theatre		
MUL 101	Introduction to Music		
D. Select three hours of the following:			
AFR 101	Intro to African Amer Studies		3
ARH 100	Survey of Art		
ARH 103	Art History I		
ARH 123	Art History II		
ARS 101	Art Appreciation		
DRA 110	Introduction to Theatre		
EH 215	Brit Lit before 1785		
EH 216	Brit Lit after 1785		
EH 225	Am Lit before 1865		
EH 226	Am Lit after 1865		
EH 235	World Lit before 1650		
EH 236	World Lit after 1650		
LG 101	Introductory Latin I		
LG 102	Introductory Latin II		
LG 111	Introductory French I		
LG 112	Introductory French II		
LG 121	Introductory Chinese I		
LG 122	Introductory Chinese II		
LG 131	Introductory Spanish I		

LG 132	Introductory Spanish II
LG 141	Intro Classical Greek I
LG 142	Intro Classical Greek II
LG 151	Introductory German I
LG 152	Introductory German II
LG 153	Accelerated Intro German
LG 171	Introductory Russian I
LG 172	Introductory Russian II
LG 173	Accelerated Intro Russian
LG 201	Intermediate Latin I
LG 202	Intermediate Latin II
LG 211	Intermediate French I
LG 212	Intermediate French II
LG 213	Accelerated Inter French - H
LG 221	Intermediate Chinese I
LG 222	Intermediate Chinese II
LG 231	Intermediate Spanish I
LG 232	Intermediate Spanish II
LG 234	Inter Spanish Accel -H
LG 241	Interm Classical Greek I
LG 242	Interm Classical Greek II
LG 251	Intermediate German I
LG 252	Intermediate German II
LG 271	Intermediate Russian I
LG 272	Intermediate Russian II
LG 273	Intensive Second Year Russian
LGS 101	Introductory Japanese I
LGS 102	Introductory Japanese II
LGS 106	Introductory Arabic I
LGS 107	Introductory Arabic II
LGS 110	Intro American Sign Language I
LGS 111	Intro American Sign Lang II
LGS 171	Introductory Korean I
LGS 172	Introductory Korean II
LGS 201	Intermediate Japanese I
LGS 202	Intermediate Japanese II
LGS 206	Intermediate Arabic I
LGS 207	Intermediate Arabic II
LGS 210	Intermediate ASL I
LGS 211	Intermediate ASL II
MUL 101	Introduction to Music
PHL 110	Introduction to Philosophy
PHL 120	Critical Thinking
PHL 121	Introduction to Logic
PHL 131	Introduction to Ethics
PHL 231	Social Ethics
PHL 240	Western Philosophy: Classical
REL 200	Old Testament/Hebrew Bible
REL 201	Survey of the New Testament

### Area III – Natural Sciences & Mathematics

A. Select 3-4 hours from the following:		3-4
MA 110	Finite Mathematics	

MA 112	Precalculus Algebra	
MA 113	Precalculus Trigonometry	
MA 115	Precal Algebra-Trigonometry	
MA 120	Calculus and Its Applications	
MA 125	Calculus I	
MA 126	Calculus II	
MA 227	Calculus III	
MA 237	Linear Algebra I	
MA 238	Differential Equations I	
B. Select 8-10 hours from the following:		8-10
BLY 101 & 101L	Life Science I and Life Science I Laboratory	
or BLY 121 & 121L	General Biology I and General Biology I Lab	
BLY 102 & 102L	Life Science II and Life Science II Lab	
or BLY 122 & 122L	General Biology II and General Biology II Laboratory	
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab	
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab	
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab	
GY 111 & 111L	Physical Geology and Physical Geology Lab	
GY 112 & 112L	Earth History and Earth History Lab	
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab	
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory	
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab	
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab	
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	

**Area IV – History, Social & Behavioral Sciences (<http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/footnote2/>)<sup>1</sup>**

A. Select one of the following:		3
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 121	World Civilization I	
HY 122	World Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
B. Select three of the following:		9

AN 100	Intro to Cultural Anthropology	
AN 101	Intro Archaeology-Bio Anthro	
ECO 215	Prin of Microeconomics	
ECO 216	Prin of Macroeconomics	
GEO 114	People, Places, Environment	
GEO 115	World Regional Geography	
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 121	World Civilization I	
HY 122	World Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
PSC 130	Intro to US Government	
PSY 120	Introduction to Psychology	
PSY 250	Life Span Development	
SY 109	Introductory Sociology	
SY 112	Social Problems	

**Area V**

A. Complete the following:

HS 262	Personal Health	3
KIN 100	Concepts of Health and Fitness	3
PE 106	Gymnastics	1
B. Select 1-3 hours from the following:		1-3
PE 130	Beginning Swimming	
PE 131	Intermediate Swimming	
KIN 231	ARC Lifeguard Training	
KIN 477	Water Safety Instructor	

**Total Hours** **49-54**

**Footnote**

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 121 & HY 122 or HY 135 & HY 136).

**Additional Information**

**E-portfolio and Assessment**

Students enrolled in education classes are required to purchase a LiveText membership.

- <https://www.southalabama.edu/colleges/ceps/livetext.html>

**Teacher Candidacy – Physical Education**

This major contains a professional component comprised of upper level courses (300-400 levels), as shown on the graduation plan, and are only available to students who have gained admission to Teacher Candidacy.

Admission Requirements for Teacher Candidacy:

Courses and GPA

- Courses: BMD 110 or BMD 251, CA 110, EDM 310, EDU 400, EPY 351, EH 101, EH 102, KIN 100, KIN 166, and KIN 201
- Hours: 60 credit hours of degree requirements completed
- Minimum Grade Point Averages: 2.5 Program, 2.5 Professional Studies, 2.5 Teaching Field, and 2.5 USA GPA (all GPAs found in

degree audit). No grade below a "C" is accepted in Professional Studies.

**ALSDE Background Check**

- [https://www.alsde.edu/sec/ec/Pages/background\\_clearance-all.aspx](https://www.alsde.edu/sec/ec/Pages/background_clearance-all.aspx)

**Application, Liability Insurance, and Interview**

- Completed and scheduled in the UCOM Advising Center during the semester prior to beginning Teacher Candidacy

**Prerequisites and Certification/Graduation Requirements:**

- While in Teacher Candidacy, students must maintain GPAs at or above admission requirement levels
- Prior to Internship, students must pass the Health and Physical Education Praxis tests [https://www.ets.org/praxis/al/al\\_teacher\\_ed/](https://www.ets.org/praxis/al/al_teacher_ed/)
- Prior to certification and graduation, students must pass edTPA

**Note:** Praxis tests requirements are subject to change as prescribed by the ALSDE. Prior to registering for any Praxis exam, please verify current requirements by going directly to the ALABAMA portion of the ETS Praxis website at <http://ets.org/praxis/al> (<http://ets.org/praxis/al/>).

## Graduation Plan

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I (CP)	3
HS 170	First Aid (CP)	1
HS 262	Personal Health (CP)	3
KIN 100	Concepts of Health and Fitness (CP)	3
Math	Area III, A <sup>1</sup>	3
Fine Arts	Area II, C <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
EH 102	English Composition II (CP)	3
KIN 166	Movement-Rhythms and Dev Act (CP)	3
History	Area IV, A <sup>1</sup>	3
BLY 101	Life Science I (Area III, B) <sup>1</sup>	3
BLY 101L	Life Science I Laboratory (Area III, B) <sup>1</sup>	1
KIN 201	Orientation to Kinesiology	3
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
EDM 310	Microcomputing Systems (CP)	3
CA 110	Public Speaking (CP)	3
Social & Behavioral Sciences	Area IV, B <sup>1</sup>	3
Science	Area III, B <sup>1</sup>	3
Science Lab	Area III, B <sup>1</sup>	1
Literature	Area II, B <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Select one of the following:		
BMD 110	Introduction to A & P I	4
BMD 251	Human Anatomy & Physiology I	
EDU 400	Edu Except Child and Youth (CP)	3
EPY 351	Human Growth & Development (CP)	3
KIN 263	Intro to Nutrition	3

KIN 351	Sports Skills	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
ST 210	Stat Reason and Application	3
KIN 476	Exercise Physiology	3
HS 361	School Comm Health-Impl Curric	3
Social & Behavioral Sciences	Area IV, B <sup>1</sup>	3
PE 106	Gymnastics	1
PE 130	Beginning Swimming (Area V, B) <sup>3</sup>	1
KIN 380	Kinesiology	3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
HS 429	School Lab Experiences-Health <sup>2</sup>	0-3
HS 460	Methods in Health Ed - W <sup>2</sup>	3
Humanities & Fine Arts	Area II, C <sup>1</sup>	3
KIN 370	Basic Motor Learning	3
KIN 461	PE for Atypical Child-Youth	3
KIN 478	Coaching Theory	3
<b>Hours</b>		<b>15-18</b>
<b>Summer</b>		
HS 362	Drug Education	3
<b>Hours</b>		<b>3</b>
<b>Fourth Year</b>		
<b>Fall</b>		
KIN 282	Intro to Athletic Training	3
KIN 429	School Lab Experience-PE <sup>2</sup>	0-3
KIN 452	Methods of Teaching PE-W <sup>2</sup>	3
Social & Behavioral Sciences	Area IV, B <sup>1</sup>	3
KIN 475	Org-Admin Hlth and PE-W	3
<b>Hours</b>		<b>12-15</b>
<b>Spring</b>		
KIN 470	Student Teaching P-12 Program <sup>2</sup>	9
<b>Hours</b>		<b>9</b>
<b>Total Hours</b>		<b>120-126</b>

- <sup>1</sup> See General Education Requirements
- <sup>2</sup> Required for admission to Candidacy
- <sup>3</sup> Recommended Course

**Notes**

- (CP) Candidacy Prerequisite
- (W) Writing-Intensive Course

## Physical Education (M.Ed.) - Health Education 6-12 Teacher Certification Degree Requirements

(30 hours)

The requirements for the Master of Education Degree include Educational Research and Evaluation (IDE 510), and 27 semester hours in the area of specialization. Eighteen hours of graduate course work must be in KIN. No courses below the 500 level can apply to any graduate program.

Code	Title	Hours
<b>Health Education (6-12)</b>		
<i>Curriculum and Teaching</i>		
KIN 506	Physical Education Curriculum	3
<i>Professional Studies Special Education</i>		
SPE 500 or EDU 567	Nat-Needs of Exc Chld and Yth Multicultural Exp in Schools	3
All certification programs require SPE 500 or an introductory Special Education course if not taken at the undergraduate level		
Select one from the following:		3
EDF 501	Cult Found of Education	
EDF 515	Multicultural Education	
EPY 502	Psy Prin Learning	
<i>Research and Evaluation</i>		
IDE 510	Educ Research and Evaluation	3
<i>Technology</i>		
EDM 510	Microcomputing Systems in Ed	3
<i>Teaching Field</i>		
KIN 505	Research Methods - HKS	3
HS 510	Current Health Issues	3
KIN 563	Nutrition	3
Advisor Approved Electives		6
<b>Total Hours</b>		<b>30</b>

### Additional Requirements

Students must successfully complete a comprehensive examination. See Graduate Student Checklist on Departmental Advising Sheets.

## Physical Education (M.Ed.) - P-12 Teacher Certification

### Degree Requirements

(30 hours)

The requirements for the Master of Education Degree include Educational Research and Evaluation (IDE 510), and 27 semester hours in the area of specialization. Eighteen hours of graduate course work must be in HPE. No courses below the 500 level can apply to any graduate program.

Code	Title	Hours
<b>Physical Education (P-12)</b>		
<i>Curriculum and Teaching</i>		
KIN 506	Physical Education Curriculum	3
KIN 521	Motor Learning	3
<i>Professional Studies</i>		
SPE 500 or EDU 567	Nat-Needs of Exc Chld and Yth Multicultural Exp in Schools	3
Special Education 500 or Advisor Approved Elective (All certification programs require SPE 500 or an introductory Special Education course if not taken at the undergraduate level.)		
<i>Research and Evaluation</i>		
IDE 510	Educ Research and Evaluation	3
<i>Technology Requirement</i>		
EDM 510	Microcomputing Systems in Ed	3

<i>Teaching Field</i>		
KIN 500	Admin of Hlth & Phys Ed & Sprt	3
KIN 505	Research Methods - HKS	3
KIN 516	Exercise Physiology	3
HS 510	Current Health Issues	3
KIN 563	Nutrition	3
<b>Total Hours</b>		<b>30</b>

### Additional Requirements

Students must successfully complete a comprehensive examination. See Graduate Student Checklist on Departmental Advising Sheets.

## Exercise Science (MS)

### Degree Requirements

(30 hours)

In addition to satisfying the general requirements of the Graduate School, the candidate for the Master of Science degree in HKS must complete a minimum of 30 semester hours.

Code	Title	Hours
<b>Exercise Science</b>		
<i>Research and Evaluation</i>		
KIN 505	Research Methods - HKS	3
<i>Area of Specialization</i>		
KIN 516	Exercise Physiology	3
KIN 562	Biochem & Molec Exer & Nutr	3
KIN 563	Nutrition	3
KIN 571	Exer Mgt Chronic Disease/Disab	3
KIN 572	Neuromuscular & Biomechanical Principles in Exercise	3
KIN 583	Clinical Ex Test & Prescript	3
<b>Select one from the following options:</b>		
<i>Thesis Option:</i>		
IDE 620	Quantitative Methods I	3
KIN 599	Thesis	6
<i>Capstone Project Option:</i>		
IDE 620	Quantitative Methods I	3
KIN 699	Research Project	6
<i>Internship Option:</i>		
KIN 595	Internship <sup>1</sup>	3
Elective	KIN 500-599 or HS 500-599	6
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> Can be repeated once as an elective.

### Additional Requirements

Students must successfully complete a comprehensive examination. See Graduate Student Checklist on Departmental Advising Sheets.

## Health Promotion (MS)

### Degree Requirements

(30 hours - Optional Fully Online Program)

In addition to satisfying the general requirements of the Graduate School, the candidate for the Master of Science degree in HKS must complete a minimum of 30 semester hours.

Code	Title	Hours
<b>Research and Evaluation</b>		<b>3</b>
KIN 505	Research Methods - HKS	3
<b>Area of Specialization</b>		<b>15</b>
HS 510	Current Health Issues	3
HS 560	Methods in Health Edu	3
or HS 575	Public Health	
KIN 563	Nutrition	3
HS 565	Community Health	3
KIN 595	Internship	3-6
<b>Advisor Approved Electives</b>		<b>12</b>
<b>Total Hours</b>		<b>30</b>

### Additional Requirements

Students must successfully complete a comprehensive examination. See Graduate Student Checklist on Department Advising Sheets.

## Recreational Therapy (BS)

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 482)		
<b>Major Requirements</b>		
<i>Recreational Therapy Major Core</i>		
A. Complete the following:		
BMD 251	Human Anatomy & Physiology I	4
BMD 252	Human Anatomy & Physiology II	4
HS 170	First Aid	1
KIN 370	Basic Motor Learning	3
RTH 292	Outdoor Recreation-Adventure	3
RTH 295	Intro to Therapeutic Rec	3
RTH 298	Practicum in Ther Rec	3
RTH 375	Mgmt in Therapeutic Recreation	3
RTH 395	Therapeutic Rec Process (W)	3
RTH 397	Recreational Therapy Interventions with Older Adults	3
RTH 465	TR Prog Des & Interventions I (see footnote table below (p. 482)) <sup>1</sup>	3
RTH 466	TR Prog Des & Interventions II (see footnote table below (p. 482)) <sup>1</sup>	3
RTH 468	Facilitation Techniques in TR	3
RTH 471	Evaluation & Research in HKS-W (see footnote table below (p. 482)) <sup>1</sup>	3
RTH 495	Internship in Rec Therapy (see footnote table below (p. 482)) <sup>1</sup>	12

SM 483	Issues in HKS (see footnote table below (p. 482)) <sup>1</sup>	3
PSY 340	Abnormal Psychology	3
B. Select one of the following:		
KIN 380	Kinesiology	3
or KIN 476	Exercise Physiology	
C. Select one of the following:		
KIN 461	PE for Atypical Child-Youth	3
or ST 210	Stat Reason and Application	
D. Select one from the following:		
KIN 477	Water Safety Instructor	3
KIN 231	ARC Lifeguard Training	
KIN 166	Movement-Rhythms and Dev Act	
E. Select one hour from HS, KIN, PE, RTH, or SM		
<b>General Electives</b>		
A. Select one from the following:		
CIS 150	Intro to Computer Applications	3
EDM 310	Microcomputing Systems	
CIS 010	Computer Proficiency Exam	0
<b>Minor Requirements</b>		
A minor is not required for this degree program		
<b>Total Hours</b>		<b>73</b>

### Footnote

<sup>1</sup> Required for admission to Candidacy as a prerequisite

### General Education Requirements

Code	Title	Hours
<b>Area I – Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II – Humanities &amp; Fine Arts</b>		
A. Complete the following:		
CA 110	Public Speaking	3
B. Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/footnote2/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/footnote2/</a> ) <sup>1</sup>		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
C. Select one of the following:		
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	

D. Select three hours of the following: 3

AFR 101	Intro to African Amer Studies
ARH 100	Survey of Art
ARH 103	Art History I
ARH 123	Art History II
ARH 203	Survey of Non-Western Art
ARS 101	Art Appreciation
CLA 110	Intro Anc Greek Roman Culture
DRA 110	Introduction to Theatre
EH 215	Brit Lit before 1785
EH 216	Brit Lit after 1785
EH 225	Am Lit before 1865
EH 226	Am Lit after 1865
EH 235	World Lit before 1650
EH 236	World Lit after 1650
LG 101	Introductory Latin I
LG 102	Introductory Latin II
LG 111	Introductory French I
LG 112	Introductory French II
LG 121	Introductory Chinese I
LG 122	Introductory Chinese II
LG 131	Introductory Spanish I
LG 132	Introductory Spanish II
LG 141	Intro Classical Greek I
LG 142	Intro Classical Greek II
LG 151	Introductory German I
LG 152	Introductory German II
LG 153	Accelerated Intro German
LG 171	Introductory Russian I
LG 172	Introductory Russian II
LG 173	Accelerated Intro Russian
LG 201	Intermediate Latin I
LG 202	Intermediate Latin II
LG 211	Intermediate French I
LG 212	Intermediate French II
LG 213	Accelerated Inter French - H
LG 221	Intermediate Chinese I
LG 222	Intermediate Chinese II
LG 231	Intermediate Spanish I
LG 232	Intermediate Spanish II
LG 234	Inter Spanish Accel -H
LG 241	Interm Classical Greek I
LG 242	Interm Classical Greek II
LG 251	Intermediate German I
LG 252	Intermediate German II
LG 271	Intermediate Russian I
LG 272	Intermediate Russian II
LG 273	Intensive Second Year Russian
LGS 101	Introductory Japanese I
LGS 102	Introductory Japanese II
LGS 106	Introductory Arabic I
LGS 107	Introductory Arabic II

LGS 110	Intro American Sign Language I
LGS 111	Intro American Sign Lang II
LGS 171	Introductory Korean I
LGS 172	Introductory Korean II
LGS 201	Intermediate Japanese I
LGS 202	Intermediate Japanese II
LGS 206	Intermediate Arabic I
LGS 207	Intermediate Arabic II
LGS 210	Intermediate ASL I
LGS 211	Intermediate ASL II
MUL 101	Introduction to Music
PHL 110	Introduction to Philosophy
PHL 120	Critical Thinking
PHL 121	Introduction to Logic
PHL 131	Introduction to Ethics
PHL 231	Social Ethics
PHL 240	Western Philosophy: Classical
REL 100	Intro to the Study of Religion
REL 200	Old Testament/Hebrew Bible
REL 201	Survey of the New Testament

#### Area III – Natural Sciences & Mathematics

A. Select 3-4 hours from the following: 3-4

MA 110	Finite Mathematics
MA 112	Precalculus Algebra
MA 113	Precalculus Trigonometry
MA 115	Precal Algebra-Trigonometry
MA 120	Calculus and Its Applications

B. Select 8-10 hours from the following: 8-10

AN 121 & 121L	Biological Anthropology and Biological Anthropology Lab
BLY 101 & 101L	Life Science I and Life Science I Laboratory
or BLY 121 & 121L	General Biology I and General Biology I Lab
BLY 102 & 102L	Life Science II and Life Science II Lab
or BLY 122 & 122L	General Biology II and General Biology II Laboratory
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab
CH 131 & 131L	General Chemistry I and General Chemistry I Lab
CH 132 & 132L	General Chemistry II and General Chemistry II Lab
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab
GY 111 & 111L	Physical Geology and Physical Geology Lab
GY 112 & 112L	Earth History and Earth History Lab
MAS 134 & 134L	Ocean Science and Ocean Science Lab

PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab	
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory	
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab	
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab	
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	

**Area IV – History, Social & Behavioral Sciences (<http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/footnote2/>)<sup>1</sup>**

A. Select one of the following:		3
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 121	World Civilization I	
HY 122	World Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
B. Complete the following:		6
PSY 120	Introduction to Psychology	
PSY 250	Life Span Development	
C. Select one of the following:		3
AN 100	Intro to Cultural Anthropology	
AN 101	Intro Archaeology-Bio Anthro	
ECO 215	Prin of Microeconomics	
ECO 216	Prin of Macroeconomics	
GEO 114	People, Places, Environment	
GEO 115	World Regional Geography	
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 121	World Civilization I	
HY 122	World Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
PSC 130	Intro to US Government	
SY 109	Introductory Sociology	
SY 112	Social Problems	

**Area V**

A. Complete the following:		
KIN 100	Concepts of Health and Fitness	3
B. Complete the following:		
PE 101-PE 157		2
<b>Total Hours</b>		<b>46-49</b>

**Footnote**

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or

history (Area IV – HY 101 & HY 102 or HY 121 & HY 122 or HY 135 & HY 136)

**Notes:**

- The following electives are recommended for Recreational Therapy students, but selections should be made with the advice and approval of the academic advisor:
- EMS 210, IST 201, KIN 380, PSY 416 (requires PSY 220 as a prerequisite), Courses may serve as prerequisites for OT/PT.

**Additional Information**

**Candidacy – Recreational Therapy**

This major contains a professional component (Candidacy) comprised of upper level courses (300-400 levels), as shown on the graduation plan, and are only available to students who have gained admission to Candidacy.

Admission Requirements for Candidacy – Recreational Therapy:

- Courses: CA 110, EH 101, EH 102, BMD 251, RTH 295, RTH 298
- Hours: 60 credit hours of degree requirements completed
- Minimum Grade Point Averages: 2.20 Major GPA, 2.20 USA GPA

Students should complete a Candidacy application in the CEPS Advising Center (UCOM 3360) the semester before they plan to enroll in Candidacy classes. The advisor, department chairperson, and dean review applications and make the decision to approve, defer, or deny admission. The decision to defer occurs when requirements are in progress at the time of application and reviewers select to defer with approval pending completion of requirements.

- Courses in Candidacy: RTH 465, RTH 466, RTH 471, RTH 495, SM 483

**Graduation Plan**

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I (CP)	3
Fine Arts	Area II, C <sup>1</sup>	3
History	Area IV, A <sup>1</sup>	3
KIN 100	Concepts of Health and Fitness	3
Math	Area III, A <sup>1</sup>	3
		<b>Hours</b>
		<b>15</b>
<b>Spring</b>		
EH 102	English Composition II (CP)	3
CA 110	Public Speaking (CP)	3
RTH 295	Intro to Therapeutic Rec (CP)	3
RTH 298	Practicum in Ther Rec (CP)	3
Science	Area III, B <sup>1</sup>	3
Science Lab	Area III, B <sup>1</sup>	1
		<b>Hours</b>
		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
BMD 251	Human Anatomy & Physiology I (CP)	4
Science	Area III, B <sup>1</sup>	3
Science Lab	Area III, B <sup>1</sup>	1
Literature	Area II, B <sup>1</sup>	3
PSY 120	Introduction to Psychology (Area IV, B) <sup>1</sup>	3

Elective	Area V, C	
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
BMD 252	Human Anatomy & Physiology II	4
Social & Behavioral Sciences	Area IV, C <sup>1</sup>	3
PE 101-PE 157	Area V, B <sup>1</sup>	1
PE 101-PE 157	Area V, B <sup>1</sup>	1
PSY 250	Life Span Development (Area IV, B) <sup>1</sup>	3
RTH 292	Outdoor Recreation-Adventure	3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
Humanities and Fine Arts	Area II, D	3
RTH 397	Recreational Therapy Interventions with Older Adults (CP)	3
KIN 370	Basic Motor Learning	3
RTH 395	Therapeutic Rec Process (W)	3
RTH 468	Facilitation Techniques in TR	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
HS 170	First Aid	1
KIN 380 or KIN 476	Kinesiology (Recreational Therapy Major Core, B) <sup>1</sup> or Exercise Physiology	3
IST 210 or KIN 461	Introduction to Disability (Recreational Therapy Major Core, C) <sup>1</sup> or PE for Atypical Child-Youth	3
Select one of the following:		3
KIN 477	Water Safety Instructor (Recreational Therapy Major Core, D)	
KIN 231	ARC Lifeguard Training (Recreational Therapy Major Core, D)	
KIN 166	Movement-Rhythms and Dev Act (Recreational Therapy Major Core, D)	
RTH 375	Mgmt in Therapeutic Recreation	3
RTH 466	TR Prog Des & Interventions II	3
<b>Hours</b>		<b>16</b>
<b>Fourth Year</b>		
<b>Fall</b>		
Major Elective	Recreational Therapy Major Core, E	1
RTH 465	TR Prog Des & Interventions I	3
RTH 471	Evaluation & Research in HKS-W <sup>2</sup>	3
SM 483	Issues in HKS	3
PSY 340	Abnormal Psychology	3
PE 101-PE 157	Area V, B <sup>1</sup>	1
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
RTH 495	Internship in Rec Therapy <sup>2</sup>	12
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>117</b>

<sup>1</sup> See General Education Requirements

<sup>2</sup> Requires admission to Candidacy

#### Notes:

- (CP) Candidacy Prerequisite
- (W) Writing-Intensive Course

## Sport Management (MS)

### Degree Requirements

(30 Hours-Fully Online Program)

In addition to satisfying the general requirements of the Graduate School, the candidate for the Master of Science degree in Sport Management must complete a minimum of 30 semester hours.

Code	Title	Hours
<b>Research and Evaluation</b>		
IDE 510	Educ Research and Evaluation	3
<b>Area of Specialization</b>		
SM 572	Sport Event Law and Risk Mgmt	3
SM 575	Sport Ldshp and Org Behavior	3
SM 584	Sport Event Marketing-Media	3
SM 585	Soc-Ethic Issues in Sport Mgmt	3
SM 586	Sport Event and Facility Mgmt	3
SM 587	Sport Business and Finance	3
Select from the following Options:		9
Thesis Option:		
IDE 620	Quantitative Methods I	
SM 599	Thesis	
Non-Thesis Option:		
KIN 500	Admin of Hlth & Phys Ed & Sprt	
SM 595	Internship in Sport Management (Completed in Last Semester of Attendance)	
Advisor Approved Elective		
<b>Total Hours</b>		<b>30</b>

### Additional Requirements

Students must successfully complete a comprehensive examination. See Graduate Student Checklist on Department Advising Sheets.

## Sport Management and Recreation Studies (BS) - Coaching Administration

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 486)		46-49
<b>Major Requirements</b>		
<i>Sport Management And Recreation Studies Major Core</i>		
A. Complete the following:		
KIN 278	Sport, Performance, & Exercise Psychology	3
KIN 475	Org-Admin Hlth and PE-W	3
SM 276	Introduction to Sport Mgt	3
SM 286	Sport Governance and Policy	3
SM 384	Sport Marketing	3
SM 391	Leadership in SMRS	3
SM 394	Sport and Business Finance	3

SM 472	Legal Issues in Sports/Rec - W (see footnote table below (p. 486)) <sup>1</sup>	3
SM 483	Issues in HKS (see footnote table below (p. 486)) <sup>1</sup>	3
SM 486	Sport/Rec Facility Plan/Design	3
SM 495	Internship in Sport Management (see footnote table below (p. 486)) <sup>1</sup>	12
SM 496	Sport and Rec Resource Mgt (see footnote table below (p. 486)) <sup>1</sup>	3

**Coaching Administration Concentration**

## A. Complete the following:

HS 262	Personal Health	3
KIN 263	Intro to Nutrition	3
KIN 370	Basic Motor Learning	3
KIN 474	Sport and Fitness Conditioning	3
KIN 478	Coaching Theory	3

## B. Select two of the following: 6

KIN 373	Coaching Volleyball	
KIN 374	Coaching Soccer	
KIN 375	Coaching Football	
KIN 376	Coaching Basketball	
KIN 377	Coaching Baseball	
KIN 378	Coaching Track and Field	

**General Electives**

## A. Complete the following:

CIS 150	Intro to Computer Applications (or elective if USA Computer Proficiency requirement is met)	3
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## B. Select five hours from the following:

ACC, BLY, BUS, CA, CH, CLS, ECO, EMT, FIN, HS, KIN 201- KN 499, LS, MA, MGT, MKT, PE 101 - PE 157 (2 hr. max), PH, PSY, ST	5
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**Minor Requirements**

A minor is not required for this degree program	0
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**Total Hours** 120-123**Footnote**<sup>1</sup> Courses require admission to Candidacy as a pre-requisite.**General Education Requirements**

Code	Title	Hours
<b>Area I – Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II – Humanities &amp; Fine Arts (<a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/footnote2/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/footnote2/</a>)<sup>1</sup></b>		
A. Complete the following:		
CA 110	Public Speaking	3
B. Select one of the following: 3		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	

EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
C. Select one of the following: 3		
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	
D. Select three hours from the following: 3		
AFR 101	Intro to African Amer Studies	
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARH 203	Survey of Non-Western Art	
ARS 101	Art Appreciation	
CLA 110	Intro Anc Greek Roman Culture	
DRA 110	Introduction to Theatre	
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
LG 101	Introductory Latin I	
LG 102	Introductory Latin II	
LG 111	Introductory French I	
LG 112	Introductory French II	
LG 121	Introductory Chinese I	
LG 122	Introductory Chinese II	
LG 131	Introductory Spanish I	
LG 132	Introductory Spanish II	
LG 141	Intro Classical Greek I	
LG 142	Intro Classical Greek II	
LG 151	Introductory German I	
LG 152	Introductory German II	
LG 153	Accelerated Intro German	
LG 171	Introductory Russian I	
LG 172	Introductory Russian II	
LG 173	Accelerated Intro Russian	
LG 201	Intermediate Latin I	
LG 202	Intermediate Latin II	
LG 211	Intermediate French I	
LG 212	Intermediate French II	
LG 213	Accelerated Inter French - H	
LG 221	Intermediate Chinese I	
LG 222	Intermediate Chinese II	
LG 231	Intermediate Spanish I	
LG 232	Intermediate Spanish II	
LG 234	Inter Spanish Accel -H	
LG 241	Interm Classical Greek I	

LG 242	Interm Classical Greek II
LG 251	Intermediate German I
LG 252	Intermediate German II
LG 271	Intermediate Russian I
LG 272	Intermediate Russian II
LG 273	Intensive Second Year Russian
LGS 101	Introductory Japanese I
LGS 102	Introductory Japanese II
LGS 106	Introductory Arabic I
LGS 107	Introductory Arabic II
LGS 110	Intro American Sign Language I
LGS 111	Intro American Sign Lang II
LGS 171	Introductory Korean I
LGS 172	Introductory Korean II
LGS 201	Intermediate Japanese I
LGS 202	Intermediate Japanese II
LGS 206	Intermediate Arabic I
LGS 207	Intermediate Arabic II
LGS 210	Intermediate ASL I
LGS 211	Intermediate ASL II
MUL 101	Introduction to Music
PHL 110	Introduction to Philosophy
PHL 120	Critical Thinking
PHL 121	Introduction to Logic
PHL 131	Introduction to Ethics
PHL 231	Social Ethics
PHL 240	Western Philosophy: Classical
REL 100	Intro to the Study of Religion
REL 200	Old Testament/Hebrew Bible
REL 201	Survey of the New Testament

**Area III – Natural Sciences & Mathematics**

A. Select 3-4 hours from the following: 3-4

MA 110	Finite Mathematics
MA 112	Precalculus Algebra
MA 113	Precalculus Trigonometry
MA 115	Precal Algebra-Trigonometry
MA 120	Calculus and Its Applications
MA 125	Calculus I

B. Select 8-10 hours from the following: 8-10

AN 121 & 121L	Biological Anthropology and Biological Anthropology Lab
BLY 101 & 101L	Life Science I and Life Science I Laboratory
or BLY 121 & 121L	General Biology I and General Biology I Lab
BLY 102 & 102L	Life Science II and Life Science II Lab
or BLY 122 & 122L	General Biology II and General Biology II Laboratory
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab
CH 131 & 131L	General Chemistry I and General Chemistry I Lab

CH 132 & 132L	General Chemistry II and General Chemistry II Lab
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab
GY 111 & 111L	Physical Geology and Physical Geology Lab
GY 112 & 112L	Earth History and Earth History Lab
MAS 134 & 134L	Ocean Science and Ocean Science Lab
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab

**Area IV – History, Social & Behavioral Sciences (<http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/footnote2/>)<sup>1</sup>**

A. Select one of the following: 3

HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 121	World Civilization I
HY 122	World Civilization II
HY 135	US History to 1877
HY 136	US History since 1877

B. Select three of the following: 9

AN 100	Intro to Cultural Anthropology
AN 101	Intro Archaeology-Bio Anthro
CA 100	Intro to Communication
CA 211	Interpersonal Comm
CJ 105	Introduction to Criminal Justice
ECO 215	Prin of Microeconomics
ECO 216	Prin of Macroeconomics
GEO 114	People, Places, Environment
GEO 115	World Regional Geography
GS 101	Intro to Gender Studies
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 121	World Civilization I
HY 122	World Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
IS 100	Global Issues
IST 201	Seasons of Life
NAS 101	Intro Native American Studies

PSC 130	Intro to US Government	
PSY 120	Introduction to Psychology	
PSY 250	Life Span Development	
SY 109	Introductory Sociology	
SY 112	Social Problems	
<b>Area V</b>		
A. Complete the following:		
KIN 100	Concepts of Health and Fitness	3
B. Select two hours from the following:		
PE 101 - PE 157 (No repeats)		2
<b>Total Hours</b>		<b>46-49</b>

**Footnote**

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236 or history (Area IV – HY 101 & HY 102 or HY 121 & HY 122 or HY 135 & HY 136).

**Additional Information**

**Candidacy – Coaching Administration**

This major contains a professional component (Candidacy) comprised of upper level courses (300-400 levels), as shown on the graduation plan, and are only available to students who have gained admission to Candidacy.

Admission Requirements for Candidacy:

- Courses: CA 110, EH 101, EH 102, KIN 278, SM 276, SM 286, SM 391
- Hours: 60 credit hours of degree requirements complete
- Minimum Grade Point Averages: 2.20 Major GPA, 2.20 USA GPA

Students should complete a Candidacy application in the CEPS Advising Center (UCOM 3360) the semester before they plan to enroll in Candidacy classes. The advisor, department chairperson, and dean review applications and make the decision to approve, defer, or deny admission. The decision to defer occurs when requirements are in progress at the time of application and reviewers select to defer with approval pending completion of requirements.

- Courses in Candidacy: RTH 471, SM 472, SM 483, SM 495, SM 496

**Graduation Plan**

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I (CP)	3
Fine Art	Area II, C <sup>1</sup>	3
History	Area IV, A <sup>1</sup>	3
KIN 100	Concepts of Health and Fitness	3
Math	Area III, A <sup>1</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EH 102	English Composition II (CP)	3
CA 110	Public Speaking (CP)	3
CIS/Elective	General Electives, A <sup>1</sup>	3
Social & Behavioral Sciences	Area IV, B <sup>1</sup>	3

Science	Area III, B <sup>1</sup>	3
Science Lab	Area III, B <sup>1</sup>	1
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
SM 286	Sport Governance and Policy (CP)	3
Science	Area III, B <sup>1</sup>	3
Science Lab	Area III, B <sup>1</sup>	1
Literature	Area II, B <sup>1</sup>	3
SM 276	Introduction to Sport Mgt (CP)	3
Social & Behavioral Sciences	Area IV, B <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Social & Behavioral Sciences	Area IV, B <sup>1</sup>	3
Humanities & Fine Arts	Area II, D <sup>1</sup>	3
HS 262	Personal Health	3
SM 391	Leadership in SMRS (CP)	3
PE 101-PE 157	PE Activity Course	1
KIN 278	Sport, Performance, & Exercise Psychology (CP)	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
KIN 263	Intro to Nutrition	3
SM 486	Sport/Rec Facility Plan/Design	3
KIN 370	Basic Motor Learning	3
KIN 475	Org-Admin Hlth and PE-W	3
SM 394	Sport and Business Finance	3
PE 101 - PE 157	PE activity course	1
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
SM 384	Sport Marketing	3
SM 483	Issues in HKS	3
Major Elective	Coaching Administration Concentration, B <sup>1</sup>	3
KIN 478	Coaching Theory	3
KIN 474	Sport and Fitness Conditioning	3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
Elective	General Electives, B <sup>1</sup>	2
SM 472	Legal Issues in Sports/Rec - W	3
Major Elective	Coaching Administration Concentration, B <sup>1</sup>	3
SM 496	Sport and Rec Resource Mgt <sup>2</sup>	3
<b>Hours</b>		<b>11</b>
<b>Spring</b>		
SM 495	Internship in Sport Management <sup>2</sup>	12
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>117</b>

<sup>1</sup> See General Education Requirements

<sup>2</sup> Required for admission to Candidacy

**Notes**

- (CP) Candidacy Prerequisite
- (W) Writing-Intensive Course

# Sport Management and Recreation Studies (BS) - Sport Administration

## Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 489)		46-49
<b>Major Requirements</b>		
<i>Sport Management And Recreation Studies Major Core</i>		
A. Complete the following:		
KIN 278	Sport, Performance, & Exercise Psychology	3
KIN 475	Org-Admin Hlth and PE-W	3
SM 276	Introduction to Sport Mgt	3
SM 286	Sport Governance and Policy	3
SM 384	Sport Marketing	3
SM 391	Leadership in SMRS	3
SM 394	Sport and Business Finance	3
SM 472	Legal Issues in Sports/Rec - W (see footnote table below (p. 489)) <sup>1</sup>	3
SM 483	Issues in HKS (see footnote table below (p. 489)) <sup>1</sup>	3
SM 486	Sport/Rec Facility Plan/Design	3
SM 495	Internship in Sport Management (see footnote table below (p. 489)) <sup>1</sup>	12
SM 496	Sport and Rec Resource Mgt (see footnote table below (p. 489)) <sup>1</sup>	3
<i>Sport Administration Concentration</i>		
A. Complete the following:		
KIN 478	Coaching Theory	3
MGT 300	Management Theory and Practice	3
MKT 320	Principles of Marketing	3
RTH 471	Evaluation & Research in HKS-W (see footnote table below (p. 489)) <sup>1</sup>	3
SM 300	Global Tourism	3
B. Select one of the following:		
RTH 292	Outdoor Recreation-Adventure	3
or SM 297	Campus Recreation	3
C. Complete three hours from BUS, CA, ECO, LS, HS, KIN, MKT, RTH, SM		
<b>General Electives</b>		
A. Complete the following:		
CIS 150	Intro to Computer Applications (or elective if USA Computer Proficiency requirement is met.)	3
B. Complete five hours from ACC, BLY, BUS, CA, CH, CLS, ECO, EMT, FIN, HS, KIN 201 - KN 499, LS, MA, MGT, MKT, PE 101 - PE 157 (2 hr. max), PH, PSY, ST		
<b>Minor Requirements</b>		
A minor is not required for this degree program		0
<b>Total Hours</b>		<b>120-123</b>

## Footnote

<sup>1</sup> Requires admission to Candidacy as a pre-requisite

## General Education Requirements

Code	Title	Hours
<b>Area I – Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II – Humanities &amp; Fine Arts (<a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/footnote2/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/footnote2/</a>)<sup>1</sup></b>		
A. Complete the following:		
CA 110	Public Speaking	3
B. Select one of the following:		
EH 215	Brit Lit before 1785	3
EH 216	Brit Lit after 1785	3
EH 225	Am Lit before 1865	3
EH 226	Am Lit after 1865	3
EH 235	World Lit before 1650	3
EH 236	World Lit after 1650	3
C. Select one of the following:		
ARH 100	Survey of Art	3
ARH 103	Art History I	3
ARH 123	Art History II	3
ARS 101	Art Appreciation	3
DRA 110	Introduction to Theatre	3
MUL 101	Introduction to Music	3
D. Select three hours of the following:		
AFR 101	Intro to African Amer Studies	3
ARH 100	Survey of Art	3
ARH 103	Art History I	3
ARH 123	Art History II	3
ARH 203	Survey of Non-Western Art	3
ARS 101	Art Appreciation	3
CLA 110	Intro Anc Greek Roman Culture	3
DRA 110	Introduction to Theatre	3
EH 215	Brit Lit before 1785	3
EH 216	Brit Lit after 1785	3
EH 225	Am Lit before 1865	3
EH 226	Am Lit after 1865	3
EH 235	World Lit before 1650	3
EH 236	World Lit after 1650	3
LG 101	Introductory Latin I	3
LG 102	Introductory Latin II	3
LG 111	Introductory French I	3
LG 112	Introductory French II	3
LG 121	Introductory Chinese I	3
LG 122	Introductory Chinese II	3
LG 131	Introductory Spanish I	3
LG 132	Introductory Spanish II	3

LG 141	Intro Classical Greek I
LG 142	Intro Classical Greek II
LG 151	Introductory German I
LG 152	Introductory German II
LG 153	Accelerated Intro German
LG 171	Introductory Russian I
LG 172	Introductory Russian II
LG 173	Accelerated Intro Russian
LG 201	Intermediate Latin I
LG 202	Intermediate Latin II
LG 211	Intermediate French I
LG 212	Intermediate French II
LG 213	Accelerated Inter French - H
LG 221	Intermediate Chinese I
LG 222	Intermediate Chinese II
LG 231	Intermediate Spanish I
LG 232	Intermediate Spanish II
LG 234	Inter Spanish Accel -H
LG 241	Interm Classical Greek I
LG 242	Interm Classical Greek II
LG 251	Intermediate German I
LG 252	Intermediate German II
LG 271	Intermediate Russian I
LG 272	Intermediate Russian II
LG 273	Intensive Second Year Russian
LGS 101	Introductory Japanese I
LGS 102	Introductory Japanese II
LGS 106	Introductory Arabic I
LGS 107	Introductory Arabic II
LGS 110	Intro American Sign Language I
LGS 111	Intro American Sign Lang II
LGS 171	Introductory Korean I
LGS 172	Introductory Korean II
LGS 201	Intermediate Japanese I
LGS 202	Intermediate Japanese II
LGS 206	Intermediate Arabic I
LGS 207	Intermediate Arabic II
LGS 210	Intermediate ASL I
LGS 211	Intermediate ASL II
MUL 101	Introduction to Music
PHL 110	Introduction to Philosophy
PHL 120	Critical Thinking
PHL 121	Introduction to Logic
PHL 131	Introduction to Ethics
PHL 231	Social Ethics
PHL 240	Western Philosophy: Classical
REL 100	Intro to the Study of Religion
REL 200	Old Testament/Hebrew Bible
REL 201	Survey of the New Testament

**Area III – Natural Sciences & Mathematics**

A. Select 3-4 hours from the following: 3-4

MA 110 Finite Mathematics

MA 112	Precalculus Algebra
MA 113	Precalculus Trigonometry
MA 115	Precal Algebra-Trigonometry
MA 120	Calculus and Its Applications
MA 125	Calculus I
B. Select 8-10 hours from the following:	8-10
AN 121 & 121L	Biological Anthropology and Biological Anthropology Lab
BLY 101 & 101L	Life Science I and Life Science I Laboratory
or BLY 121 & 121L	General Biology I and General Biology I Lab
BLY 102 & 102L	Life Science II and Life Science II Lab
or BLY 122 & 122L	General Biology II and General Biology II Laboratory
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab
CH 131 & 131L	General Chemistry I and General Chemistry I Lab
CH 132 & 132L	General Chemistry II and General Chemistry II Lab
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab
GY 111 & 111L	Physical Geology and Physical Geology Lab
GY 112 & 112L	Earth History and Earth History Lab
MAS 134 & 134L	Ocean Science and Ocean Science Lab
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab

**Area IV – History, Social & Behavioral Sciences (<http://bulletin.southalabama.edu/programs-az/education-professional-studies/health-kinesiology-sport/footnote2/>)<sup>1</sup>**

A. Select one of the following: 3

HY 101 HY of Western Civilization I

HY 102 HY of Western Civilization II

HY 121 World Civilization I

HY 122 World Civilization II

HY 135 US History to 1877

HY 136 US History since 1877

B. Select three of the following: 9

AN 100	Intro to Cultural Anthropology
AN 101	Intro Archaeology-Bio Anthro
CA 100	Intro to Communication
CA 211	Interpersonal Comm
CJ 105	Introduction to Criminal Justice
ECO 215	Prin of Microeconomics
ECO 216	Prin of Macroeconomics
GEO 114	People, Places, Environment
GEO 115	World Regional Geography
GS 101	Intro to Gender Studies
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 121	World Civilization I
HY 122	World Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
IS 100	Global Issues
IST 201	Seasons of Life
NAS 101	Intro Native American Studies
PSC 130	Intro to US Government
PSY 120	Introduction to Psychology
PSY 250	Life Span Development
SY 109	Introductory Sociology
SY 112	Social Problems

**Area V**

A. Complete the following:

KIN 100	Concepts of Health and Fitness	3
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B. Select two hours from the following:

PE 101 - PE 157 (No repeats)	2
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**Total Hours 46-49**

**Footnote**

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 121 & HY 122 or HY 135 & HY 136).

**Additional Information**

**Candidacy – Sport Administration**

This major contains a professional component (Candidacy) of upper level courses (300-400 levels), as shown on the graduation plan, and are only available to students who have gained admission to Candidacy.

Admission Requirements for Candidacy:

- Courses: CA 110, EH 101, EH 102, KIN 278, SM 276, SM 286, SM 391
- Hours: 60 credit hours of degree requirements complete
- Minimum Grade Point Averages: 2.20 Major GPA, 2.20 USA GPA

Students should complete a Candidacy application in the CEPS Advising Center (UCOM 3360) the semester before they plan to enroll in Candidacy classes. The advisor, department chairperson, and dean review applications and make the decision to approve, defer, or deny admission. The decision to defer occurs when requirements are in progress at the

time of application and reviewers select to defer with approval pending completion of requirements.

- Courses in Candidacy: RTH 471, SM 472, SM 483, SM 495, SM 496

**Graduation Plan**

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I (CP)	3
Fine Art	Area II, C <sup>1</sup>	3
History	Area IV, A <sup>1</sup>	3
KIN 100	Concepts of Health and Fitness	3
Math	Area III, A <sup>1</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EH 102	English Composition II (CP)	3
CA 110	Public Speaking (CP)	3
CIS/Elective	General Electives, A <sup>1</sup>	3
Social & Behavioral Sciences	Area IV, B <sup>1</sup>	3
Science	Area III, B <sup>1</sup>	3
Science Lab	Area III, B <sup>1</sup>	1
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
SM 286	Sport Governance and Policy (CP)	3
Science	Area III, B <sup>1</sup>	3
Science Lab	Area III, B <sup>1</sup>	1
Literature	Area II, B <sup>1</sup>	3
SM 276	Introduction to Sport Mgt (CP)	3
Social & Behavioral Sciences	Area IV, B <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Social & Behavioral Sciences	Area IV, B <sup>1</sup>	3
Humanities & Fine Arts	Area II, D <sup>1</sup>	3
KIN 278	Sport, Performance, & Exercise Psychology (CP)	3
SM 391	Leadership in SMRS (CP)	3
PE 101-PE 157	PE Activity Course	1
MGT 300	Management Theory and Practice	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
SM 486	Sport/Rec Facility Plan/Design	3
RTH 292 or SM 297	Outdoor Recreation-Adventure or Campus Recreation	3
KIN 475	Org-Admin Hlth and PE-W	3
SM 394	Sport and Business Finance	3
PE 101 - PE 157	PE activity course	1
<b>Hours</b>		<b>13</b>
<b>Spring</b>		
SM 384	Sport Marketing	3
SM 483	Issues in HKS	3
Major Elective	Sport and Recreation Management Concentration, C <sup>1</sup>	3
KIN 478	Coaching Theory	3
SM 300	Global Tourism	3
<b>Hours</b>		<b>15</b>

Fourth Year		
<b>Fall</b>		
Elective	General Electives, B <sup>1</sup>	3
SM 472	Legal Issues in Sports/Rec - W	3
Elective	General Electives, B <sup>1</sup>	2
SM 496	Sport and Rec Resource Mgt <sup>2</sup>	3
<b>Hours</b>		<b>11</b>
<b>Spring</b>		
SM 495	Internship in Sport Management <sup>2</sup>	12
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>114</b>

<sup>1</sup> See General Education Requirements

<sup>2</sup> Required for admission to Candidacy

#### Notes

- (CP) Candidacy Prerequisite
- (W) Writing-Intensive Course

## Sport Management and Recreation Studies Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

Code	Title	Hours
SM 276	Introduction to Sport Mgt	3
SM 391	Leadership in SMRS	3
Select five from the following:		15
SM 286	Sport Governance and Policy	
SM 297	Campus Recreation	
SM 300	Global Tourism	
SM 384	Sport Marketing	
SM 394	Sport and Business Finance	
SM 472	Legal Issues in Sports/Rec - W	
SM 486	Sport/Rec Facility Plan/Design	
SM 496	Sport and Rec Resource Mgt	
KIN 475	Org-Admin Hlth and PE-W	
KIN 478	Coaching Theory	
<b>Total Hours</b>		<b>21</b>

See Sport Management and Recreation Studies academic advisor for help with course selection.

## Hospitality and Tourism Management Department Information

(251) 461-1902

Department of Hospitality and Tourism Management  
<https://www.southalabama.edu/colleges/ceps/htm/>

Title	Name
Department Chair	Khaldoon Nusair
Assistant Professor	Min Hwang
Senior Instructor	Amanda Donaldson

#### Program Overview:

Students at South who earn a bachelor's degree in hospitality and tourism management become dynamic leaders in one of the fastest-growing industries in the world. Starting Fall 2024, the department is offering two accredited degree concentrations focused on events marketing and management and global leadership.

#### 1. Events Marketing and Management Concentration

The Meetings, Incentives, Conventions, and Events (MICE) industry is a crucial segment in the Hospitality and Tourism industry. According to the U.S. Bureau of Labor Statistics, this market segment adds about 15,200 jobs annually. The degree will prepare students to become event planning professionals. The Events Marketing and Management concentration provides the coursework in essential topics such as the day-to-day operations of an event planner, coordinating with clients and vendors, marketing basics, creating event styles and themes, business fundamentals, and nurturing students' skills to meet the employment outlook in the MICE industry.

Title	Name
General Education	41
General Electives	6
HTM Major Core Requirements	49
Events Marketing and Management Concentration	24
<b>Total Hours</b>	<b>120</b>

#### 2. Global Leadership Concentration

The Bureau of Labor Statistics projects the U.S. economy to add 8.3 million jobs from 2021 to 2031. Of those, 1.9 million jobs—23.1 percent of all new jobs projected—are expected to be in leisure and hospitality. The Global Leadership concentration equips students with the skills needed to meet the employment outlook in the hospitality and tourism industry. Potential employment opportunities include: operations and service management, leadership and strategic management, financial and human resource management, global leadership, and personal and professional career development. Students also build problem-solving, communication, critical thinking, analytical, and research skills.

Title	Name
General Education	41
General Electives	6
HTM Major Core Requirements	49
Global Leadership Concentration	24
<b>Total Hours</b>	<b>120</b>

#### The HyFlex Program:

South's hospitality and tourism management courses are now available via hybrid-flexible (hyflex) instruction. The new hyflex model is an added benefit for community college graduates and working professionals. This instructional modality allows students to participate in some parts of a

course via videoconferencing technology rather than having to attend the class meeting in person.

## Degrees, Programs, or Concentrations

- Hospitality and Tourism Management (BS) (p. 495)
- Hospitality and Tourism Management (BS) Events Marketing and Management Concentration (<http://bulletin.southalabama.edu/programs-az/education-professional-studies/hospitality-tourism-management/hospitality-tourism-management-bs-events-concentration/>)
- Hospitality and Tourism Management (BS) Global Leadership Concentration (<http://bulletin.southalabama.edu/programs-az/education-professional-studies/hospitality-tourism-management/hospitality-tourism-management-bs-global-ldr-concentration/>)
- Hospitality and Tourism Management Minor (p. 498)

## Courses

### HTM 200 Intro to Hosp & Tour Ind 3 cr

This course provides students with a comprehensive introduction to the many entities that make up the hospitality industry, such as hotels, restaurants, clubs, cruise lines, and casino hotels. Students will learn about hospitality careers, the importance of service, and how hotels and restaurants are organized, as well as an overview of today's hot issues, including ethical challenges and management concerns.

### HTM 210 Food & Bev Serv Mngt 3 cr

This course focuses on the tools necessary for managing food service operations in today's aggressive business environment. Students learn how to position, manage, and leverage a successful food service operation - commercial and non-commercial - in a variety of venues. Using a menu-driven approach, the course examines a variety of management tools, best practices, and techniques.

**Prerequisite:** HTM 200 Minimum Grade of D

### HTM 212 Food Sanitation and Safety 3 cr

In this course students are introduced to food safety principles and applications, the Hazard Analysis Critical Control Point System (HACCP), microbiology of food safety, infection control, and safety and environmental issues related to the foodservice and hospitality industry. Students completing the course are eligible to take the ServSafe exam offered by the National Restaurant Association.

### HTM 216 Fund. of Hosp. Financial Mgt. 3 cr

This course is designed to provide hospitality and tourism students with a solid foundation of accounting concepts and methods of financial analysis that is required to be successful in the hospitality industry. The course provides students with a fundamental understanding of using numbers to operate various departments and analyze management reports and financial statements.

**Prerequisite:** (HTM 200 Minimum Grade of D)

### HTM 220 Mtgs., Inc., Conv., Events 3 cr

This course will introduce students to multiple component of events management, including planning, marketing, ticketing, budgeting, operations, and evaluation. Students will engage in instruction, observation, and analysis in order to apply knowledge and theory to a specific event. The course will be delivered in a blended format.

**Prerequisite:** HTM 200 Minimum Grade of D

### HTM 250 Hospitality HR Management 3 cr

This course is an introduction to hospitality management, including an overview of management in the hospitality industry and professional opportunities. The concepts and practices of hospitality management are examined and discussed. The scope and forms of hospitality organizations (e.g. food and lodging, resorts, tourism enterprises, conventions, events, attractions, etc.) are reviewed, as well as local and global trends within these organizations.

**Prerequisite:** HTM 200 Minimum Grade of D

**Cross-Listed:** HTM 350

### HTM 310 Global Leadership for HTM 3 cr

This course examines principles of visionary global leadership in the hospitality industry by exploring leadership concepts, theories and fundamentals. Students begin to define their leadership paradigms, and identify leadership strategies that ameliorate personal and professional success.

**Prerequisite:** HTM 200 Minimum Grade of D

### HTM 312 Hospitality Service Culture 3 cr

This course explores the dimensions of successful service environments, comprised of various factors, including the values, beliefs, norms, rituals and practices, within hospitality organization. In this course, students will learn the value a customer-centric approach brings to an organization through the creation of a positive consumer experience. The course focuses on hospitality service culture and methods for implementation, management and improvements within the service delivery process by making customer care part of the organization's mission, vision, values and goals to garner a competitive advantage in the marketplace.

### HTM 315 Hospitality/Tourism Marketing 3 cr

This course is designed to provide a broad overview of essential marketing, promotion, and sales principles currently applied in the tourism and hospitality industries. It provides an introduction to marketing theories, principles, and concepts, and an exploration of the role of marketing within a globalized hospitality organization. Students will identify marketing strategies, differentiate services marketing, explain the role of customer expectation, analyze market segments, evaluate target marketing, and demonstrate the ability to effectively communicate using audio visual materials. The focus is on achieving a competitive advantage in a global market. Students will also examine the trends, issues and problems influencing tourism and hospitality marketing in a dynamic intercultural environment.

**Prerequisite:** HTM 200 Minimum Grade of D

### HTM 318 Hospitality Industry Managerial Accounting 3 cr

The study of managerial accounting practices as they relate to the hospitality and tourism industry. Students will learn the skills to conduct analyses and make effective decisions based on a thorough understanding of financial statements. A variety of financial performance analytical models used to support decision making in the hospitality industry will be examined related to realistic budget development, forecast and plan cash flow.

### HTM 320 Destination Mgmt. & Marketing 3 cr

The purpose of this course is to equip students with an understanding of the principles of destination management and marketing. Techniques for soliciting a variety of markets, planning presentations, and assessing economic impact of bookings, along with the role of convention bureaus as a catalyst to regional economic development will be important components of this course. The internal operations of a destination marketing organization organization, including stakeholder care, financial management, human resources management, and governance will also be explored.

**Prerequisite:** HTM 200 Minimum Grade of D

**HTM 330 Cruise Operations Management 3 cr**

The course provides an introduction to the cruise market and the reasons for its significant growth. The principles, practices, and philosophies of cruising, along with cruise line employee roles and responsibilities are examined. Strategies for management and marketing are explored.

**HTM 340 Special Events Management 3 cr**

Emphasis is placed on the special events sector consisting of private and public events, sporting events, weddings, fairs and festivals. Various categories of special events and their unique content tailored to their specific objectives are discussed. Experiential learning through professional experiences involving observation and participation in event settings is required.

**HTM 362 Hospitality Information Systems 3 cr**

Examination of information system applications used in hospitality functional areas such as operation, marketing and sales, human resources, and accounting and finance.

**HTM 382 Digital Marketing in Hospitality and Tourism 3 cr**

Understand the role of digital marketing in the hospitality and tourism industry by examining the fundamentals, frameworks, tools and strategies for successful digital marketing and consumer engagement. Students will learn how to apply technology and social media to leverage success across wide areas of the hospitality and tourism sectors that incorporate digital technologies. Topics include marketing mix, relationship marketing, campaign planning, and marketing communications.

**HTM 396 HTM Career Planning 3 cr**

This course teaches students to perform a good-fit analysis by aligning career and employer choices with self-assessment, determine competencies gaps, and develop a strategic professional development plan. Three credit hours. Offered in web-enhanced and web-blended formats.

**Prerequisite:** HTM 200 Minimum Grade of D

**HTM 397 Study Abroad - Culinary 3 cr**

This course is designed to engage students in active learning related to international culture, cuisine, and culinary practice in settings outside the United States. Through participation in the course, students will explore the culture of the host country, cuisine as it is related to the culture, and common food preparation and service practices. Activities include readings, lectures, discussions, reflective journaling, tours, observations, and active engagement in food preparation and service.

**HTM 398 Study Abroad - Intl Hosp Mgt 3 cr**

This course is designed to engage students in active learning related to international hospitality management in settings outside the United States. Through participation in the course, students will explore the culture, management practices, and service standards in the host country related to the hospitality industry. Activities include readings, lectures, discussions, reflective journaling, tours, and observations.

**HTM 400 Legal Issues in HTM 3 cr**

This course will provide a comprehensive study of the legal aspects of the hospitality industry with an emphasis on compliance and prevention of liabilities. The course is not intended to replace the legal services of an attorney, but rather provide an overview of common legal issues in the field of hospitality and tourism management. 3 credit hours. Blended or online.

**Prerequisite:** HTM 200 Minimum Grade of D

**HTM 410 Sustainable and Eco-Tourism 4 cr**

Examine the interaction of ecotourism with social, natural and cultural environments as well as the impacts of ecotourism on the environment and global societies.

**Prerequisite:** HTM 200 (may be taken concurrently) Minimum Grade of D

**HTM 435 Quality Service Management - W 3 cr**

This course is designed to prepare students to understand, challenge, and refine the principles of guest-services management in an organization. Theories and concepts of service will be explored with emphasis on identifying customer preferences and a systematic process for organizations to design service delivery systems and implement a successful quality service environment that consistently meets and exceeds customer expectations. This course is a designated writing intensive course (W) and all major writing assignments must be satisfactorily completed in order to receive credit for the course. Prerequisites: EH 102 or EH 105, or placement; HTM 200 Introduction to Hospitality and Tourism Management.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and HTM 200 Minimum Grade of D

**HTM 440 Lodging Management 3 cr**

This course is an exploration of issues facing the hotel and lodging industry. The goal of the course is to prepare students for the hospitality industry with a specific focus on the hotel industry. It will introduce students to multiple components of lodging management, including: sales and marketing; front office, housekeeping, maintenance and accounting departments; food and beverage operations for full-and limited-service hotels; safety and securing; careers in the lodging industry. Students will engage in instruction, observation, and analysis in order to apply knowledge and theory to specific hospitality lodging situations. The course will be delivered in a blended format or online format.

**Prerequisite:** HTM 200 Minimum Grade of D

**HTM 445 HTM Financial Reporting 3 cr**

This course is designed to provide hospitality and tourism students with a solid foundation of accounting concepts and methods of financial analysis that is required to be successful in the hospitality industry. The course provides students with a fundamental understanding of using numbers to operate various departments and analyze management reports and financial statements.

**Prerequisite:** HTM 200 Minimum Grade of D

**HTM 450 Non-Traditional Lodging 3 cr**

This course will provide students with an in-depth study into the unique world of "non-traditional" lodging, the condominium resort and vacation ownership industry and other forms of non-traditional lodging. The course focuses on the hospitality aspects of the condominium resort, vacation ownership industry, and recreation and park lodging, and specifically on how non-traditional lodging operations differ from traditional lodging operations such as hotels, motels, and resorts.

**Prerequisite:** HTM 200 Minimum Grade of D

**HTM 455 Advanced Meetings, Incentives, Conventions, Events 3 cr**

An advanced course that builds upon and expands the foundational concepts introduced in HTM 220. This project-centered course offers a hands-on learning experience, enabling students to plan and execute events by integrating the knowledge acquired from their previous Hospitality and Tourism courses. The course is designed to empower students to further enhance their management and leadership skills, equipping them for future careers in the events industry.

**Prerequisite:** HTM 220 Minimum Grade of D

**HTM 490 Special Topics 1-4 cr**

This course is designed as an educational tool for college students to develop a theoretical understanding of the concept of servant leadership as it applies to the hospitality and tourism management industry, and to acquire and apply fundamental hospitality and tourism workplace competencies through "real-world" experiential learning activities that include "earning the right to lead" through engagement and visible leadership. Students will complete online learning modules related to theory and practice while also engaging in experiential learning activities in a hospitality organization.

**HTM 494 Directed Studies 1-4 cr**

Directed study on a topic of special interest or significance in the field of hospitality and tourism management. Course requirements can be met through research, reading, writing, or lab activities, as approved by the department chair and supervising instructor. May be taken for 1-4 credit hours. May be repeated, if content varies, for up to six hours of credit. Prerequisites: Junior or Senior standing and approval of department chair and supervising instructor.

Faculty Name	Faculty Department
DONALDSON, AMANDA BETH (amandadonaldson@southalabama.edu)	Hospitality and Tourism
HWANG, EUN MIN (minhwang@southalabama.edu)	Hospitality and Tourism
NUSAIR, KHALDOON (knusair@southalabama.edu)	Hospitality and Tourism

**HTM 496 Internship I Capstone Exp - W 3 cr**

This pre-internship course examines the impact of business environments on personal and career effectiveness in the Hospitality field. Topics include effective business communication, ethical decision making, and leadership development.

**Prerequisite:** EH 102 Minimum Grade of C or EH 105 Minimum Grade of C and HTM 200 (may be taken concurrently) Minimum Grade of D

**Corequisite:** HTM 498

**HTM 498 Internship II 3 cr**

This Internship II course provides students an opportunity to receive supervised, relevant, and practical experience in work that is related to the objectives of the Hospitality and Tourism Management (HTM) program.

**Prerequisite:** EH 102 Minimum Grade of C or EH 105 Minimum Grade of C and HTM 200 Minimum Grade of D

**Corequisite:** HTM 496

## Faculty

Faculty Position	Degrees Held
Instructor	BS, University of Alabama MS, University of Alabama
Assistant Professor	BS, University of Nevada-Las Vegas MS, University of Houston PHD, University of Nevada-Las Vegas
Professor	MS, SUNY at Stony Brook MS, SUNY at Stony Brook PHD, Ohio State U-Main Campus

# Hospitality and Tourism Management (BS)

## Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 496)		41-44
<b>General Electives</b>		
Electives 100-499		6
<b>Major Requirements</b>		
<i>Hospitality and Tourism Management Major Core</i>		
HTM 200	Intro to Hosp & Tour Ind	3
HTM 210	Food & Bev Serv Mngt	3
HTM 212	Food Sanitation and Safety	3
HTM 216	Fund. of Hosp. Financial Mgt.	3
HTM 220	Mtgs., Inc., Conv., Events	3
HTM 310	Global Leadership for HTM	3
HTM 315	Hospitality/Tourism Marketing	3
HTM 318	Hospitality Industry Managerial Accounting	3
HTM 350		3
HTM 382	Digital Marketing in Hospitality and Tourism	3
HTM 396	HTM Career Planning	3
HTM 410	Sustainable and Eco-Tourism	4
HTM 435	Quality Service Management - W	3

HTM 440	Lodging Management	3
<i>Capstone</i>		
A. Complete the following:		
HTM 496	Internship I Capstone Exp - W	3
HTM 498	Internship II	3
<b>Concentrations</b>		
(Choose one below from Events Marketing and Management OR Global Leadership)		
<b>Events Marketing and Management</b>		
CA 101	Intro to Media	3
APR 221	Advertising Principles	3
APR 224	Public Relations Principles	3
HTM 320	Destination Mgmt. & Marketing	3
HTM 340	Special Events Management	3
HTM 455	Advanced Meetings, Incentives, Conventions, Events	3
SM 384	Sport Marketing	3
Elective		
-Advisor Approved 100-499 from APR, CA, HTM, SM		3
<b>Global Leadership</b>		
HTM 320	Destination Mgmt. & Marketing	3
HTM 330	Cruise Operations Management	3
IST 495	Prof Leadership & Teamwork	3
OL 300	Introduction to Organizational Leadership	3
SM 300	Global Tourism	3
SM 391	Leadership in SMRS	3

Electives	
100-499 (Recommended: HTM, IST, OL, SM)	6
<b>Minor Requirements</b>	
A minor is not required for this degree program	0
<b>Total Hours</b>	<b>144-147</b>

## General Education Requirements

Code	Title	Hours
<b>Area I – Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II – Humanities &amp; Fine Arts</b>		
A. Complete the following:		
CA 110	Public Speaking	3
B. Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/hospitality-tourism-management/footnote1/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/hospitality-tourism-management/footnote1/</a> ) <sup>1</sup>		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
C. Select one of the following:		
ARH 100	Survey of Art	3
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	
D. Select three hours from the following:		
AFR 101	Intro to African Amer Studies	3
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARH 203	Survey of Non-Western Art	
ARS 101	Art Appreciation	
CLA 110	Intro Anc Greek Roman Culture	
DRA 110	Introduction to Theatre	
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
LG 101	Introductory Latin I	
LG 102	Introductory Latin II	
LG 111	Introductory French I	
LG 112	Introductory French II	
LG 121	Introductory Chinese I	
LG 122	Introductory Chinese II	

LG 131	Introductory Spanish I
LG 132	Introductory Spanish II
LG 141	Intro Classical Greek I
LG 142	Intro Classical Greek II
LG 151	Introductory German I
LG 152	Introductory German II
LG 153	Accelerated Intro German
LG 171	Introductory Russian I
LG 172	Introductory Russian II
LG 173	Accelerated Intro Russian
LG 201	Intermediate Latin I
LG 202	Intermediate Latin II
LG 211	Intermediate French I
LG 212	Intermediate French II
LG 213	Accelerated Inter French - H
LG 221	Intermediate Chinese I
LG 222	Intermediate Chinese II
LG 231	Intermediate Spanish I
LG 232	Intermediate Spanish II
LG 234	Inter Spanish Accel -H
LG 241	Interm Classical Greek I
LG 242	Interm Classical Greek II
LG 251	Intermediate German I
LG 252	Intermediate German II
LG 271	Intermediate Russian I
LG 272	Intermediate Russian II
LG 273	Intensive Second Year Russian
LGS 101	Introductory Japanese I
LGS 102	Introductory Japanese II
LGS 106	Introductory Arabic I
LGS 107	Introductory Arabic II
LGS 110	Intro American Sign Language I
LGS 111	Intro American Sign Lang II
LGS 171	Introductory Korean I
LGS 172	Introductory Korean II
LGS 201	Intermediate Japanese I
LGS 202	Intermediate Japanese II
LGS 206	Intermediate Arabic I
LGS 207	Intermediate Arabic II
LGS 210	Intermediate ASL I
LGS 211	Intermediate ASL II
MUL 101	Introduction to Music
PHL 110	Introduction to Philosophy
PHL 120	Critical Thinking
PHL 121	Introduction to Logic
PHL 131	Introduction to Ethics
PHL 231	Social Ethics
PHL 240	Western Philosophy: Classical
REL 100	Intro to the Study of Religion
REL 200	Old Testament/Hebrew Bible
REL 201	Survey of the New Testament

### Area III – Natural Sciences & Mathematics

A. Select 3-4 hours from the following: 3-4

MA 110	Finite Mathematics
MA 112	Precalculus Algebra
MA 113	Precalculus Trigonometry
MA 115	Precalgebra-Trigonometry
MA 120	Calculus and Its Applications
MA 125	Calculus I
MA 126	Calculus II
MA 227	Calculus III
MA 237	Linear Algebra I
MA 238	Differential Equations I

B. Select 8-10 hours from the following: 8-10

AN 121 & 121L	Biological Anthropology and Biological Anthropology Lab
BLY 101 & 101L	Life Science I and Life Science I Laboratory
or BLY 121 & 121L	General Biology I and General Biology I Lab
BLY 102 & 102L	Life Science II and Life Science II Lab
or BLY 122 & 122L	General Biology II and General Biology II Laboratory
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab
CH 131 & 131L	General Chemistry I and General Chemistry I Lab
CH 132 & 132L	General Chemistry II and General Chemistry II Lab
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab
GY 111 & 111L	Physical Geology and Physical Geology Lab
GY 112 & 112L	Earth History and Earth History Lab
MAS 134 & 134L	Ocean Science and Ocean Science Lab
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab

**Area IV – History, Social & Behavioral Sciences (<http://bulletin.southalabama.edu/programs-az/education-professional-studies/hospitality-tourism-management/footnote1/>)<sup>1</sup>**

A. Select one of the following: 3

HY 101	HY of Western Civilization I
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HY 102	HY of Western Civilization II
HY 121	World Civilization I
HY 122	World Civilization II
HY 135	US History to 1877
HY 136	US History since 1877

B. Select two of the following: 6

AN 100	Intro to Cultural Anthropology
AN 101	Intro Archaeology-Bio Anthro
CA 100	Intro to Communication
CA 211	Interpersonal Comm
CJ 105	Introduction to Criminal Justice
GEO 114	People, Places, Environment
GEO 115	World Regional Geography
GS 101	Intro to Gender Studies
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 121	World Civilization I
HY 122	World Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
IS 100	Global Issues
IST 201	Seasons of Life
NAS 101	Intro Native American Studies
PSC 130	Intro to US Government
PSY 120	Introduction to Psychology
PSY 250	Life Span Development
SY 109	Introductory Sociology
SY 112	Social Problems

C. Complete the following:

ECO 215	Prin of Microeconomics	3
or ECO 216	Prin of Macroeconomics	

**Total Hours 41-44**

**Footnote**

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 121 & HY 122 or HY 135 & HY 136)

**Graduation Plan**

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I	3
Fine Art	Area II, C <sup>1</sup>	3
Math	Area III, A <sup>1</sup>	3
Science	Area III, B <sup>1</sup>	3
Science Lab	Area III, B <sup>1</sup>	1
HTM 200	Intro to Hosp & Tour Ind	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
EH 102	English Composition II	3

CA 110	Public Speaking	3
Science	Area III, B <sup>1</sup>	3
Science Lab	Area III, B <sup>1</sup>	1
ECO 215 or ECO 216	Prin of Microeconomics (Area IV, C) <sup>1</sup> or Prin of Macroeconomics	3
HTM 210	Food & Bev Serv Mngt	3
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
Literature	Area II, B <sup>1</sup>	3
ACC 211	Financial Accounting	3
HTM 220	Mtgs., Inc., Conv., Events	3
Social & Behavioral Sciences	Area IV, B <sup>1</sup>	3
History	Area IV, A <sup>1</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Social & Behavioral Sciences	Area IV, B <sup>1</sup>	3
Humanities & Fine Arts	Area II, D <sup>1</sup>	3
HTM 212	Food Sanitation and Safety	3
Elective		3
Elective <sup>2</sup>		3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
HTM 310	Global Leadership for HTM	3
HTM 315	Hospitality/Tourism Marketing (C)	3
Elective		3
Elective		3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
HTM 410	Sustainable and Eco-Tourism	4
HTM 435	Quality Service Management - W	3
HTM 440	Lodging Management	3
HTM 396	HTM Career Planning	3
Elective		3
<b>Hours</b>		<b>16</b>
<b>Fourth Year</b>		
<b>Fall</b>		
HTM 350		3
HTM 400	Legal Issues in HTM	3
HTM 445	HTM Financial Reporting	3
Elective		3
Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
HTM 496	Internship I Capstone Exp - W	3
HTM 498	Internship II	3
Elective		3
Elective		3
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> See General Education Requirements<sup>2</sup> Recommended Course: HTM 212**Notes:**

- HTM 200 is the prerequisite for all HTM core courses.
- (W) Courses that satisfy USA writing requirement.

## Hospitality and Tourism Management Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

Students in other colleges may elect, with the approval of their department chair, an HTM minor in the College of Education and Professional Studies. A 2.0 GPA is required for the courses applied toward the minor. The HTM minor allows students to enhance their major degrees with exposure to a program that prepares students for local and global hospitality and tourism careers. The required courses provide students an overview of the foundational elements of the industry, while the elective courses offer more in-depth exposure to the various sectors within the industry.

The minor consists of **18 credit hours** as follows:

Code	Title	Hours
<b>Required Courses (3 credit hours)</b>		
HTM 200	Intro to Hosp & Tour Ind	3
<b>Elective Courses (15 credit hours)</b>		
HTM 210	Food & Bev Serv Mngt	3
HTM 212	Food Sanitation and Safety	3
HTM 216	Fund. of Hosp. Financial Mgt.	3
HTM 318	Hospitality Industry Managerial Accounting	3
HTM 320	Destination Mgmt. & Marketing	3
HTM 396	HTM Career Planning	3
HTM 397	Study Abroad - Culinary	3
HTM 398	Study Abroad - Intl Hosp Mgt	3
HTM 450	Non-Traditional Lodging	3
HTM 490	Special Topics	1-4
HTM 494	Directed Studies	1-4
HTM 496	Internship I Capstone Exp - W	3
HTM 498	Internship II	3
HTM 310	Global Leadership for HTM	3
HTM 315	Hospitality/Tourism Marketing	3
HTM 350		3
HTM 435	Quality Service Management - W	3
HTM 220	Mtgs., Inc., Conv., Events	3
HTM 312	Hospitality Service Culture	3
HTM 330	Cruise Operations Management	3
HTM 410	Sustainable and Eco-Tourism	4
HTM 440	Lodging Management	3

## Integrative Studies

### Department Information

(251) 460-6263

Department of Integrative Studies website

<http://www.southalabama.edu/colleges/ceps/integrative/index.html>  
(<http://www.southalabama.edu/colleges/ceps/integrative/>)

## Department of Integrative Studies Staff

Title	Name
Chair	Paige A. Vitulli
Assistant Professors	Manders, Moody
Associate Professor	Adams

The **Department of Integrative Studies (INGS)** offers the **Interdisciplinary Studies** and **Organizational Leadership** programs. Faculty are professionals from various backgrounds with expertise in interdisciplinary studies, organizational leadership, business, management, marketing, international relations, instructional design, social science, political science, history, community counseling, educational research, teacher education and child & family development.

The **Interdisciplinary Studies degree (IST)** is a customizable program which is designed to give students a variety of options in earning a bachelors of science or arts (BS or BA). The degree builds skills in communication, cultural competency, analytical thinking, leadership, and teamwork. Emphasis is on the importance of becoming an active leader, effective team member, and engaged global citizen. The degree is tailored to meet the needs and interests of our students and can be completed fully on-line.

The **Organizational Leadership degree (OL)** is designed to help students demonstrate they have the abilities to oversee organizations and help them grow. This bachelors of science (BS) degree provides students with knowledge, skills and abilities to: lead teams; create programs; boost productivity; facilitate ethical practices; promote teamwork; negotiate; resolve conflict; design, develop, implement and evaluate training; manage organizational finances; and promote a healthy and productive work environment.

New employers in the region are facing a range of leadership needs in industry, business, non-profit, health services and military. Opportunities for leadership in maritime, aerospace, logistics, engineering, construction, petrochemical, hospitality and many other areas of expertise are growing.

## Degrees, Programs, or Concentrations

- Interdisciplinary Studies (BS or BA) (p. 503)
- Interdisciplinary Studies Minor (p. 506)
- Organizational Leadership (BS) (p. 506)

## Courses

### International Studies (IS)

#### IS 100 Global Issues 3 cr

This course introduces students to the basic structural components of the global system, including the nation-state system and the world economy, and explores the major schools of thought in such areas as security, economic prosperity and development, international law, gender and environmental studies. The course helps students understand the complex and interlinked issues facing global society, and current problems, and view the U.S. within a broader global context.

#### IS 193 Study Abroad 1-6 cr

This course is an introductory International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

#### IS 200 People-Nations - 3 cr

Variable content course focusing on particular nation or region of the world. Course offers a multi-disciplinary introduction to the people, society and politics. May be repeated for credit when content varies up to a total of 6 hours.

#### IS 210 Global Engagement Orientation 1 cr

This course introduces students to international global issues, allows students to identify opportunities for active engagement in these issues, and provides the framework for successful completion of the Global Engagement Certificate.

#### IS 290 Special Topics - 3 cr

Study of selected topics within a particular Area Studies Concentration. May be repeated for credit when content varies.

**Prerequisite:** IS 100 Minimum Grade of D

#### IS 293 Study Abroad 1-6 cr

This course is an introductory International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

#### IS 363 Crime and Politics in LatinAm 3 cr

An examination of the violent crime epidemic affecting many parts of Latin America, with specific focus on the themes of democratic transition, political economy, and foreign relations with the United States. Same as PSC 363 and CJ 363.

**Prerequisite:** (PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or IS 100 Minimum Grade of C)

**Cross-Listed:** CJ 363, PSC 363

#### IS 371 Studies in Russia 3-6 cr

This course will cover specific topics in the history, politics, and culture of modern Russian civilization. May be repeated for credit when content varies.

#### IS 372 Studies in E. Europe & C. Asia 3-6 cr

This course will cover specific topics in the history, politics, and culture of modern Eastern European and Central Asian civilizations. May be repeated for credit when content varies.

#### IS 390 Sp Top- 1-3 cr

Advanced study of selected topics within a particular concentration. May be repeated for credit when content varies.

#### IS 391 Study Abroad - 18 cr

Study of selected topics within a particular Area Studies Concentration. May be repeated.

#### IS 393 Study Abroad 1-6 cr

This course is an advanced International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

#### IS 410 Global Engagement Capstone 1 cr

Global Engagement Capstone is required for students completing the Global Engagement Certificate (GEC), and is a one hour course designed to help students reflect on the 16 hours of coursework and nine hours of globally engaged activities they have completed. Students will create a portfolio during the course, which will be presented to students and affiliated faculty at its conclusion.

**Prerequisite:** IS 210 Minimum Grade of P

**IS 473 International Law 3 cr**

This course covers major issues, cases and topics in public and private international law. Course coverage includes individuals and corporations, diplomatic relations, jurisdiction, human rights, economic relations, treaties, environmental law, and more.

**Prerequisite:** (IS 100 Minimum Grade of C or PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C)

**Cross-Listed:** CJ 473, PSC 473

**IS 489 Leadership and World Leaders 3 cr**

An overview of the definitions, characteristics, and typologies of leadership, with a focus on lives and legacies of global influential political leaders over the past century.

**Prerequisite:** PSC 130 Minimum Grade of D or PSC 250 Minimum Grade of D or IS 100 Minimum Grade of D

**Cross-Listed:** PSC 251, PSC 489

**IS 490 Special Topics 3 cr**

Advanced study of selected topics within a particular Area Studies Concentration. May be repeated for credit when content varies.

**Prerequisite:** IS 100 Minimum Grade of D

**IS 491 Seminar on Terrorism 3 cr**

Study of a terrorism from a sociopolitical perspective with an emphasis on causes, policy, tactics and operational characteristics and counter-terrorism operations. Cross-listed with CJ 491 and PSC 491.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or PSC 130 Minimum Grade of C or IS 100 Minimum Grade of C

**Cross-Listed:** CJ 491, PSC 491

**IS 492 Seminar - 3 cr**

Advanced study of selected topics in international studies from a comparative perspective. May be repeated for credit when content varies.

**Prerequisite:** IS 100 Minimum Grade of D

**IS 493 Study Abroad 1-6 cr**

This course is an advanced International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**IS 494 Directed Studies 1-3 cr**

Directed research in the field of international studies. May be repeated or credit up to a total of 9 hours. Prerequisite: permission of IS Director

**IS 495 Senior Seminar - W 3 cr**

The course seeks to provide an interdisciplinary and cross-regional overview of the fields and research opportunities within international studies.

**Prerequisite:** EH 102 Minimum Grade of C

**IS 496 Prof St Internship - 3-9 cr**

Practical learning experiences through occupational or professional work with an approved international organization, governmental agency, or international business Prerequisite: Permission of IS Director

**IS 499 Senior Honors Thesis 3 cr**

The course covers major theoretical perspectives in organizational psychology based on empirical research and case studies. Students will explore learning theory, group dynamics, and change in different types of learning organizations.

**Prerequisite:** (EH 102 Minimum Grade of D or EH 105 Minimum Grade of D)

**IS 591 Study Abroad 12 cr**

Graduate level international exchange programs for University of South Alabama students.

**Interdisciplinary Stds (IST)****IST 020 International Student First Year Experience 0 cr**

Designed for Global Jags or new international students in their first semester at USA. Emphasis is placed on preparing the student in making a successful transition to college life in the United States & being successful in one's chosen academic program of study. Topics include: immigration regulations, academic success strategies & integrity, the American Education System, and campus resources.

**IST 050 International Student First Year Experience - Graduate 0 cr**

Designed for Global Jags or new international students in their first semester at USA. Emphasis is placed on preparing the student in making a successful transition to college life in the United States & being successful in one's chosen academic program of study. Topics include: immigration regulations, academic success strategies & integrity, the American Education System, and campus resources.

**IST 100 Freshman Seminar 2 cr**

A course for first-time students that assists with maximizing the student's potential to achieve academic success and to adjust responsibly to the individual and interpersonal challenges presented by college life. The course provides an introduction to the nature of higher education and a general orientation to the functions and resources of the University. Extensive reading and writing assignments relevant to the student's first year experience are required.

**IST 101 Foundations of Inter Studies 3 cr**

This course will assist students with clarifying educational goals, understanding effective learning methods, and becoming acquainted with university resources, diversity, and culture. It introduces students to basic theories and principles of education and development, with emphasis on liberal education. The focus is to develop written and oral skills to enhance students' critical thinking and problem solving abilities. Assists students in defining competencies needed for success in academic study, professional leadership, and career opportunities. Students will develop a working knowledge of Sakai, Skype and WebEx.

**Cross-Listed:** AIS 101

**IST 125 Professional Conduct 3 cr**

Introduces students to primary sources in ethical theory and includes readings and discussions of theories of human nature. Provides a basis for understanding one's rationale for personal moral decisions and offers a foundation for an approach to the ethics of business.

**Cross-Listed:** AIS 125

**IST 200 Clinical Observation 1 cr**

Clinical Observations (Medicine, Dentistry, Optometry, and Veterinary Medicine). This course gives the student clinical exposure to various health-care services. It is designed to help students make informed decisions when selecting a career in the health professions. A written report on the clinical experience or a scenario dealing with ?medical ethics? is required. May be repeated for a maximum of six hours credit. Prereq: Permission of Chair of Preprofessional Advisory Committee.

**IST 201 Seasons of Life 3 cr**

An interdisciplinary media-assisted course in which students study human development from the biosocial, cognitive, and psychosocial perspectives with special emphasis on the adult years. Through readings, audio, written exercises, and class discussions, students explore the theories and research findings of life span development which enable them to reflect on their own lives as well as the lives of others.

**Cross-Listed:** AIS 201

**IST 210 Introduction to Disability 3 cr**

This course will provide students from any discipline the opportunity to develop the knowledge and skills needed to effectively work with people with disabilities in a variety of settings. Disability is examined as a type of diversity. Topics include: the history and sociological context of disability; the impact of disability on the individual and family; advocacy and civil rights; current trends in services and supports for children and adults with disabilities; and respectful language and interaction. Students will actively engage in readings, discussions, and writing on disability issues.

**Prerequisite:** EH 102 Minimum Grade of C or EH 105 Minimum Grade of C

**Cross-Listed:** AIS 210

**IST 250 Career Planning and Develop 3 cr**

Principles, methods, and practice in career planning and development with an emphasis on career information, self-analysis, exploration of careers, career opportunities, and guidelines for goal achievement.

**Cross-Listed:** CP 250

**IST 290 Special Topics - 1-3 cr**

A variable topics course treating special themes. May be repeated for credit when course content varies.

**Cross-Listed:** AIS 290

**IST 300 Global Orientn-Ed Abroad 1 cr**

Study Abroad applicants will prepare for their study abroad experience through an examination of selected country-specific reading as well as cross-cultural orientation materials. Travel safety, University of South Alabama policies and procedures for study abroad, and advice for cultural adjustment will be covered during the course. IST 300 satisfies the requirements of LG 394.

**Cross-Listed:** AIS 300, LG 394

**IST 302 Interdis and Critical Thinking 3 cr**

Provides students an introduction to the field of interdisciplinary studies and an opportunity to critically reflect on the experience of self, education, and career and the relationship among these three phenomena.

**Cross-Listed:** AIS 302

**IST 305 Issues in Human Services 3 cr**

An interdisciplinary course for students who plan to work in the helping professions (counseling, social work, nursing etc.). Guest speakers from various disciplines present information about their fields. Discussion topics include: similarities and differences in the helping professions, the helping relationship, empathic communication, multicultural and legal issues, and stress and burnout management.

**Cross-Listed:** AIS 305

**IST 310 Global Leadership 3 cr**

This course helps prepare students to assume global leadership roles in their careers and the community at large. Students explore leadership theories and principles as well as investigate leadership qualities among historical and contemporary individuals. In addition, students confront present-day global issues and argue viewpoints orally, as well as through persuasive and technical papers. Students are expected to complete an interdisciplinary project based on global issues.

**Prerequisite:** (A01 27 or S01 610 or USEH P or EH 101 Minimum Grade of C or EH 110 Minimum Grade of C or EH 190 Minimum Grade of C or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** AIS 310

**IST 315 Women's Issues in Wrkpl-Comm 3 cr**

This course will examine contemporary issues faced by women in the workplace and the community from an interdisciplinary perspective. Some of the topics to be covered are gender communication issues, developing a leadership plan, playing the game, power talk, conflict management from a woman's point of view, international development, and women, sexuality and labor.

**Cross-Listed:** AIS 315

**IST 320 Cultural Competency 3 cr**

An interdisciplinary exploration of issues related to interactions between diverse groups in teams, communities, and organizations. Reviews research from a variety of disciplines, introduces the history and law of equal opportunity in the U.S., and examines the costs and benefits of diversity. Topics include prejudice, stereotyping, affirmative action, barriers to mobility, discrimination, marginalization, mentoring, cooperative teamwork, and international issues.

**Cross-Listed:** AIS 320

**IST 330 Analytical & Info Lit.-W 3 cr**

This course examines principles of qualitative and quantitative research methods and their application to interdisciplinary studies in the social sciences. Emphasis is on the development of functional literacy for information expressed quantitatively and thoughtful integration of such information into academic and practical research.

**Prerequisite:** (IST 350 Minimum Grade of C or AIS 350 Minimum Grade of C)

**Cross-Listed:** AIS 330

**IST 350 Adv Verbal & Written Comm - W 3 cr**

This course builds on the foundation laid in freshman composition, stressing critical thinking, analysis, and research. It aims to prepare students oral presentations, research and writing papers.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** AIS 350

**IST 401 Adults in Society 3 cr**

Adults in Society is a media-assisted course that uses print material, videos, written assignments, and class discussions to explore issues which relate to adult development. Using an interdisciplinary approach, students will examine the relationship of adults to their families, work and communities.

**Cross-Listed:** AIS 401

**IST 420 Comm. Dev and Leadership 3 cr**

Presents the conceptual foundations of community development and leadership, including basic concepts, methods and literature. Students will study theories of leadership, community development and human capital, investigate public relationships, examine community decision-making and responsible civic action. The course lays foundations for further study and practice in the field. Students will experience the interdisciplinary approaches to community development, leadership, politics, civic responsibility and teamwork.

**Cross-Listed:** AIS 420

**IST 425 Workplace Learning & Dev 3 cr**

This project-based course explores workplace learning and development. It will introduce students to interdisciplinary learning and motivational theories necessary to prepare them to be effective in today's changing workplace, and provide them with the skills to problem-solve, lead and work as part of a team.

**Cross-Listed:** AIS 425

**IST 430 Senior Research Thesis - W 3 cr**

An in-depth research project in the student's concentration. Provides an opportunity for the student to design a comprehensive research project, analyze and synthesize research data, and develop expertise in a particular subject.

**Prerequisite:** (IST 302 Minimum Grade of D and IST 330 Minimum Grade of D and IST 350 Minimum Grade of C)

**Cross-Listed:** AIS 430

**IST 450 The Job Campaign 3 cr**

Practical approach to career development designed to help students develop strategies for obtaining suitable employment and making career choices. Emphasis is on the principles, methods, and practice in achieving career goals through the study of careers, preparing resumes, writing letters of application, practicing job interview techniques, and identifying prospective employers.

**Cross-Listed:** CP 450

**IST 490 Special Topics - 1-6 cr**

A variable topics course treating special themes. May be repeated for credit when course content varies.

**IST 494 Directed Studies 1-6 cr**

Directed Study of a topic consistent with the student's individualized program under the supervision of a member of the university faculty.

**Cross-Listed:** AIS 494

**IST 495 Prof Leadership & Teamwork 3 cr**

Students will examine their skills, abilities, personality, attitudes, values, interests, and behaviors within the context of current scholarship on leadership to increase awareness of their leadership competencies.

**Prerequisite:** IST 302 Minimum Grade of D

**Cross-Listed:** AIS 495

**IST 498 Internship I-Capstone Exp 3-9 cr**

This internship course provides the student an opportunity to have an internship field experience and to reflect on and critically evaluate that internship experience, particularly as it relates to the interdisciplinary course of study. Students will prepare reports, write papers, make presentations, and engage in group discussion that critically considers their internship experience.

**Prerequisite:** (IST 350 Minimum Grade of C or AIS 350 Minimum Grade of C) and (IST 302 Minimum Grade of D and IST 330 Minimum Grade of D)

**Cross-Listed:** AIS 498

**IST 499 Honors Senior Thesis - H-W 3-6 cr**

A substantial research project reflecting a commitment to genuine scholarship in the student's field of study. Provides an opportunity for the student to design a comprehensive research project, analyze and synthesize research data, and develop expertise in a particular subject. Fulfills the senior project requirement for the honors program.

**Cross-Listed:** AIS 499

**IST 500 Global Orientn-Ed Abroad-Grad 1 cr**

This is a pre-departure academic and orientation process course for all graduate students who plan on studying abroad in terms following their participating in this course. This course will facilitate the application, academic advising, pre-departure advising, and activities related to getting students ready for participation in their actual program abroad.

**Organizational Leadership (OL)****OL 300 Introduction to Organizational Leadership 3 cr**

This course provides a general overview of leadership principles and practice. The course covers general principles and commonly encountered issues in organizational leadership such as leadership styles, developing an organizational mission and objectives, fostering productive, equitable and inclusive organizational culture and climate, and tapping the strengths of diverse employees.

**OL 350 Organizational Financial Management 3 cr**

This course provides an overview of financial management principles for for-profit and non-profit/public organizations. This includes the use of financial analysis and forecasting to create a budget as well as management of assets, liability, and cash flow. Finally, the course covers typical sources of financial risk and fraud and methods to mitigate those risks.

**Prerequisite:** (OL 300 Minimum Grade of D)

**OL 400 Legal & Ethical Issues in Organizational Leadership 3 cr**

This class provides an overview of major legal principles that apply to organizational contexts and to leaders in these contexts. In addition the course reviews major approaches to ethical reasoning in leadership and resolving conflict in organizations as a leader.

**Prerequisite:** (OL 300 Minimum Grade of D)

**OL 410 Conflict Resolution & Negotiations in Organizations 3 cr**

OL 410 is an overview of the various theories and models of conflict resolution and negotiation. The course also covers specific conflict resolution and negotiation tactics and how these apply to specific organizational situations. Finally, the course provides an overview of how personal factors such as emotional intelligence and cultural intelligence impact a leader's ability to resolve conflict and successfully negotiate on behalf of the organization. Special attention is also paid to how successful conflict resolution and negotiation practice promotes an inclusive and equitable organizational climate.

**Prerequisite:** (OL 300 Minimum Grade of D)

**OL 490 Internship in Organizational Leadership 3 cr**

This course consists of an internship completed by the student in a relevant organizational setting, which may include a for-profit business, non-profit organization, or government organization. Students will also meet over video-conferencing with a course instructor periodically over the course of the semester.

**Prerequisite:** (OL 300 Minimum Grade of D and OL 350 Minimum Grade of D and OL 400 Minimum Grade of D and OL 410 (may be taken concurrently) Minimum Grade of D)

**Faculty****Faculty Name**

MANDERS, JEANETTE ELIZABETH  
(jmanders@southalabama.edu)

**Faculty Department**

Interdisciplinary Studies

**Faculty Position**

Asst Prof of Instruction

**Degrees Held**

BS, Spring Hill College  
MED, University of Georgia  
PHD, University of Georgia

MOODY, ERIC MICHAEL  
(emmoody@southalabama.edu)

Interdisciplinary Studies

Assistant Professor

BS, University of North Alabama  
MBA, University of North Alabama  
PHD, University of Florida

## Interdisciplinary Studies (BS or BA) Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 503)		41-44
<b>Major Requirements</b>		
<i>General Competency</i>		
IST 302	Interdis and Critical Thinking	3
IST 320	Cultural Competency	3
IST 330	Analytical & Info Lit.-W	3
IST 350	Adv Verbal & Written Comm - W	3
IST 495	Prof Leadership & Teamwork	3
<i>Capstone</i>		
IST 430	Senior Research Thesis - W	3
or IST 498	Internship I-Capstone Exp-W	
<i>Concentration</i>		
Collaborate with academic advisor to design an individualized program of study		30
<i>Electives</i>		
Select 31 hours from the following:		31
IST 101	Foundations of Inter Studies	
IST 125	Professional Conduct	
IST 210	Introduction to Disability	
IST 290	Special Topics -	
IST 305	Issues in Human Services	
IST 310	Global Leadership	
IST 315	Women's Issues in Wrkpl-Comm	
IST 401	Adults in Society	
IST 420	Comm. Dev and Leadership	
IST 425	Workplace Learning & Dev	
IST 490	Special Topics -	
IST 494	Directed Studies	
IST 499	Honors Senior Thesis - H-W	
Electives 100-499		
<b>Minor Requirements</b>		
A minor is not required for this degree program		0
<b>Total Hours</b>		<b>120-123</b>

### General Education Requirements

Code	Title	Hours
<b>Area I – Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II – Humanities &amp; Fine Arts</b>		
A. Complete the following:		
CA 110	Public Speaking	3

B. Select one of the following: (<http://bulletin.southalabama.edu/programs-az/education-professional-studies/integrative-studies/footnote1/>)<sup>1</sup> 3

EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	

C. Select one of the following: 3

ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	

D. Select three hours from the following: 3

AFR 101	Intro to African Amer Studies	
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARH 203	Survey of Non-Western Art	
ARS 101	Art Appreciation	
CLA 110	Intro Anc Greek Roman Culture	
DRA 110	Introduction to Theatre	
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
LG 101	Introductory Latin I	
LG 102	Introductory Latin II	
LG 111	Introductory French I	
LG 112	Introductory French II	
LG 121	Introductory Chinese I	
LG 122	Introductory Chinese II	
LG 131	Introductory Spanish I	
LG 132	Introductory Spanish II	
LG 141	Intro Classical Greek I	
LG 142	Intro Classical Greek II	
LG 151	Introductory German I	
LG 152	Introductory German II	
LG 153	Accelerated Intro German	
LG 171	Introductory Russian I	
LG 172	Introductory Russian II	
LG 173	Accelerated Intro Russian	
LG 201	Intermediate Latin I	
LG 202	Intermediate Latin II	

LG 211	Intermediate French I
LG 212	Intermediate French II
LG 213	Accelerated Inter French - H
LG 221	Intermediate Chinese I
LG 222	Intermediate Chinese II
LG 231	Intermediate Spanish I
LG 232	Intermediate Spanish II
LG 234	Inter Spanish Accel -H
LG 241	Interm Classical Greek I
LG 242	Interm Classical Greek II
LG 251	Intermediate German I
LG 252	Intermediate German II
LG 271	Intermediate Russian I
LG 272	Intermediate Russian II
LG 273	Intensive Second Year Russian
LGS 101	Introductory Japanese I
LGS 102	Introductory Japanese II
LGS 106	Introductory Arabic I
LGS 107	Introductory Arabic II
LGS 110	Intro American Sign Language I
LGS 111	Intro American Sign Lang II
LGS 171	Introductory Korean I
LGS 172	Introductory Korean II
LGS 201	Intermediate Japanese I
LGS 202	Intermediate Japanese II
LGS 206	Intermediate Arabic I
LGS 207	Intermediate Arabic II
LGS 210	Intermediate ASL I
LGS 211	Intermediate ASL II
MUL 101	Introduction to Music
PHL 110	Introduction to Philosophy
PHL 120	Critical Thinking
PHL 121	Introduction to Logic
PHL 131	Introduction to Ethics
PHL 231	Social Ethics
PHL 240	Western Philosophy: Classical
REL 100	Intro to the Study of Religion
REL 200	Old Testament/Hebrew Bible
REL 201	Survey of the New Testament

**Area III – Natural Sciences & Mathematics**

A. Select 3-4 hours from the following: 3-4

MA 110	Finite Mathematics
MA 112	Precalculus Algebra
MA 113	Precalculus Trigonometry
MA 115	Precal Algebra-Trigonometry
MA 120	Calculus and Its Applications
MA 125	Calculus I
MA 126	Calculus II
MA 227	Calculus III
MA 237	Linear Algebra I
MA 238	Differential Equations I

B. Select 8-10 hours from the following: 8-10

AN 121 & 121L	Biological Anthropology and Biological Anthropology Lab
BLY 101 & 101L	Life Science I and Life Science I Laboratory
or BLY 121 & 121L	General Biology I and General Biology I Lab
BLY 102 & 102L	Life Science II and Life Science II Lab
or BLY 122 & 122L	General Biology II and General Biology II Laboratory
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab
CH 131 & 131L	General Chemistry I and General Chemistry I Lab
CH 132 & 132L	General Chemistry II and General Chemistry II Lab
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab
GY 111 & 111L	Physical Geology and Physical Geology Lab
GY 112 & 112L	Earth History and Earth History Lab
MAS 134 & 134L	Ocean Science and Ocean Science Lab
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab

**Area IV – History, Social & Behavioral Sciences (<http://bulletin.southalabama.edu/programs-az/education-professional-studies/integrative-studies/footnote1/>)<sup>1</sup>**

A. Select one of the following: 3

HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 121	World Civilization I
HY 122	World Civilization II
HY 135	US History to 1877
HY 136	US History since 1877

B. Select three of the following: 9

AN 100	Intro to Cultural Anthropology
AN 101	Intro Archaeology-Bio Anthro
CA 100	Intro to Communication
CA 101	Intro to Media
CJ 105	Introduction to Criminal Justice
ECO 215	Prin of Microeconomics

ECO 216	Prin of Macroeconomics
GEO 114	People, Places, Environment
GEO 115	World Regional Geography
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 121	World Civilization I
HY 122	World Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
IS 100	Global Issues
IST 201	Seasons of Life
NAS 101	Intro Native American Studies
PSC 130	Intro to US Government
PSY 120	Introduction to Psychology
PSY 250	Life Span Development
SY 109	Introductory Sociology
SY 112	Social Problems

**Total Hours** **41-44**

**Footnote**

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 121 & HY 122 or HY 135 & HY 136).

All undergraduates must complete two designated writing credit (W) courses, at least one of which must be in the student’s major or minor.

## Graduation Plan

(120 Total Hours)

The Graduation Plan is an example of course progression. Individual student plans may vary. Students should consult with an academic advisor to create a personalized plan.

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I	3
History	Area IV, A <sup>1</sup>	3
Elective 100-499	Electives <sup>1</sup>	3
Social & Behavioral Sciences	Area IV, B <sup>1</sup>	3
Fine Arts	Area II, C <sup>1</sup>	3
<b>Milestone Notes</b>		
Minimum Term GPA 2.0		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EH 102	English Composition II	3
Natural Science	Area III, B <sup>1</sup>	3
Natural Science Lab	Area III, B <sup>1</sup>	1
CA 110	Public Speaking	3
Social & Behavioral Sciences	Area IV, B <sup>1</sup>	3
Humanities & Fine Arts	Area II, D <sup>1</sup>	3
<b>Milestone Notes</b>		
EH 101 C or better or EH 105 C or better		
<b>Hours</b>		<b>16</b>

<b>Second Year</b>		
<b>Fall</b>		
Math	Area III, A <sup>1</sup>	3
Social & Behavioral Sciences	Area IV, B <sup>1</sup>	3
Literature	Area II, B <sup>1</sup>	3
Natural Science	Area III, B <sup>1</sup>	3
Natural Science Lab	Area III, B <sup>1</sup>	1
IST 290	Special Topics - (Electives) <sup>1,2</sup>	1
<b>Milestone Notes</b>		
EH 102 C or better		

**Hours** **14**

<b>Spring</b>		
IST 125	Professional Conduct (Electives) <sup>1,2</sup>	3
IST 201	Seasons of Life (Electives) <sup>1,2</sup>	3
IST 302	Interdis and Critical Thinking	3
Concentration 100-499	Concentration <sup>1</sup>	3
Concentration 100-499	Concentration <sup>1</sup>	3

**Milestone Notes**  
Minimum Term GPA 2.0

**Hours** **15**

<b>Third Year</b>		
<b>Fall</b>		
IST 305	Issues in Human Services (Electives) <sup>1,2</sup>	3
IST 310	Global Leadership (Electives) <sup>1,2</sup>	3
IST 330	Analytical & Info Lit.-W	3
IST 350	Adv Verbal & Written Comm - W	3
Concentration 300-499	Concentration <sup>1,2</sup>	3

**Milestone Notes**  
15 Hours of USA Upper Division Coursework Completed

**Hours** **15**

<b>Spring</b>		
IST 315	Women's Issues in Wrkpl-Comm (Electives) <sup>1,2</sup>	3
IST 320	Cultural Competency	3
Concentration 300-499	Concentration <sup>1</sup>	3
Concentration 300-499	Concentration <sup>1</sup>	3
Concentration 300-499	Concentration <sup>1</sup>	3

**Milestone Notes**  
Apply for Graduation

**Hours** **15**

<b>Fourth Year</b>		
<b>Fall</b>		
IST 401	Adults in Society (Electives) <sup>1,2</sup>	3
IST 420	Comm. Dev and Leadership (Electives) <sup>1,2</sup>	3
IST 425	Workplace Learning & Dev (Electives) <sup>1,2</sup>	3
Concentration 100-499	Concentration <sup>1</sup>	3
Concentration 100-499	Concentration <sup>1</sup>	3

**Milestone Notes**  
Minimum Term GPA 2.0

**Hours** **15**

<b>Spring</b>		
IST 495	Prof Leadership & Teamwork	3
IST 430 or IST 498	Senior Research Thesis - W (Capstone) <sup>1</sup> or Internship I-Capstone Exp	3
Concentration 100-499	Concentration <sup>1</sup>	3
Concentration 100-499	Concentration <sup>1</sup>	3
Elective 100-499	Electives <sup>1</sup>	3

**Milestone Notes**  
IST 330 C or better and IST 350 C or better

Minimum Term GPA 2.0	
Hours	15
Total Hours	120

<sup>1</sup> See General Education Requirements

<sup>2</sup> Recommended Course

#### Notes:

- (W) Writing-Intensive Course - 2 Required

### Major Milestones

Effective fall 2016, the Interdisciplinary Studies degree includes a Major Milestones guideline to help students stay on track for timely graduation. In order to remain on track, students must complete the Milestone requirements for each term. Requirements for Major Milestones apply only to full-time degree-seeking students who entered fall 2016 or later. These requirements are viewable on the Major Milestones table below.

- Students who earn an English ACT score of 27, or a written SAT score of 610, can opt out of EH 101.
- Must have one history elective and one literature elective. In addition, students must choose a second history or literature course to complete a two-part sequence.

Two designated writing courses are required with at least one course chosen from the student's major. Writing courses are identified in the University Bulletin by a (W) after the course title.

This Sample 4-Year Plan is designed as a guide for students preparing for their course selections and only provides only a suggested schedule. Actual course selections should be made in consultation with an academic advisor.

## Interdisciplinary Studies Minor

### Degree Requirements

Students in other colleges may elect, with the approval of their department chair, an IST minor in the College of Education and Professional Studies. A 2.0 GPA is required for the courses applied toward the minor. Students must complete at least 50% of the courses counted towards the IST minor at the University of South Alabama. The minor consists of 18 credit hours, comprised of 4 upper-division courses (12 hours) and 2 electives (6 hours).

Code	Title	Hours
<b>Required Courses</b>		
IST 302	Interdis and Critical Thinking	3
IST 320	Cultural Competency	3
IST 495	Prof Leadership & Teamwork	3
IST 310	Global Leadership	3
	or IST 420	Comm. Dev and Leadership
<b>Electives</b>		
Select two of the following:		6
IST 125	Professional Conduct	
IST 201	Seasons of Life	
IST 305	Issues in Human Services	
IST 310	Global Leadership	
IST 315	Women's Issues in Wrkpl-Comm	

IST 401	Adults in Society
IST 420	Comm. Dev and Leadership
IST 425	Workplace Learning & Dev
<b>Total Hours</b>	<b>18</b>

## Organizational Leadership (BS)

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		<b>41-44</b>
Select General Education Requirements (p. 506)		
<b>Major Requirements</b>		
ISD 320	Training Interventions	3
ISD 340	Analysis, Assessment & Eval	3
ISD 450	Human Performance Tech	3
IST 310	Global Leadership	3
IST 320	Cultural Competency	3
IST 330	Analytical & Info Lit.-W	3
IST 350	Adv Verbal & Written Comm - W	3
IST 420	Comm. Dev and Leadership	3
IST 495	Prof Leadership & Teamwork	3
MGT 300	Management Theory and Practice	3
MGT 341	Organizational Behavior	3
MGT 351	Human Resource Management	3
MGT 357	Leadership	3
OL 300	Introduction to Organizational Leadership	3
OL 350	Organizational Financial Management	3
OL 400	Legal & Ethical Issues in Organizational Leadership	3
OL 410	Conflict Resolution & Negotiations in Organizations	3
OL 490	Internship in Organizational Leadership	3
<b>Elective Requirements</b>		
Electives		25
<b>Total Hours</b>		<b>120-123</b>

### General Education Requirements

Code	Title	Hours
<b>Area I – Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II – Humanities &amp; Fine Arts</b>		
A. Complete the following:		
CA 110	Public Speaking	3
B. Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/integrative-studies/footnote1/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/integrative-studies/footnote1/</a> ) <sup>1</sup>		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	

EH 236	World Lit after 1650	
C. Select one of the following:		3
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	
D. Select three hours from the following:		3
AFR 101	Intro to African Amer Studies	
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARH 203	Survey of Non-Western Art	
ARS 101	Art Appreciation	
CLA 110	Intro Anc Greek Roman Culture	
DRA 110	Introduction to Theatre	
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
LG 101	Introductory Latin I	
LG 102	Introductory Latin II	
LG 111	Introductory French I	
LG 112	Introductory French II	
LG 121	Introductory Chinese I	
LG 122	Introductory Chinese II	
LG 131	Introductory Spanish I	
LG 132	Introductory Spanish II	
LG 141	Intro Classical Greek I	
LG 142	Intro Classical Greek II	
LG 151	Introductory German I	
LG 152	Introductory German II	
LG 153	Accelerated Intro German	
LG 171	Introductory Russian I	
LG 172	Introductory Russian II	
LG 173	Accelerated Intro Russian	
LG 201	Intermediate Latin I	
LG 202	Intermediate Latin II	
LG 211	Intermediate French I	
LG 212	Intermediate French II	
LG 213	Accelerated Inter French - H	
LG 221	Intermediate Chinese I	
LG 222	Intermediate Chinese II	
LG 231	Intermediate Spanish I	
LG 232	Intermediate Spanish II	
LG 234	Inter Spanish Accel -H	
LG 241	Interm Classical Greek I	
LG 242	Interm Classical Greek II	
LG 251	Intermediate German I	

LG 252	Intermediate German II	
LG 271	Intermediate Russian I	
LG 272	Intermediate Russian II	
LG 273	Intensive Second Year Russian	
LGS 101	Introductory Japanese I	
LGS 102	Introductory Japanese II	
LGS 106	Introductory Arabic I	
LGS 107	Introductory Arabic II	
LGS 110	Intro American Sign Language I	
LGS 111	Intro American Sign Lang II	
LGS 171	Introductory Korean I	
LGS 172	Introductory Korean II	
LGS 201	Intermediate Japanese I	
LGS 202	Intermediate Japanese II	
LGS 206	Intermediate Arabic I	
LGS 207	Intermediate Arabic II	
LGS 210	Intermediate ASL I	
LGS 211	Intermediate ASL II	
MUL 101	Introduction to Music	
PHL 110	Introduction to Philosophy	
PHL 120	Critical Thinking	
PHL 121	Introduction to Logic	
PHL 131	Introduction to Ethics	
PHL 231	Social Ethics	
PHL 240	Western Philosophy: Classical	
REL 100	Intro to the Study of Religion	
REL 200	Old Testament/Hebrew Bible	
REL 201	Survey of the New Testament	

### Area III – Natural Sciences & Mathematics

A. Select 3-4 hours from the following:		3-4
MA 110	Finite Mathematics	
MA 112	Precalculus Algebra	
MA 113	Precalculus Trigonometry	
MA 115	Precal Algebra-Trigonometry	
MA 120	Calculus and Its Applications	
MA 125	Calculus I	
MA 126	Calculus II	
MA 227	Calculus III	
MA 237	Linear Algebra I	
MA 238	Differential Equations I	
B. Select 8-10 hours from the following:		8-10
AN 121 & 121L	Biological Anthropology and Biological Anthropology Lab	
BLY 101 & 101L	Life Science I and Life Science I Laboratory	
or BLY 121 & 121L	General Biology I and General Biology I Lab	
BLY 102 & 102L	Life Science II and Life Science II Lab	
or BLY 122 & 122L	General Biology II and General Biology II Laboratory	
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab	

CH 131 & 131L	General Chemistry I and General Chemistry I Lab
CH 132 & 132L	General Chemistry II and General Chemistry II Lab
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab
GY 111 & 111L	Physical Geology and Physical Geology Lab
GY 112 & 112L	Earth History and Earth History Lab
MAS 134 & 134L	Ocean Science and Ocean Science Lab
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab
<b>Area IV – History, Social &amp; Behavioral Sciences (<a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/integrative-studies/footnote1/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/integrative-studies/footnote1/</a>)<sup>1</sup></b>	
A. Select one of the following:	3
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 121	World Civilization I
HY 122	World Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
B. Select three of the following:	9
AN 100	Intro to Cultural Anthropology
AN 101	Intro Archaeology-Bio Anthro
CA 100	Intro to Communication
CA 101	Intro to Media
CJ 105	Introduction to Criminal Justice
ECO 215	Prin of Microeconomics
ECO 216	Prin of Macroeconomics
GEO 114	People, Places, Environment
GEO 115	World Regional Geography
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 121	World Civilization I
HY 122	World Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
IS 100	Global Issues
IST 201	Seasons of Life

NAS 101	Intro Native American Studies
PSC 130	Intro to US Government
PSY 120	Introduction to Psychology
PSY 250	Life Span Development
SY 109	Introductory Sociology
SY 112	Social Problems

**Total Hours** **41-44**

### Footnote

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 121 & HY 122 or HY 135 & HY 136).

All undergraduates must complete two designated writing credit (W) courses, at least one of which must be in the student's major or minor.

## Graduation Plan

(120 Total Hours)

The Graduation Plan is an example of course progression. Individual student plans may vary. Students should consult with an academic advisor to create a personalized plan.

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I	3
History	Area IV, A <sup>1</sup>	3
Elective 100-499	Electives <sup>1</sup>	3
Social & Behavioral Sciences	Area IV, B <sup>1</sup>	3
Fine Arts	Area II, C <sup>1</sup>	3
<b>Milestone Notes</b>		
Minimum Term GPA 2.0		
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>15</b>

<sup>1</sup> See General Education Requirements

<sup>2</sup> Recommended Course

### Notes:

- (W) Writing-Intensive Course - 2 Required

## Major Milestones

Effective fall 2016, the Interdisciplinary Studies degree includes a Major Milestones guideline to help students stay on track for timely graduation. In order to remain on track, students must complete the Milestone requirements for each term. Requirements for Major Milestones apply only to full-time degree-seeking students who entered fall 2016 or later. These requirements are viewable on the Major Milestones table below.

- Students who earn an English ACT score of 27, or a written SAT score of 610, can opt out of EH 101.
- Must have one history elective and one literature elective. In addition, students must choose a second history or literature course to complete a two-part sequence.

Two designated writing courses are required with at least one course chosen from the student's major. Writing courses are identified in the University Bulletin by a (W) after the course title.

This Sample 4-Year Plan is designed as a guide for students preparing for their course selections and only provides only a suggested schedule. Actual course selections should be made in consultation with an academic advisor.

## Leadership/Teacher Education

### Department Information

(251) 380-2761

Department of Leadership and Teacher Education website  
<https://www.southalabama.edu/colleges/ceps/lt/>

Title	Name
Chair	
Professors	Baxter, Giles, Kent
Associate Professors	Delmas, Ferguson, Johnson, Maulding Green, McCorrison, Morton, Parrish, Reeves
Assistant Professors	Byrd, Carmouche, Gossen, Morrison, Szatkowski
Senior Instructor	Simpson
Instructors	Holland

### Undergraduate

The Department offers the Bachelor of Science degree in Education leading to Alabama Class B certification in the following areas: Elementary Education, Early Childhood Education, Secondary Education, and Special Education. The department offers the Bachelor of Science degree in Education with a major in Early Childhood Studies.

### Graduate

The department offers the M.Ed. degree leading to Alabama Class A Certification in the following areas: Art Education, Instructional Leadership, Elementary Education, Early Childhood Education, English for Speakers of Other Languages, Secondary Education, and Special Education. The department offers the M.Ed. degree in Educational Administration with an emphasis in higher education leadership. The department also offers the Instructional Specialist degree (Ed.S.) leading to Alabama Class AA Certification in the following areas: Early Childhood Education, Elementary Education, Instructional Leadership, Reading Specialist, Secondary Education, Special Education and Teacher Leader. The department offers the Doctor of Education degree in Educational Leadership.

## Degrees, Programs, or Concentrations

- Early Childhood Education (Alt. M.Ed.) (p. 532)
- Early Childhood Education (M.Ed.) (p. 532)
- Early Childhood Studies (BS) (p. 533)
- Educational Administration (M.Ed.) (p. 536)
- Educational Leadership (Ed.D.) (p. 537)
- Educational Specialist (Ed.S.) (p. 539)
- Elementary Education (Alt. M.Ed.) (p. 542)
- Elementary Education (M.Ed.) (p. 542)

- Elementary Education: K-6 (BS) (p. 543)
- Reading Specialist Certification (p. 547)
- Secondary Education (Alt. M.Ed.) (p. 547)
- Secondary Education (M.Ed.) (p. 548)
- Secondary Education Biology (BS) (p. 549)
- Secondary Education English Language Arts (BS) (p. 552)
- Secondary Education General Sciences (BS) (p. 558)
- Secondary Education Mathematics (BS) (p. 558)
- Secondary Education Social Science (BS) (p. 562)
- Special Education (Alt. M.Ed.) (p. 565)
- Special Education (BS) (p. 566)
- Special Education (M.Ed.) (p. 570)

## Courses

### Art Education (AED)

#### AED 301 Visual Arts for Young Children 3 cr

Exploration of knowledge and skills in the arts appropriate for young children. Art techniques and media are explored.

#### AED 440 Arts for Learning 3 cr

Using the arts to promote physical, social, emotional, and cognitive development.

**Prerequisite:** SED 340 Minimum Grade of C and SED 341 Minimum Grade of C

**Corequisite:** AED 441

#### AED 441 Art in the N-12 Program 3 cr

Art and the intellectual, creative, and emotional growth of adolescents and youth. The study of appropriate techniques and materials for teaching studio art and crafts, art history, appreciation and aesthetics, and participation in humanities programs at the secondary level. Laboratory practice in the secondary school. Restricted to N-12 art majors. Prerequisites: Completion of two-thirds of teaching field.

**Prerequisite:** SED 340 Minimum Grade of C and SED 341 Minimum Grade of C

**Corequisite:** AED 440

#### AED 494 Dir St - 1-3 cr

No more than two directed study courses can be counted toward the Bachelor's degree and Class B Certificate. Prerequisite: Permission of department chair.

#### AED 501 Trn-Prac Tch Art Elem Sc 3 cr

Orients the student toward the artistic interests and creative abilities of children in the elementary school, and developing attitudes of respect for individuality and creativity. Included are laboratory experiences with art materials and research into appropriate techniques of teaching art

#### AED 502 Trn-Prac Tch Art Sec Sch 3 cr

Current trends and practices in curriculum, instruction, selection of materials, and derivation of procedures for guiding learning in art in the secondary school.

#### AED 540 Art in the N-12 Program 3 cr

Art and the intellectual, creative, and emotional growth of children. The role of art in the instructional program, examination of objectives in an art program, and the study of appropriate techniques and materials for teaching art and crafts at the elementary level. Restricted to N-12 art majors.

**Prerequisite:** SED 555 Minimum Grade of B and SED 559 Minimum Grade of B and EPY 525 Minimum Grade of B

**AED 560 Grad Research Seminar 3 cr**

Research in problems confronting American education. Selected topics are explored by students which provide the basis for seminar discussions. A seminar paper is presented by each student. This course also includes a field-based practicum. Prerequisite: Permission of department chair.

**AED 590 Sp Top - 3 cr**

Current topics of special concern to secondary educators. A different topic will be used each time the course is offered. No more than 6 hours can be applied toward a graduate degree. Prerequisite: Permission of department chair.

**AED 594 Dir St - Research 1-3 cr**

Students explore through directed study problems and issues of special interest or significance in Art Education. No more than 3 hours of any departmental 594 courses can be applied toward a degree program. Prerequisite: Permission of department chair.

**AED 595 Internship 1-6 cr**

The internship is a supervised learning experience in a work setting similar to that in which the educator will eventually be employed. The internship provides the students with an opportunity to apply the theories and concepts learned during the graduate program of study.

**Prerequisite:** (P134 158 or 5134 158)

**Educational Leadership (EDL)****EDL 410 Leadership Development 1 cr**

This course is for undergraduates who are, or aspire to be, leaders. Faculty from throughout the University will direct weekly class sessions. Requires permission of the Dean of Students.

**EDL 501 Theories Instructnl Leadership 3 cr**

The need for instructional leaders to understand and be able to operate within the larger context of community effect on opportunities for all students is addressed. Cooperation among schools, the district, parents, and the larger community as essential to the success of instructional leaders and students and ethical practices are emphasized.

**EDL 502 Data-Driven Instrucnl Leadrshp 3 cr**

This course stresses the engagement of the school community in developing and maintaining a shared vision; planning effectively; using critical thinking and problem-solving techniques; collecting, analyzing, and interpreting data; allocation of resources; and evaluation of results for the purpose of continuous school improvement.

**EDL 503 Supervision & Prof Development 3 cr**

This course addresses how the instructional leader recruits, selects, organizes, evaluates, and mentors faculty and staff to accomplish school and system goals.

**EDL 504 Ethical & Legal Dimens Sch Ldr 3 cr**

Students completing this course will demonstrate understanding of the legal system of schools. Students will be able to relate constitutional, federal, state, and local requirements as they concern students, employees, teachers, and instructional program administration. The student will demonstrate an understanding of the concepts of honesty, integrity, and fairness.

**EDL 505 Bus Mgmt of Lrng Organizations 3 cr**

This course explores leadership skills related to group dynamics, problem identification, accountability, diversity, economic levels, and their relationship to financing schools. Internal and external public relations and political factors which impact the funding of school will also be presented.

**EDL 506 Teaching and Learning Leaders 3 cr**

Student will acquire the knowledge to ensure that decisions about curricular, instructional strategies, assessment and professional development are based on sound research, best practices, and other contextual information needed to align the curricula with student needs.

**EDL 510 Theories of Adlt Tchg & Lrng 3 cr**

This course is an introduction to the pedagogy of teaching adult learners. Topics will include basic instructional design, strategies to meet needs of adult learners, higher order questioning, student assessment, and mechanisms for providing feedback to students. The class will model effective teaching and assessment practices. Participants will be expected to demonstrate effective teaching in a summative class presentation.

**EDL 512 Community Development 3 cr**

Presents the field of community development, including basic terminology, concepts, methods and literature. Purposes are to present conceptual foundations of community development, provide some experiences in practical application, and lay foundations for further study and practice in the field.

**EDL 513 Instr Lead and Curr Dev 3 cr**

Students in this course will learn to participate in the process of instructional improvement, adaptation to the needs of children and local communities, and instructional leadership within schools. The course will include staff development, instructional evaluation and assessment, school effectiveness concepts, government requirements, cultural diversity, curriculum development, problem solving, small group leadership, conflict management, empowerment, professional ethics, and other interpersonal skills applied to instructional development situations.

**Corequisite:** EDL 595A

**EDL 517 Education Law 3 cr**

Students completing this course will demonstrate understanding of the legal system of schools. Students will be able to relate to constitutional, federal, state, and local requirements as they concern students, employees, teachers, and instructional program administration. Students will understand statutory rights of certified and non-certified personnel in Alabama, including due process, tenure, transfer, suspension, and termination, and will be able to investigate legal matters affecting the administration of schools.

**Corequisite:** EDL 595B

**EDL 525 School Finance 3 cr**

This course explores leadership skills related to group dynamics, problem identification, accountability, diversity, economic levels, and their relationship to financing schools. Internal and external public relations and political factors which impact the funding of school will also be discussed. Fiscal management, including the Alabama Local School Accounting and Reporting system, will be analyzed.

**Corequisite:** EDL 595C

**EDL 530 School Dist Leadership 3 cr**

This course describes the unique forces that shape the role and functions of the school superintendent. The management of conflict is explored as well as the management of all aspects of this school system. The concept of the administrative team is also explored and examined.

**EDL 545 Secondary School Leadership 3 cr**

Provides understandings and skills in the leadership and management of secondary schools. Emphases are placed upon the administrator's role in staff and student personnel administration, program development, and building operations.

**EDL 546 Elem School Leadership 3 cr**

Provides an understanding of the organizational and various other characteristics of a good elementary school with emphasis on leadership.

**EDL 549 Practicum in Educ Supv 3 cr**

The practicum is a supervised learning experience in several settings which simulates the work situations of educational supervision. An opportunity is provided to apply the theories and concepts learned during the student's graduate program.

**EDL 550 Prin of School Lead 3 cr**

This course provides understanding and skills in the leadership and management of schools, including elements of effective classroom management, monitoring student services, and school and community relations. Management skills associated with school facilities, transportation, and student records will be studied.

**EDL 557 Supervisory Leadership 3 cr**

Students completing this course will learn to work with teachers in improving classroom instruction. Students will demonstrate the ability to collect classroom information, including assessment and evaluative data; coordinate student service needs; direct teachers using leadership, motivational techniques, professional ethics, and school management; and use techniques such as personnel selection, stress management, conflict management, scheduling, and research in adapting instruction to the changing needs of the community.

**Corequisite:** EDL 595E

**EDL 561 Dev of Postsecondary Education 3 cr**

This course provides an overview of the organization, development and characteristics of postsecondary education.

**EDL 562 Student in Higher Education 3 cr**

This course focuses on the demographics and characteristics of the American college student today. Development theories applicable to the diverse population of students (e.g., race, ethnicity, age, gender, sexual orientation, disability) are introduced and examined.

**EDL 573 Educational Gerontology 3 cr**

Will introduce the students to the organization and administration of programs of instruction of and about older persons, instruction of general or specific audiences about aging, and instruction of professionals working with or on the behalf of older persons.

**EDL 575 Org and Plan Postsec Educ 3 cr**

Designed as an introduction to and an analysis of organizational and administrative features of postsecondary education.

**EDL 578 Law and Postsecondary Educ 3 cr**

Explores court decisions and federal and state laws relating to governance, student rights, and tort liability in postsecondary education.

**EDL 590 Sp Top - 1-3 cr**

Guided supervision in the identification and completion of educational tasks, such as program design, program revision, self study for accreditation visitation, supervision in the organization, and application of selected learning activities to acquire and enhance leadership skills.

**EDL 594 Dir St and Research 1-3 cr**

Exploration of problems and issues of special interest or significance in Educational Leadership. Not more than three semester hours of any departmental 594 courses can be accepted toward a degree.

**EDL 595 Internship 1-6 cr**

The internship is a supervised learning experience in several work settings which simulates the reality of Educational Leadership work situations. The internship provides an opportunity to apply the theories and concepts learned during the student's graduate program. Students are expected to complete no less than 50 hours for each semester hour earned.

**EDL 595A Internship A 1 cr**

The internship is a supervised learning experience in several work settings which simulates the reality of Education Leadership work situations. The internship provides an opportunity to apply the theories and concepts learned during the student's graduate program. Students are expected to complete no less than 50 hours for each semester hour earned.

**Corequisite:** EDL 513

**EDL 595B Internship B 1 cr**

The internship is a supervised learning experience in several work settings which simulates the reality of Educational Leadership work situations. The internship provides an opportunity to apply the theories and concepts learned during the student's graduate program. Students are expected to complete no less than 50 hours for each semester hour earned.

**Corequisite:** EDL 517

**EDL 595C Internship C 1 cr**

The internship is a supervised learning experience in several work settings which simulates the reality of Educational Leadership work situations. The internship provides an opportunity to apply the theories and concepts learned during the student's graduate program. Students are expected to complete no less than 50 hours for each semester hour earned.

**Corequisite:** EDL 525

**EDL 595D Internship D 1 cr**

The internship is a supervised learning experience in several work settings which simulates the reality of Educational Leadership work situations. The internship provides an opportunity to apply the theories and concepts learned during the student's graduate program. Students are expected to complete no less than 50 hours for each semester hour earned.

**Corequisite:** EDL 550

**EDL 595E Internship E 1 cr**

The internship is a supervised learning experience in several work settings which simulates the reality of Educational Leadership work situations. The internship provides an opportunity to apply the theories and concepts learned during the student's graduate program. Students are expected to complete no less than 50 hours for each semester hour earned.

**Corequisite:** EDL 557

**EDL 595F Internship F - Related Topics 1 cr**

The internship is a supervised learning experience in several work settings which simulates the reality of Educational Leadership work situations. The internship provides an opportunity to apply the theories and concepts learned during the student's graduate program. Students are expected to complete no less than 50 hours for each semester hour earned.

**EDL 598 Residency - 1-6 cr**

The internship is designed to place candidates in the cooperating school during critical times of instructional planning. The residency allows interns to experience leadership in as many of the Alabama Leadership Standard indicators as possible. Candidates shall prepare and maintain a comprehensive portfolio which indicates the level of experiences and knowledge gained in instructional leadership during the intern experiences.

**Prerequisite:** 5412 146

**EDL 603 Curr Prob and Iss Ed Adm 3 cr**

Explores problems and issues at the federal, state, and local levels facing the administration and supervision of American educational institutions. Particular emphasis is on decision making affecting education.

**EDL 607 Lead Schs/Multicultural Soc 3 cr**

Students will examine the role of educational leaders in schools with diverse student populations and study strategies to address race, class and gender inequities that exist in schools.

**EDL 611 Human Relations Skills 3 cr**

Designed to assess and improve the student's level of competency in communication and group leadership skills, knowledge of socio-cultural influences and differences, and understanding of the developmental characteristics of human beings.

**EDL 621 Sem Prog Curriculum Dev 3 cr**

Designed to assess and improve the student's level of competency in program development skills, instructional strategies, systems analysis, and change innovation.

**EDL 631 Sem Ed Management Skills 3 cr**

Designed to assess and improve the student's knowledge of decision-making styles, problem-solving processes, leadership skills, implementation of organizational change, and physical environments which promote productivity. Additionally, when appropriate to the candidate's expected leadership position, current knowledge of law, finance, plant management, and professional negotiations will be stressed.

**EDL 689 Quantitative/Action Research 3 cr**

Basic principles of quantitative and action research for decision making and problem solving in the educational environment.

**EDL 690 Sp Top - 1-3 cr**

May be a content-varying course or may be guided supervision in the identification and completion of educational tasks as well as supervision in the organization and application of selected learning activities to acquire and enhance leadership skills. May be repeated for credit when course content varies.

**EDL 694 Dir St and Research 1-3 cr**

Students explore problems and issues of special interest or significance to advanced students. Not more than three semester hours of any department 694 courses can be accepted toward a degree.

**EDL 695 Mentoring Leadership 3 cr**

This course is a learning experience in mentoring relationships. The course provides an opportunity to apply the theories and concepts learned during the student's advanced graduate studies. The student will learn mentoring skills and serve as a mentor for students interested in educational administration or new to the field of administration.

**EDL 699 Research Project 1-3 cr**

A supervised field project, study, or investigation in Educational Leadership. The student will conduct an investigation and apply concepts and skills learned during the sixth-year program.

**Prerequisite:** IDE 692 Minimum Grade of B or EDU 692 Minimum Grade of B

**EDL 699A Research Project 1-3 cr**

A supervised field project, study, or investigation in Educational Leadership. The student will conduct an investigation and apply concepts and skills learned during the sixth-year program.

**Prerequisite:** IDE 692 Minimum Grade of B or EDU 692 Minimum Grade of B

**EDL 699B Research Project 1-3 cr**

A supervised field project, study, or investigation in Educational Leadership. The student will conduct an investigation and apply concepts and skills learned during the sixth-year program.

**Prerequisite:** IDE 692 Minimum Grade of B or EDU 692 Minimum Grade of B

**EDL 699C Research Project 1-3 cr**

A supervised field project, study, or investigation in Educational Leadership. The student will conduct an investigation and apply concepts and skills learned during the sixth-year program.

**Prerequisite:** IDE 692 Minimum Grade of B

**EDL 701 Adv Organizational Theory 3 cr**

An in-depth exploration of organizing in educational settings. Organizational theories and models are examined, as is their application to educational settings, particularly when challenges or changes are introduced.

**EDL 702 School Finance 3 cr**

General study of finance at local, state, and federal basis. Include principles of taxation, the concepts of equity and adequacy, acceptable practices in securing and administering school funds, and acceptable accounting and business procedures. Explores the unique characteristics of the Alabama Tax structure, its history, and impact on the funding of education.

**EDL 703 Adv School Leadership 3 cr**

This course explores research-based practices of effective leadership in P-12 education settings. The role of mission and vision in the leadership of an organization, decision-making models, and leadership styles will be explored.

**EDL 720 Global Education 3 cr**

This course focuses on similarities and differences in the ways various countries educate their citizens from early childhood to adult learners.

**EDL 732 Ethics and Law for Ed Leaders 3 cr**

An examination of ethical and legal issues present in educational settings, including primary, secondary, and postsecondary education.

**EDL 798A Research Project 1-3 cr**

A supervised field project, study, or investigation in Educational Leadership. The student will conduct an investigation and apply concepts and skills learned during the sixth-year program.

**Prerequisite:** IDE 792 Minimum Grade of B

**EDL 798B Research Project 1-3 cr**

A supervised field project, study, or investigation in Educational Leadership. The student will conduct an investigation and apply concepts and skills learned during the sixth-year program.

**Prerequisite:** IDE 792 Minimum Grade of B

**EDL 798C Research Project 1-3 cr**

A supervised field project, study, or investigation in Educational Leadership. The student will conduct an investigation and apply concepts and skills learned during the sixth-year program.

**Prerequisite:** IDE 792 Minimum Grade of B

**EDL 799 Research/Dissertation 1-12 cr**

Directed dissertation research in the field of educational leadership. Faculty advisor approval required.

**Edu-K-6 and 6-12 Teacher (EDU)****EDU 100 Role of the Teacher 2 cr**

This course provides a broad overview of education, schools, and teaching as well as an orientation to the K-6 Teacher Education Program.

**EDU 125 Step 1: Inquiry Approaches to Teaching 1 cr**

The goal of Step 1: Inquiry Approaches to Teaching is to have undergraduate students explore teaching mathematics or science in an upper-elementary setting. This 1-credit hour course provides students with an introduction to inquiry-based science and mathematics instruction through experiencing inquiry-based instruction as a learner, and implementing inquiry-based instruction in a real classroom setting. Course objectives focus on learning to write an inquiry-based lesson plan, examining strategies for achieving instructional equity, and demonstrating use of instructional technology. Step 1 is a first course within the UTeach minor.

**EDU 126 Step 2: Inquiry-Based Lesson Design 1 cr**

This one-hour field-based course focuses on the basic principles of designing, implementing, and assessing inquiry-based mathematics and science instruction for middle school curricula. Field experiences will be completed in a public middle school and will consist of preparing, teaching, and assessing three inquiry-based mathematics or science lessons. Alignment to state content and pedagogical standards will be emphasized. May be taken concurrently with EDU 325. Prerequisites: EDU 125 with a grade of C or better.

**Prerequisite:** (EDU 125 Minimum Grade of C)

**EDU 127 Step Combo: Inquiry Approaches to Teaching and Lesson Design 2 cr**

This two-hour field-based course is an accelerated exploration of teaching as a career by modeling and practicing inquiry-based mathematics and science instruction. Field experiences will be completed in both elementary and middle schools and consist of preparing, teaching, and assessing six inquiry-based mathematics or science lessons. Alignment to state content and pedagogical standards will be emphasized. May be taken concurrently with EDU 325.

**EDU 290 Special Topics 1-3 cr**

Guided study of selected educational tasks (e.g. curriculum revision, classroom materials development, models of learning and teaching) and teaching problems and practices for improving student achievement. Not more than six hours may be earned in Special Topics courses.

**EDU 300 Classroom Management 1 1-3 cr**

An introductory course in classroom management with emphasis upon effective instructional practices that inhibit student behaviors incompatible with learning. The focus is upon PEPE and how it provides the framework for effective teaching practices through the use of rules and procedures.

**Prerequisite:** (EDU 311 Minimum Grade of C and EDU 332 Minimum Grade of C and EDU 335 Minimum Grade of C and EDU 337 Minimum Grade of C and EDU 345 Minimum Grade of C)

**Corequisite:** EDU 430

**EDU 301 Arts in the Elementary School 3 cr**

Knowledge and skills appropriate to the elementary school art program. Techniques in media for teaching art in the various grades.

**EDU 302 Classroom Management 2 1 cr**

An introductory course in classroom management with emphasis upon effective instructional practices that inhibit student behaviors incompatible with learning. The focus is upon PEPE and how it provides the framework for effective teaching practices through the use of rules and procedures.

**Prerequisite:** EDU 300 Minimum Grade of C and EDU 303 Minimum Grade of C and EDU 313 Minimum Grade of C and EDU 336 Minimum Grade of C and EDU 312 Minimum Grade of C and EDU 331 Minimum Grade of C and 5002 157 and 5003 157 and 5004 154 and 5005 158

**Corequisite:** EDU 311, EDU 335, EDU 337, EDU 345, EDU 362

**EDU 303 Field Experience SPE 1-3 cr**

An in-field opportunity for early field-based practicum in a variety of placements.

**Prerequisite:** EDU 330 Minimum Grade of C

**Corequisite:** EDU 312, EDU 313, EDU 331, EDU 336, EDU 362

**EDU 311 Partnerships in SPE 3 cr**

Emphasis is on the special problems found in the home, community, and school of the exceptional child, the teacher, the family, and community resource agencies. Ways for the teacher to form teamships to work collaboratively with all human resources involved in the child's life are explored and ethical and moral standards examined.

**Prerequisite:** EDU 303 Minimum Grade of C and EDU 312 Minimum Grade of C and EDU 313 Minimum Grade of C and EDU 331 Minimum Grade of C and EDU 336 Minimum Grade of C and EDU 362 Minimum Grade of C

**Corequisite:** EDU 332, EDU 335, EDU 337, EDU 345

**EDU 312 Intell and Physical Disabilit 3 cr**

A study of the intellectual and physical disability which usually require substantial curriculum adaptations or ecological accommodation. Historical perspectives, etiology, definitions, classification, treatment, social aspects and interdisciplinary team work will be explored.

**Prerequisite:** EDU 330 Minimum Grade of C

**Corequisite:** EDU 303, EDU 313, EDU 331, EDU 336, EDU 362

**EDU 313 Learning & Behav Disorders 3 cr**

An examination of the definitions, characteristics, and prevalence of children with learning and/or behavioral disabilities. Emphasis is placed on the causes of problems in motor, perceptual, social, academic, affective and behavioral development. Students will be introduced to current service delivery models and the programming options for individuals with learning and behavioral disabilities.

**Prerequisite:** EDU 330 Minimum Grade of C

**Corequisite:** EDU 303, EDU 312, EDU 331, EDU 336, EDU 362

**EDU 321 Field Experience in SpeEd Sett 1 cr**

A series of in-field opportunities in Special Education. A variety of appropriate placements will be employed depending on each student's interest and needs. May be repeated for credit.

**EDU 322 Field Experience in SpeEd Sett 1 cr**

A series of in-field opportunities in Special Education. A variety of appropriate placements will be employed depending on each student's interest and needs. Students are placed in settings related to the student's major areas of study and co-requisites in progress. May be repeated for credit.

**Corequisite:** EDU 354

**EDU 325 Knowing & Learning in Mathematics and Science 3 cr**

This course introduces the cognitive, psychological, and pedagogical principles of learning for effective science and mathematics instruction for all learners. Course emphasize will be on the use of current technology for classroom learning; novice-expert transfer and understanding of subject matter; equity; summative, formative, and authentic assessment. Students will develop a model of knowing and learning that will guide their future practice. May be taken concurrently with EDU 126, or EDU 127.

**Prerequisite:** (EDU 125 (may be taken concurrently) Minimum Grade of C or EDU 126 (may be taken concurrently) Minimum Grade of C or EDU 127 (may be taken concurrently) Minimum Grade of C)

**EDU 326 Classroom Interactions 3 cr**

The three-hour field-based course focuses on how the interactions between curriculum, technology, and pedagogy are used to promote learning. The review of major instructional models and the delivery of effective instruction will be emphasized. This course has a field component that consists of multiple observations and teaching events, including a multiple-day connected lesson in a secondary setting.

**EDU 330 Foundations Read Instruct - W 3 cr**

A course to orient the study to fundamentals in the teaching of reading and provides practice in basic skills. This course has a required field experience.

**EDU 331 Teaching Reading 3 cr**

A course focusing on methodology, materials, and techniques for developing systematic instruction and diagnosis appropriate for early childhood and elementary children. This course has a required field experience.

**Prerequisite:** EDU 330 Minimum Grade of C

**Corequisite:** EDU 303, EDU 312, EDU 313, EDU 336, EDU 362

**EDU 332 Teaching Language Arts 3 cr**

A course presenting methods of promoting meaningful language and literacy skills in early childhood and elementary school programs. This course has a required field experience.

**Prerequisite:** EDU 303 Minimum Grade of C and EDU 312 Minimum Grade of C and EDU 313 Minimum Grade of C and EDU 331 Minimum Grade of C and EDU 336 Minimum Grade of C and EDU 362 Minimum Grade of C

**Corequisite:** EDU 311, EDU 335, EDU 337, EDU 345

**EDU 334 Teaching Mathematics I 3 cr**

This is a course that focuses on effective methods of teaching mathematics to K through grade 3 students. Emphasis will be on developing pedagogical practices that support ambitious and equitable teaching, using research-based frameworks and tools, connecting theory and practice to meet the different needs of K-3 students.

**Prerequisite:** EEC 351 Minimum Grade of C and EDU 330 Minimum Grade of C and EDU 346 Minimum Grade of C and RED 333 Minimum Grade of C

**Corequisite:** EDU 303, EDU 331, EDU 337

**EDU 335 Teaching Mathematics - W 3 cr**

A course which deals with effective methods of teaching mathematics to elementary school students. Emphasis will be on developing an understanding of numbers, teaching basic operations, and using teaching aids and materials to meet the various needs of elementary age children. This course has a required field experience.

**Prerequisite:** EDU 303 Minimum Grade of C and EDU 312 Minimum Grade of C and EDU 313 Minimum Grade of C and EDU 331 Minimum Grade of C and EDU 336 Minimum Grade of C and EDU 362 Minimum Grade of C and (5003 157 or 5903 157) and (5004 154 or 5904 154) and (5005 158 or 5905 158)

**Corequisite:** EDU 311, EDU 332, EDU 337, EDU 345

**EDU 336 Teaching Social Studies 3 cr**

A course using problem solving and independent investigation as means as teaching the relationship of humans to their environment. Objectives, content and procedures are discussed. This course has a required field experience.

**Prerequisite:** EDU 330 Minimum Grade of C

**Corequisite:** EDU 303, EDU 312, EDU 313, EDU 331, EDU 362

**EDU 337 Teaching Science 3 cr**

A course using discovery, inquiry and problem-solving approaches as a means of teaching science. Relationships of science to entire early childhood and elementary curriculum is discussed. This course has a required field experience.

**Prerequisite:** EDU 303 Minimum Grade of C and EDU 312 Minimum Grade of C and EDU 313 Minimum Grade of C and EDU 331 Minimum Grade of C and EDU 336 Minimum Grade of C and EDU 362 Minimum Grade of C

**Corequisite:** EDU 311, EDU 332, EDU 335, EDU 345

**EDU 338 STEAM Education 3 cr**

This course is an extension of mathematics and science teaching methods. It will provide a foundation of the STEAM disciplines in education, the value of integration methods, and strategies used to deliver integrated STEAM education in the elementary school setting. Topics in the course include nature of the disciplines in STEAM education, STEAM pedagogy, teaching strategies, integrated STEAM learning, and problem-based learning.

**Prerequisite:** EDU 303 Minimum Grade of C and EDU 334 Minimum Grade of C and EDU 337 Minimum Grade of C and EDU 336 Minimum Grade of C and EDU 331 Minimum Grade of C

**Corequisite:** EDU 332, EDU 335, EDU 345

**EDU 340 Fundamentals of Teaching - W 3 cr**

This course provides an introduction to effective instructional practices in the secondary classroom. The focus is on planning for instruction and classroom management. This course has both required class meetings and field experiences.

**Prerequisite:** EDM 310 Minimum Grade of C and EDU 400 Minimum Grade of C and EPY 351 Minimum Grade of C

**EDU 341 Middle Level Education - W 3 cr**

Philosophy, concepts, and issues of middle level education including the developmental stage of young adolescence, appropriate and responsive curricular, and meeting the physical, emotional, psychosocial, and cognitive needs of diverse learners.

**Prerequisite:** EDU 340 Minimum Grade of C and EDU 453 (may be taken concurrently) Minimum Grade of C or EDU 454 (may be taken concurrently) Minimum Grade of C or EDU 456 (may be taken concurrently) Minimum Grade of C or EDU 457 (may be taken concurrently) Minimum Grade of C

**Corequisite:** EDU 342, EDU 363, EDU 451

**EDU 342 Secondary Field Experience 1-3 cr**

Supervised practice in teaching curriculum areas in middle and high school classroom settings during the semester in which block courses are taken.

**Prerequisite:** EDU 340 Minimum Grade of C and EDU 453 (may be taken concurrently) Minimum Grade of C or EDU 454 (may be taken concurrently) Minimum Grade of C or EDU 456 (may be taken concurrently) Minimum Grade of C or EDU 457 (may be taken concurrently) Minimum Grade of C

**Corequisite:** EDU 341, EDU 363, EDU 451

**EDU 345 Field Experience 1-3 cr**

Supervised practice in teaching curriculum areas in the elementary or early childhood classroom setting during the semester in which sequence courses are taken.

**Prerequisite:** EDU 303 Minimum Grade of C and EDU 312 Minimum Grade of C and EDU 313 Minimum Grade of C and EDU 331 Minimum Grade of C and EDU 336 Minimum Grade of C and EDU 362 Minimum Grade of C

**Corequisite:** EDU 311, EDU 332, EDU 335, EDU 337

**EDU 346 K-6 Education 3 cr**

This course will introduce the roles of the teacher in working with children in the elementary grades.

**EDU 348 P-3 Education 3 cr**

This course will introduce the roles of the teacher in working with children during the early childhood years (preschool through 3rd grade)

**EDU 352 Literature for Adolescents 3 cr**

This course will introduce the roles of the teacher in working with children from pre-kindergarten through the primary grades. History, management, and parent education techniques are presented.

**EDU 354 Serving Students Severe Disabilities 3 cr**

Curriculum and methods for individuals who exhibit significant challenges in the areas of cognitive, motor, self care, communicative, and/or social behaviors. Emphasis is on physical management, class/individual scheduling, adapted aids and equipment, task analysis, and functional life skills.

**EDU 362 Behavior Management of Exceptional Child 3 cr**

Presentation of the principles and applications of behavioral modification, data collection procedures, and single-subject research designs as related to exceptional children and youth in special education environments.

**Corequisite:** EDU 303, EDU 312, EDU 313, EDU 331, EDU 336

**EDU 363 Teaching Adaptive Curriculum Through Behavior/Classroom 3 cr**

An examination of regular and special education K-12 curricula, materials, and procedures. Specific emphasis will be placed on the selection, modification, and adaptation of curricula, materials, and procedures to meet the needs of individuals with learning and behavioral disabilities.

**Prerequisite:** EDU 340 Minimum Grade of C

**EDU 372 Behavior Management of Exceptional Child 3 cr**

Presentation of the principles and applications of behavior analysis, data collection procedures, and single subject research designs as related to exceptional children and youth.

**EDU 373 Teaching Reading to Students with Disabilities 3 cr**

Introduces the student to the curriculum, teaching the methodologies and instructional activities and materials associated with effective and appropriate developmental and functional reading instruction for students with disabilities.

**EDU 398 P-3 Field Experience 1-3 cr**

Observation and supervised teaching in an early childhood classroom setting prior to Internship

**Prerequisite:** EDU 348 Minimum Grade of C

**EDU 400 Education of Exceptional Children and Youth 3 cr**

Introduction to the field of exceptional children and youth, involving the study of various areas of exceptionality.

**EDU 410 Formal and Informal Assessment 3 cr**

Assesses developmental levels, academic and non-academic performance of exceptional individuals through the administration and interpretation of criterion-referenced instruments, and informal measures. Evaluation of classroom teaching and special education programs is also emphasized.

**EDU 429 Opening School Lab Experience 1 cr**

Professional laboratory experiences of observation and participation for a two-week period at the opening of school. (May be taken twice.)

**Prerequisite:** senior standing.

**EDU 430 K-6 Internship 3-10 cr**

Observation and supervised teaching in elementary or early childhood settings with the opportunity for study and discussion of problems and issues encountered.

**Prerequisite:** (EDU 311 Minimum Grade of C and EDU 332 Minimum Grade of C and EDU 335 Minimum Grade of C and EDU 337 Minimum Grade of C and EDU 345 Minimum Grade of C) and (5003 157 or 5903 157) and (5004 154 or 5904 154) and (5005 158 or 5905 158) and (5205 159 or 190 233)

**Corequisite:** EDU 300

**EDU 430L K-6 Internship Lab 3-9 cr**

Observation and supervised teaching in elementary or early childhood settings with the opportunity for study and discussion of problems and issues encountered.

**EDU 432 Impact of Typical and Atypical Development on Education 3 cr**

An examination of typical child development and developmental characteristics of infants, toddlers, and young children with disabilities from the prenatal period through age eight. Characteristics of disabling conditions and their impact upon development are also discussed.

**EDU 433 Issues in Education of Young Children with Disabilities 3 cr**

This course prepares students to work with infants, toddlers, and young children with disabilities and their families. Topics covered include specific teaching and intervention techniques, special education laws and regulations, and service delivery models.

**EDU 440 Project-Based Instruction 3 cr**

The three-hour field-based capstone course focuses on the principles of design, instruction, classroom management, and assessment of project-based and case-based curriculum projects in mathematics and science education. This course has a field component that includes observations and teaching in secondary school settings. **Prerequisites:** EDU 325 with a grade of 'C' or better, and admission to the Teacher Educator Program.

**EDU 451 Content Area Literacy 3 cr**

Methods and materials in the teaching of reading. Development of effective study and skills at the secondary level is stressed.

**EDU 453 Teaching Language Subjects 3 cr**

Assists the student in organizing materials and in developing methods of teaching language subjects in secondary schools

**Prerequisite:** EDU 340 Minimum Grade of C

**Corequisite:** EDU 341, EDU 342

**EDU 454 Teaching Mathematics 3 cr**

Assists the student in organizing materials and in developing methods of teaching mathematics in secondary schools.

**Prerequisite:** EDU 340 Minimum Grade of C

**Corequisite:** EDU 341, EDU 342

**EDU 456 Teaching Science 3 cr**

Assists the student in organizing materials and in developing methods of teaching science in secondary schools

**Prerequisite:** EDU 340 Minimum Grade of C

**Corequisite:** EDU 341, EDU 342

**EDU 457 Teaching Social Studies 3 cr**

Assists the student in organizing materials and in developing methods of teaching social studies in secondary schools

**Prerequisite:** EDU 340 Minimum Grade of C

**Corequisite:** EDU 341, EDU 342

**EDU 465 Student Teaching Secondary Sch 3 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the N-12 program. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Prerequisite: Appropriate methods course.

**Prerequisite:** EDU 341 Minimum Grade of C

**EDU 466 Internship-Language Arts 3-9 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the 6-12 program. Students will be placed with a person holding a Masters degree and a valid teaching certificate in the appropriate field.

**Prerequisite:** (EDU 341 Minimum Grade of C and EDU 453 Minimum Grade of B and 5038 167)

**EDU 467 Internship - Social Studies 3-9 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the N-12 program. Students will be placed with a person holding a valid teaching certificate in the appropriate field.

**Prerequisite:** EDU 341 Minimum Grade of C and EDU 457 Minimum Grade of B and P081 155 or 5081 155

**EDU 468 Internship - Science 3-9 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the 6-12 program. Students will be placed with a person holding a Masters degree and a valid teaching certificate in the appropriate field.

**Prerequisite:** EDU 341 Minimum Grade of C and EDU 456 Minimum Grade of B and (P435 152 or 5435 152 or P245 150 or 5245 150 or 5265 138 or 5235 150) or 5236 154 or 5246 146 or 5436 141 or 5266 145

**EDU 469 Internship - Math 3-9 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the 6-12 program. Students will be placed with a person holding a Masters degree and a valid teaching certificate in the appropriate field.

**Prerequisite:** (EDU 341 Minimum Grade of C and EDU 454 Minimum Grade of B and 5165 159)

**EDU 470 Apprentice Teaching 7 cr**

This seven-credit-hour field-based course applies previously learned techniques and theoretical perspectives of mathematics or science education within a secondary school classroom setting. Prerequisites: EDU 325 with a grade of 'C' or better, admission to the Teacher Educator Program, and a passing score on the Praxis exam corresponding with the student's desired area of certification.

**Prerequisite:** (5165 159 or 5266 145 or 5436 141 or 5246 146 or 5236 154) and (EDU 325 Minimum Grade of C)

**EDU 490 Special Topics 3 cr**

Guided study of selected educational tasks (e.g. curriculum revision, classroom materials development, models of learning and teaching) and teaching problems and practices for improving student achievement. Not more than six hours may be earned in Special Topics courses.

**EDU 494 Directed Research Studies 1-3 cr**

No more than six hours can be accepted for a Bachelor's Degree and Class B Certificate.

**EDU 495 K-6 Internship SPE 3-9 cr**

Observation and supervised K-6 classroom teaching experience providing the opportunity to synthesize all previous instruction. This culminating activity provides opportunity for study and discussion of problems and issues encountered in the practicum situation.

**Prerequisite:** (EDU 302 Minimum Grade of C and EDU 311 Minimum Grade of C and EDU 335 Minimum Grade of C and EDU 337 Minimum Grade of C and EDU 345 Minimum Grade of C and EDU 362 Minimum Grade of C) and (5002 157 and 5003 157 and 5004 154 and 5005 158 and 5205 159)

**Corequisite:** EDU 430

**EDU 496 Internship 6-12 9 cr**

Observation and supervised classroom teaching experience providing the opportunity to synthesize all previous instruction. This culminating activity provides opportunity for study and discussion of problems and issues encountered in the practicum situation.

**Prerequisite:** EDU 372 Minimum Grade of C and EDU 363 Minimum Grade of C

**EDU 497 P-3 Internship 3-9 cr**

Observation and supervised classroom teaching experience providing the opportunity to synthesize all previous instruction. This culminating activity provides opportunity for study and discussion of problems and issues encountered in the practicum situation.

**Prerequisite:** EDU 432 Minimum Grade of C and EDU 433 Minimum Grade of C

**EDU 498 P-3 Internship 3-10 cr**

Observation and supervised teaching experience providing the opportunity to synthesize all previous instruction. This culminating activity provides opportunity for study and discussion of problems and issues encountered in the practicum situation.

**Prerequisite:** EDU 348 Minimum Grade of C and EDU 398 Minimum Grade of C

**EDU 499 Senior Honors Project - H 3-6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project, relevant to the field of elementary/early childhood study, that will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty chaired by the honors mentor. This course is required for Honors recognition and may be repeated for up to six hours. Prerequisite: Participant in honors program and junior level status.

**EDU 500 Capstone Portfolio 0 cr**

The capstone portfolio is a 0 credit course for graduate students whose programs require a capstone portfolio as all or part of their comprehensive exam. Students will enroll in this course for their final semester. The portfolio will be developed under the guidance of the student's academic advisor and other departmental faculty, and will demonstrate mastery of content knowledge, professional dispositions and skills.

**EDU 567 Multicultural Exp in Schools 3 cr**

In an increasingly diverse society, teachers must be able to work with students with form a variety of backgrounds, some quite different from teachers' own cultural backgrounds. This course responds to the growing need for better training for teachers in how to work with a diverse population, increase academic achievement, and prepare students from a global workplace.

**Cross-Listed:** SED 567

**EDU 640 Instructional Development 3 cr**

Preparation of a modular program of instruction which incorporates all elements of the instructional-design process.

**EDU 650 Instructional Techniques 3 cr**

**Cross-Listed:** IDE 650

**EDU 692 Research Proj Seminar 3 cr**

Survey of both current and classic research in education. Students will identify a research problem of significance in their area of specialization and develop a strategy or research design to solve this problem.

**Prerequisite:** IDE 510 Minimum Grade of B

**Cross-Listed:** IDE 692

**Elem-Early Childhood (EEC)****EEC 290 Special Topics - 3 cr**

Guided study of selected educational tasks (e.g. curriculum revision, classroom materials development, models of learning and teaching) and teaching problems and practices for improving student achievement. Not more than 6 hours may be earned in Special Topics courses.

**EEC 300 Creating Envir for Lrng/Play 3 cr**

A study of environments that promote learning through play in early childhood. Emphasis on materials, activities, equipment, and effective strategies that support and encourage young children's play, learning and creativity.

**EEC 315 Creating Culturally Responsive Early Childhood Classrooms 3 cr**

This course emphasizes the importance of recognizing the role of culture(s) and lived experiences in developing effective, meaningful, and inclusive learning opportunities for young children.

**EEC 332 Teaching Language Arts 3 cr**

A course presenting methods of promoting meaningful language and literacy skills in early childhood and elementary school programs. This course has a required field experience.

**Corequisite:** EEC 346, RED 330, RED 333

**EEC 334 Lit for the Young Child 3 cr**

A survey course dealing with methods of writing literary materials with children in preschool through the primary grades. It is designed to assist those who wish to become widely acquainted with books and related materials for today's young children.

**Cross-Listed:** RED 334

**EEC 335 Teaching Mathematics - W 3 cr**

A course which deals with effective methods of teaching mathematics to elementary school students. Emphasis will be on developing an understanding of numbers, teaching basic operations, and using teaching aids and materials to meet the various needs of elementary age children. This course has a required field experience.

**Prerequisite:** ((MA 181 Minimum Grade of D or MA 201 Minimum Grade of D) or (MA 202 Minimum Grade of D or MA 281 Minimum Grade of D)) and EEC 346 Minimum Grade of C and RED 330 Minimum Grade of C and EEC 332 Minimum Grade of C

**Corequisite:** EEC 336, EEC 337, RED 331

**EEC 336 Teaching Social Studies 3 cr**

A course using problem solving and independent investigation as means of teaching the relationship of humans to their environment. Objectives, content and procedures are discussed. This course has a required field experience.

**Prerequisite:** EEC 346 Minimum Grade of C and RED 330 Minimum Grade of C and RED 333 Minimum Grade of C and EEC 332 Minimum Grade of C

**Corequisite:** EEC 335, EEC 337, EEC 345, RED 331

**EEC 337 Teaching Science 3 cr**

A course using discovery, inquiry and problem-solving approaches as a means of teaching science. Relationships of science to entire early childhood and elementary curriculum is discussed. This course has a required field experience.

**Prerequisite:** EEC 346 Minimum Grade of C and RED 330 Minimum Grade of C and RED 333 Minimum Grade of C and EEC 332 Minimum Grade of C

**Corequisite:** EEC 335, EEC 336, EEC 345, RED 331

**EEC 338 Curr App Music-Movement in EC 3 cr**

Focus on planning, preparing, and guiding experiences for young children in musical play, movement, and creative dramatics to develop the whole child through cooperative activities that promote language and literacy learning across the curriculum.

**EEC 345 Sequence Field Experience 1 cr**

Supervised practice in teaching curriculum areas in the elementary or early childhood classroom setting during the semester in which sequence courses are taken.

**Prerequisite:** EEC 346 Minimum Grade of C and RED 330 Minimum Grade of C and RED 333 Minimum Grade of C and EEC 332 Minimum Grade of C

**Corequisite:** EEC 335, EEC 336, EEC 337, RED 331

**EEC 346 Early Child Prog(Birth-8)-W 3 cr**

This course will introduce the roles of the adult in working with children from birth through age 8. History, management and parent education techniques are presented.

**EEC 348 Lang Dev in Early Childhood 3 cr**

An introduction to speech and language development birth through primary grades and teaching practices that support language and literacy development. Includes discussion of cultural and developmental factors that influence language development methods appropriate for helping young children acquire language and literacy skills.

**Cross-Listed:** RED 348

**EEC 351 Child Development & Learning 3 cr**

A study of physical, cognitive, social, and emotional development from birth to age 8. Emphasis is placed on applying an understanding of child growth and development in an educational context. This course includes a field experience in an early childhood setting.

**EEC 429 Opening School Lab Exp 1 cr**

Professional laboratory experiences of observation and participation for a two-week period at the opening of school. (May be taken twice.)  
Prerequisite: senior standing.

**EEC 430 Student Teaching - EEC 9-12 cr**

Observation and supervised teaching in elementary or early childhood settings with the opportunity for study and discussion of problems and issues encountered. (Co-requisite: Lab) Prerequisite: Permission of department.

**Prerequisite:** EEC 332 Minimum Grade of C and EEC 335 Minimum Grade of C and EEC 336 Minimum Grade of C and EEC 337 Minimum Grade of C and EEC 345 Minimum Grade of C and EEC 346 Minimum Grade of C and RED 330 Minimum Grade of C and RED 331 Minimum Grade of C and RED 333 Minimum Grade of C

**EEC 430L Student Teaching - EEC 0 cr**

Observation and supervised teaching in elementary or early childhood settings with the opportunity for study and discussion of problems and issues encountered. (Co-requisite: Lecture) Prerequisite: Permission of department.

**Prerequisite:** EEC 332 Minimum Grade of C and EEC 335 Minimum Grade of C and EEC 336 Minimum Grade of C and EEC 337 Minimum Grade of C and EEC 345 Minimum Grade of C and EEC 346 Minimum Grade of C and RED 330 Minimum Grade of C and RED 331 Minimum Grade of C and RED 333 Minimum Grade of C

**Corequisite:** EEC 430

**EEC 490 Special Topics 3 cr**

Guided study of selected educational tasks (e.g. curriculum revision, classroom materials development, models of learning and teaching) and teaching problems and practices for improving student achievement.

**EEC 494 Directed Studies 1-3 cr**

No more than 6 hours can be accepted for a Bachelor's Degree and Class B Certificate. Prerequisite: Permission of department chair.

**EEC 496 Internship- 3-9 cr**

The internship is a supervised learning experience in an approved setting similar to that in which the student will eventually be employed. The internship provides students with an opportunity to apply theories and concepts learned during the undergraduate program. Requires candidacy and approval of department chair.

**EEC 499 Senior Honors Project - H 3-6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project, relevant to the field of elementary/early childhood study, that will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty chaired by the honors mentor. This course is required for Honors recognition and may be repeated for up to 6 credit hours. Prerequisite: Participant in honors program and junior level status.

**EEC 522 Elementary School Curriculum 3 cr**

The study of curriculum with an emphasis on concepts, procedures and models particular to curriculum in the elementary school. Curriculum study includes the context of and a process of planning, developing, implementing, and evaluating the elementary school curriculum.

**EEC 523 Instr Plan Elem School 3 cr**

Presents an overview of factors and procedures involved in planning, developing and evaluating the elementary school instructional process.

**EEC 532 Lit and Lang Dev in Elem Sch 3 cr**

Designed to explore the multi-dimensional theory of language development and to provide techniques and practices for development of language ability. Through correlating these related areas, the student should grow in understanding dynamics and change in language structure and development. Opportunities for oral and written communication are emphasized.

**EEC 535 Trends in Teaching Mathematics 3 cr**

This course emphasizes new methods of presenting mathematical content to elementary school students. Various materials will be developed to promote thinking and discovery of mathematical concepts. Opportunities are provided for developing multi-level materials appropriate to the varied abilities and interest levels in elementary school.

**Prerequisite:** EEC 523 (may be taken concurrently) Minimum Grade of C

**EEC 536 Issues-Innov Tch Soc Studies 3 cr**

Current issues and innovations in early childhood and elementary school social studies teaching and learning are reviewed.

**EEC 537 Teaching Science 3 cr**

Current trends and issues in early childhood and elementary school science teaching and learning are reviewed.

**EEC 545 Effective Mathematics Teaching Practices 3 cr**

This course supports elementary mathematics educators in examining and reflecting upon effective teaching practices that promote ambitious mathematics instruction in the K-6 classroom.

**EEC 547 Instructional Strategies for Science Teaching 3 cr**

This course prepares students to provide effective science instruction using strategies that focus on phenomena, inquiry learning, sensemaking, and science practices

**EEC 548 Early Childhood Practicum 1-9 cr**

Experiences in a field-setting working with children birth through age 8 under the supervision of qualified personnel.

**EEC 550 Trends in Parent Education 3 cr**

A study of current trends in parent education designed to promote better homeschool communication and cooperation.

**EEC 551 Seminar Elem Education 3 cr**

A seminar of topics, programs and research in the field of elementary education. This course provides a forum for discussion of contemporary educational issues and practicum experiences in the teaching field in which the quality of performance in teaching is evaluated.

**EEC 552 Comm Svcs Families-Children 3 cr**

Study of agencies which provide services, types of services provided, and means of obtaining needed services.

**EEC 553 Org Patterns and Curr in ECE 3 cr**

A review of organizational and curricular patterns utilized in the classroom setting for the education of young children. A study of educators and their theories concerning learning styles and developmental patterns in relation to the school setting and curriculum.

**EEC 554 Lang Dev in Early Child Ed 3 cr**

Study of the language development of young children with an emphasis on provision of classroom environment to promote growth of language.

**EEC 555 Org-Adm In Early Childhood Ed 3 cr**

Managing the multiple responsibilities of administrative heads of educational programs for young children.

**EEC 556 Elementary School Curriculum 3 cr**

An in-depth study of the development, implementation, and assessment of Elementary school curriculum through a theoretical and research-based lens.

**EEC 557 Elementary Practicum 1-9 cr**

Experiences in a field setting working with children in grades K-6 under the supervision of qualified personnel.

**EEC 558 Teaching Spelling and Writing 3 cr**

Analysis of methods of teaching spelling and the mechanics of writing, included review of pertinent research in the skill areas as well as emphasis on the relationship of spelling to the development of skills in word recognition.

**EEC 560 Workshop Elem-Early Child Ed 3 cr**

A topical workshop in which participants have experiences in creating, designing, constructing and using instructional materials and activities. No more than 6 hours can be applied toward a degree program.

**EEC 562 Classroom Logis - Facilitation 3 cr**

To increase teacher's competencies to facilitate learning by providing a classroom atmosphere conducive to self-discipline, participation and worthwhile learning activities.

**EEC 575 Diag Lrng Difficulties in Math 3 cr**

Analysis of diagnostic techniques for identifying children's learning difficulties in mathematics.

**Prerequisite:** EEC 535 Minimum Grade of B

**EEC 577 Children's Lit for Gifted 3 cr**

An exploration of research related to reading behavior of gifted and high-ability children with emphasis on examining criteria for selecting and utilizing literature to promote cognitive, emotional, and social development.

**EEC 590 Sp Top - 1-3 cr**

Guided supervision in the identification and completion of educational tasks, such as curriculum revision, course and/or program design, self-study for accreditation visitation, student achievement evaluation, aesthetic experiences, consumer and career education. No more than 6 hours can be applied toward a graduate degree.

**EEC 592 Research Seminar 3 cr**

Structured to assist graduate students in designing and implementing appropriate research for professional growth and writing of a thesis.

**EEC 594 Dir St and Research 1-3 cr**

Students explore through directed individual study research problems and issues of special interest or significance in elementary or early childhood education. No more than 3 hours of any departmental 594 courses can be applied toward a degree program. **Prerequisite:** Permission of department chair

**EEC 595 Internship-Elementary 3-9 cr**

The internship is a supervised learning experience in a work setting similar to that in which the educator will eventually be employed. The internship provides the student an opportunity to apply the theories and concepts learned during the graduate program of study. **Prerequisite:** Permission of department chair.

**Prerequisite:** (5004 154 (5003 157 or 5903 157) or 5904 154) and (5005 158 or 5905 158) and (5205 159 or 190 233)

**EEC 598 Internship Early Childhood Edu 3-9 cr**

The internship is a supervised learning experience in a work setting similar to that in which the educator will eventually be employed. The internship provides the student an opportunity to apply the theories and concepts learned during the graduate program of study. **Prerequisite:** Permission of department chair.

**Prerequisite:** 5025 156 and 5205 159 or 190 233

**EEC 599 Thesis 1-9 cr**

A student selects a project, study, or investigation related to his area of specialization in early childhood or elementary education. The project forms a basis for the thesis. A thesis committee will provide direction during the investigation for and writing of the thesis.

**EEC 601 Advanced Seminar - 3 cr**

In depth study of various curriculum areas through research reports, problem analysis and individual evaluation of promising practices and topical issues. Each seminar participant will concentrate on a curriculum area: e.g., arithmetic, career awareness, communication, consumer education, humanities, natural sciences, social sciences, early reading and psycholinguistics.

**EEC 610 Diag and Prescriptive Teaching 3 cr**

Designed to assist teachers and school leaders in understanding the skills and techniques necessary for diagnosing and prescribing instruction for learners in different types of teaching-learning settings.

**EEC 622 Seminar in Curr-Inst Problems 3 cr**

Critical study of curriculum and instructional problems in the elementary school. Research reviews and program design problems are emphasized.

**EEC 635 Seminar in Mathematics Ed 3 cr**

A study of current topics related to teaching mathematics in early childhood and elementary years.

**EEC 690 Sp Top - 3 cr**

Guided supervision in the identification and completion of educational tasks, such as curriculum revision, course and/or program design, self-study for accreditation visitation, student achievement evaluation. No more than 6 hours can be applied toward a graduate degree. **Prerequisite:** Permission of department chair.

**EEC 694 Dir St and Research - 1-3 cr**

Students explore through directed study problems and issues of special interest or significance in early childhood or elementary education. No more than 3 hours of any departmental 694 courses can be applied toward a degree program. **Prerequisite:** Permission of department chair.

**EEC 695 Internship 3-9 cr**

The internship is a supervised learning experience in a work setting similar to that in which an educator will eventually be employed. The internship provides the student with an opportunity to apply the theories and concepts learned during the graduate program.

**EEC 699 Research Project 1-3 cr**

The research project, as the culminating experience in the Instructional Specialist Program, provides an opportunity for the candidate to synthesize and apply the various program components in a selected instructional setting. Suitable agreements are reached with the appropriate school systems by the candidate. May be taken more than one semester. **Prerequisite:** Permission of department chair.

**Prerequisite:** EEC 601 Minimum Grade of B and EEC 610 Minimum Grade of B and EEC 622 Minimum Grade of B and (IDE 692 Minimum Grade of B or EDU 692 Minimum Grade of B)

**English Lang Teaching (ELT)****ELT 325 Survey of ESL 3 cr**

A comprehensive survey of current research, methodology and materials in the field of English as a Second Language and historical, philosophical, political, legal, social and educational issues that have contributed to policy regarding public school services for language minority students.

**ELT 330 Methods and Materials for ESL 3 cr**

Techniques of teaching English as a second language will be introduced and applications explored. Acquaints students with methodology and materials, with instruction on the preparation of audio and visual teaching aids, lesson plans and the use of educational technology, behavioral objectives, state ESOL objectives and teaching strategies for English learners in the ESL or mainstream classroom. ELT 525 is a recommended pre-requisite or co-requisite course, but is not a requirement.

**ELT 345 Cross-Cultural Understanding 3 cr**

Investigates the roles of language and culture in education. Addresses the social processes involved in second language acquisition, including developmental influences, influences of home language and culture, culture variation, home vs. school cultural differences and working parents/family of ELL students.

**ELT 358 Cross-Cultural Understanding 3 cr**

This course provides knowledge of linguistics including English syntax, semantics, pragmatics, morphology, phonemics and phonology as applied to teaching English Language Learners. Students will review theories in first and second language acquisition. Students will apply linguistic theory, issues in sociolinguistics, psycholinguistics and neurolinguistics to teach English to ELLs, with emphasis on pronunciation, intonation and structural analysis of English and contrastive analysis of English and non-English linguistic systems.

**ELT 525 Found Tchg Eng as Sec Lang 3 cr**

A comprehensive survey of current research, methodology and materials in the field of English as a Second Language and historical, philosophical, legal, social, and educational issues that have contributed to policy regarding public school services for language minority populations.

**ELT 530 Methods and Materials Tch ESL 3 cr**

Techniques of teaching English as a second language will be introduced and applications explored. Acquaints students with methodology and materials, with instruction on the preparation of audio and visual teaching aids, lesson plans, and the use of educational technology, behavioral objectives, state ESOL objectives, and teaching strategies for the ELL student in the ESL or mainstream classroom. Course restricted to majors in ESOL education.

**ELT 545 Cross-Cultural Understand Tch 3 cr**

Investigates the roles of language and culture in education. Addresses the social processes involved in the second language acquisition, including developmental influences, influences of home language and culture, cultural variation, home vs. school cultural differences, and working with parents/family of ELL students.

**ELT 553 LA Assess Eval of ELL Students 3 cr**

Selection, administration, and interpretation of measurement instruments. Includes entry and placement procedures, language proficiency/achievement testing, linguistic and cultural aspects of intelligence testing, multiple intelligence assessment, ELL student assessment in the mainstream classroom, and application of testing to instruction. Course restricted to majors in ESOL education.

**ELT 558 Applied Ling for Teach of ELL 3 cr**

This course provides knowledge of linguistics including English syntax, semantics, pragmatics, morphology, phonemics, and phonology as applied to teaching English Language Learners. Students will review theories in first and second language acquisition. Students will apply linguistics theory, issues in sociolinguistics, psycholinguistics, and neurolinguistics, to teach English to ELLs with emphasis on pronunciation, intonation, and structural analysis of English and contrastive analysis of English and non-English linguistic systems. Course restricted to majors in ESOL education.

**ELT 590 Spec Top- 1-3 cr**

Current topics of special concern to ESOL Educators. A different topic will be covered each time the course is offered. Not more than six semester hours may be applied toward a degree program.

**ELT 594 Directed Study and Research 1-3 cr**

Students explore through directed study problems and issues of special interest or significance in ESOL Education. Not more than three semester hours may be applied toward a degree program.

**ELT 595 ESOL Internship 3,6 cr**

Three hundred hours of supervised on-the-job experience in teaching English to speakers of other languages (ESOL) in P-12 settings. Interns are engaged in the full scope of teaching activities including planning, delivering lessons, evaluating students, and conducting managerial tasks related to teaching English as a Second Language. Teaching experience will be accompanied by scheduled observations and discussions to analyze and evaluate each student's internship experience. Course restricted to majors in ESOL education.

**Prerequisite:** ELT 525 Minimum Grade of C and ELT 530 Minimum Grade of B and ELT 545 Minimum Grade of C and ELT 553 Minimum Grade of C and ELT 558 Minimum Grade of C

**Higher Education (HED)****HED 501 Digital Leader 3 cr**

This course will explore the role of digital media, including social media, in higher education administration.

**HED 503 Higher Ed Finance 3 cr**

This course will examine national, state and local economic factors and their impact upon budgeting and financial management work of higher education administrators/leaders.

**HED 603 Current Probs Higher Education 3 cr**

Analysis of current issues affecting higher education.

**HED 611 Human Relations in Higher Edu 3 cr**

Designed to assess and improve the student's level of competency in program development skills, instructional strategies, systems analysis, and change innovation.

**HED 631 Sem Higher Ed Mgt Skills 3 cr**

Designed to assess and improve the student's knowledge of decision making styles, problem-solving processes, leadership skills, implementation of organizational change, and physical environments which promote productivity, all in the context of higher education.

**HED 701 Adv Org Theory for Higher Edu 3 cr**

This course is designed to provide students with an in-depth exploration of organizational theories and models and organizational approaches in higher education. Topics covered include administrative structure and leadership, accountability and change.

**HED 702 Higher Ed Finance 3 cr**

This course is designed to provide students with an overview of finance in higher education. The overview will include the financial benefits of higher education, access and affordability issues, state and federal funding, price-setting, tuition discounting, merit aid, sources of revenue and expenditures, cost-cutting measures, budgeting and college athletics.

**HED 703 Adv Leadership for Higher Ed 3 cr**

This course is designed to provide students with an in-depth exploration of leadership theories and models. Students will create a personal knowledge base from which to create a plan to develop or revise a leadership perspective.

**HED 704 Current Issues in Higher Ed 3 cr**

This course offers an in-depth analysis of current issues in and challenges to higher education.

**HED 707 Multiculturalism and Organizational Change in Higher Education 3 cr**

Students will examine the role of University leaders, at Universities and diverse student populations, and study strategies and organizational models relative to the solution of problems associated with the implementation of organizational diversity plans.

**HED 732 Ethics and Law for Higher Ed 3 cr**

An examination of ethical and legal issues present in higher education.

**HED 6313 Sem Higher Ed Mgt Skills 3 cr****Leadership/Teacher Educ (LTE)****LTE 547 Instructional Coaching 3 cr**

An overview of strategies for guiding teachers and other professionals toward improving student achievement by building better learning communities.

**LTE 645 Curriculum Leadership 3 cr**

A purpose of this course will be to prepare professional educators through teaching, research and services to become committed to life-long learning and to facilitating the process of building better communities.

**LTE 646 Community Leadership 3 cr**

This course will prepare future teacher leaders to work effectively within their school community as well as with the communities in which they work and with the families of the students they teach.

**LTE 647 Instructional Coaching 3 cr**

A purpose of this course is to prepare professional educators through teaching, research, and service to become committed to life-long learning and to facilitate the process of building better communities. Students will demonstrate best educational practices and professional dispositions and will learn how to create a positive, motivational learning environment in schools while recognizing, appreciating, and including diverse learners and perspectives. Additionally, students are expected to demonstrate satisfactory skills in curriculum leadership; to engage in action research related to schools; to engage in literacy coaching; to address current family, community, regional, and national issues related to scholastic achievement, and to use tenets of instructional leadership to guide teachers and other professionals toward improving student achievement.

**LTE 699 Research Project 1-3 cr**

The Research Project, as the culminating experience in the Instructional Specialist Program, provides the candidate an opportunity to synthesize and apply program components and a timely topic in the field.

**Prerequisite:** IDE 692 Minimum Grade of B or EDU 692 Minimum Grade of B

**Natural Science Educ (NSE)****NSE 201 Intro to Physical Science 3 cr**

The scientific attitude, the application of physical laws and principles to modern life, and assembling of apparatus and materials for demonstrating these principles are studied. (Not open to science majors.)

**NSE 202 Intro to Physical Science 3 cr**

The scientific attitude, the application of physical science laws and principles to modern life, and assembling of apparatus and materials for demonstrating these principles are studied. (Not open to science majors.)

**NSE 403 Aerospace Education 3 cr**

Basic principles of flight; survey of space exploration, military, commercial, and general aviation. Preparation of materials for use in teaching.

**NSE 404 Aerospace Education 3 cr**

Basic scientific principles applied in aerospace. Development of model rockets and aircraft. Preparation of materials for use in teaching.

**NSE 494 Dir St - 1-3 cr**

Directed study. No more than 6 hours can be accepted for a Bachelor's Degree and Class B Certificate. Prerequisite: Permission of department chair.

**NSE 501 Adv Aerospace Education 3 cr**

Scientific principles applied in aerospace education. Development of model rockets and aircraft. Preparation of advanced materials for teaching.

**NSE 594 Dir St and Research 1-3 cr**

Students explore through directed study problems and issues of special interest or significance in Science Education. No more than 3 hours of any departmental 594 courses can be applied toward a degree program. Prerequisite: Permission of department chair.

**Passage USA (PSG)****PSG 001 Adult Development Seminar I 0 cr**

A learner-centered approach to developing self-advocacy, academic/career, independent living, and community integration skills is used. Seminar I focuses on personal safety and prevention, campus navigation, learning with technology, and personal care.

**PSG 002 Internship/Work Experiences I 0 cr**

Individualized instruction focused on career exploration and soft skill development. Students will explore different job and career options during the semester as well as develop skills related to employment.

**PSG 003 Adult Dev Sem II 0 cr**

A holistic instructional approach addresses individual learning goals in areas of functional skills and knowledge, application, integration, caring, and learning to learn is used. Seminar II focuses on goal setting, self-care, well-being, budgeting, and learning strategies.

**Prerequisite:** PSG 001 Minimum Grade of S

**PSG 004 Intern/Wrk Exp II 0 cr**

Individualized instruction focused workplace documentation, characteristics of good employees and employment development. Students will explore different job and career options while practicing skills they have learned in class in supervised work experiences.

**Prerequisite:** PSG 002 Minimum Grade of S

**PSG 005 Adult Dev Sem III 0 cr**

Students will participate in valuable and diverse learning experiences generalized to multiple environments. Seminar III focuses on transportation to and from campus, managing personal, finances, interpersonal skills development, and citizenship responsibilities.

**Prerequisite:** PSG 003 Minimum Grade of S

**PSG 006 Intern/Wrk Exp III 0 cr**

Students will be placed in supervised internship/work placements and receive on job training. Individual job training will address Adult Education Program goals as well a student's needs.

**Prerequisite:** PSG 004 Minimum Grade of S

**PSG 007 Adult Dev Sem IV 0 cr**

Through individualized instructions students will refine self-advocacy, academic/career, independent/daily living, and community integration skills. Seminar IV focuses on advanced transportation, budgeting and finances, interpersonal, well-being, and self-care skills.

**Prerequisite:** PSG 005 Minimum Grade of S

**PSG 008 Intern/Wrk Exp IV 0 cr**

Students will have a supervised internship/work experience. Instruction will focus on the skills needed to gain and/or maintain paid employment. Individualized instruction will be provided.

**Prerequisite:** PSG 006 Minimum Grade of S

**PSG 009 Work Pract I 0 cr**

Students will engage in supervised work-based experience in a practicum setting(s) for a minimum of 6 hours a week.

**PSG 010 Work Pract II 0 cr**

Students will engage in supervised work-based experience in a practicum setting(s) for a minimum of 6 hours a week.

**Prerequisite:** PSG 009 Minimum Grade of S

**PSG 011 Work Pract III 0 cr**

Students will engage in supervised work-based experience in a practicum setting(s) for a minimum of 10 hours a week.

**Prerequisite:** PSG 010 Minimum Grade of S

**PSG 012 Work Pract IV 0 cr**

Students will engage in supervised work-based experience in a practicum setting(s) for a minimum of 10 hours a week.

**Prerequisite:** PSG 011 Minimum Grade of S

**PSG 020 Job and Career Skills 1 0 cr**

An individualized approach is taken toward identifying and mastering the skills that will be needed for jobs and career. Contents include workplace advocacy, on-site generic and specific work skills, workplace hazards, and specific work skills for employment sectors.

**PSG 021 Adv Ind Liv Skills 1 0 cr**

An individualized approach is taken toward identifying and mastering the skills that will be needed for independent living. Focus areas will include budgeting, hygiene, home upkeep, personal safety and prevention, community engagement, social skills and other skills.

**PSG 022 Job and Career Skills 2 0 cr**

An individualized approach is taken toward identifying and mastering the skills that will be needed for jobs and career: workplace advocacy, on-site work skills, workplace hazards, and specific work skills for employment sectors.

**Prerequisite:** PSG 020 Minimum Grade of S

**PSG 023 Adv Ind Liv Skills 2 0 cr**

An individualized approach is used to develop needed independent living skills. Personal, financial, nutritional, safety, and community skills will be assessed and taught using a strengths-based approach.

**Prerequisite:** PSG 021 Minimum Grade of S

**PSG 024 Job and Career Skills 3 0 cr**

An individualized approach is taken toward identifying and mastering the skills that will be needed for jobs and career in fields of interest. Specific and general skills needed in related employment sectors will also be taught.

**Prerequisite:** PSG 022 Minimum Grade of S

**PSG 025 Comm Res Exper 1 0 cr**

Individualized supports and direct instruction will be provided to help students master the skills they need to live as independently as possible in their community residence.

**Prerequisite:** PSG 023 Minimum Grade of S

**PSG 026 Job and Career Skills 4 0 cr**

An individualized approach is taken toward identifying and mastering the skills needed for jobs and career in fields of interest. Specific and general skills needed in related employment sectors will also be taught.

**Prerequisite:** PSG 024 Minimum Grade of S

**PSG 027 Comm Res Exper 2 0 cr**

Individualized supports and direct instruction will be provided to help students master the skills they need to live as independently as possible in their community residence. Person-centered planning will be used to identify strengths and needs.

**Prerequisite:** PSG 025 Minimum Grade of S

**PSG 029 Comm R 0 cr**

Individualized community-based supports and direct instruction will be provided to help students master the skills they need to live as independently as possible in their community residence. Person-centered planning will be used to identify strengths and needs.

**Prerequisite:** PSG 027 Minimum Grade of S

**PSG 031 Career Practicum 1 0 cr**

Students will engage in supervised work-based experience in a competitive employment setting. The practicum setting will be related to students' job and career goals.

**PSG 032 Career Practicum 2 0 cr**

Students will engage in supervised work-based experience in a competitive employment setting. The practicum setting will be related to students' job and career goals.

**Prerequisite:** PSG 031 Minimum Grade of S

**PSG 033 Career Employ Pract 1 0 cr**

Students will engage in supervised work-based experience in a competitive employment setting in the community.

**Prerequisite:** PSG 032 Minimum Grade of S

**PSG 034 Career Employ Pract 2 0 cr**

Students will engage in extended-length, supervised work-based experience in a competitive employment setting in the community.

**Prerequisite:** PSG 033 Minimum Grade of S

**PSG 035 Career Employ Pract 3 0 cr**

Students will engage in extended-length, supervised work-based experience in a competitive employment setting in the community.

**Prerequisite:** PSG 034 Minimum Grade of S

**PSG 090 Special Topics 0 cr**

Guided study topics of specific interest to the student. Students will participate in inclusive classes that are part of the USA undergraduate curriculum.

**PSG 091 Passage Special Topics 6 cr**

This course is co-listed with a course that is part of the USA undergraduate curriculum. The instructor has provided special permission to students in PASSAGE USA to enroll in the class. Individualized expectations for course completion will be developed by the course instructor, the student, and PASSAGE USA staff.

**Reading Instruction (RED)****RED 110 Effect Read-Lang-Study Skills 3 cr**

A laboratory experience to increase facility in reading, language and study skills.

**RED 330 Found of Read Instruction - W 3 cr**

A course to orient the student to fundamentals in the teaching of reading and provides practice in basic skills.

**RED 331 Teaching Reading 3 cr**

A course focusing on methodology, materials, and techniques for developing systematic instruction and diagnosis appropriate for early childhood and elementary children. This course has a required field experience.

**Prerequisite:** RED 330 Minimum Grade of C and EEC 346 Minimum Grade of C and RED 333 Minimum Grade of C and EEC 332 Minimum Grade of C

**Corequisite:** EEC 335, EEC 336, EEC 337, EEC 345

**RED 333 Literature for Children - W 3 cr**

A course for the selection and use of literature based on the interests, abilities, and needs of children from prekindergarten through the elementary school. Particular emphasis on creative ways of sharing books with children. This course has a required field experience.

**Corequisite:** RED 330

**RED 334 Lit for the Young Child - W 3 cr**

A survey course dealing with methods of writing literary materials with children in preschool through the primary grades. It is designed to assist those who wish to become widely acquainted with books and related materials for today's young children.

**RED 348 Lang & Lit Dev in Early Child 3 cr**

A study of oral language structures and stages of development, early literacy foundations, and developmental sequences of phonological awareness along with teaching practices that support language and literacy development. Includes discussion of cultural and developmental factors that influence acquisition of language and literacy skills.

**RED 352 Literature for Adolescents 3 cr**

Discussion and evaluation of literature for students in grades 7 through 12 with extensive reading, listening, and viewing of materials.

**RED 451 Content Area Literacy - W 3 cr**

Methods and materials in the teaching of reading. Development of effective study and skills at the secondary level is stressed.

**Prerequisite:** SED 340 Minimum Grade of C and SED 341 (may be taken concurrently) Minimum Grade of C

**RED 458 Crit Read in Content Field - W 3 cr**

An examination of non-fiction (and some fiction) which emphasizes critical reading skills. Various types of prose will be considered including that found in textbooks, newspapers and other periodicals, popular fiction, and non-fiction.

**RED 520 Reading Foundations 3 cr**

Introduces students to the fundamentals of the teaching of reading, including concepts of print, phonological awareness, phonics, fluency, vocabulary, and comprehension and how these areas are assessed. This course has a required field experience.

**RED 530 Curr App & Res in Read Instr 3 cr**

An intensive exploration of the current theories, practices, and research in the teaching of reading.

**RED 531 Trends-Practices Tchg Reading 3 cr**

Begins with in-depth study of the nature of reading as a process and its place in the total school program and extends through assessments, methods, materials, and personalized procedures for pupils and teachers.

**Prerequisite:** RED 520 Minimum Grade of C

**RED 533 Diag-Corr Reading Disabilities 3 cr**

First, an intensive study of steps in the diagnosis of reading disabilities; second, a survey of corrective and remedial techniques for eliminating the difficulties; the third, application of diagnostic and instructional techniques to specific type of disabilities.

**Prerequisite:** RED 531 Minimum Grade of B

**RED 534 Remed-Clinic Procd in Reading 3 cr**

A practicum in remediating reading disabilities. Each student receives close supervision in work with actual cases at varying disabilities levels.

**Prerequisite:** RED 533 Minimum Grade of B

**RED 541 Literacy in the Content Area 3 cr**

This course includes the methods and materials for literacy-based instruction in the content areas. The incorporation of literacy-based activities such as reading, writing, and thinking; and the use of strategies to promote student comprehension are emphasized. Prerequisite: Admission to teacher education program.

**RED 544 Wrtg Process Skls Read Writing 3 cr**

Intensive writing applications with an emphasis on the writing process, action research, and the reading and discussion of reading and writing pedagogy and research.

**RED 545 Lit for Children - Adolescents 3 cr**

Provides a comprehensive survey of books written for children and adolescents, and makes appropriate interspersions of periodicals and other media. Through varied class activities, with emphasis on techniques for encouraging literary enjoyment, the student will increase skills in making children's literature an integral part of the school curriculum.

**RED 547 Lit Early Childhood Classroom 3 cr**

Provides a comprehensive survey of books written for children in the pre K-3 classroom, and incorporates periodicals, media and technology appropriate for teaching young children. A variety of class activities intended to motivate and encourage children to become lifelong readers is included.

**RED 548 Literacy Coaching 3 cr**

Includes an in-depth study of coaching techniques, specifically the role of coaching in the school setting. This course includes strategies for encouraging teachers to engage in the coaching process, coaching teachers to meet the literacy needs of their students, as well as providing school-based professional development and maximizing moments with struggling readers.

**Prerequisite:** RED 531 Minimum Grade of B

**RED 557 Practicum in Reading Education 1-9 cr**

Experiences in working in the area of reading instruction and/or diagnosis under the supervision of a reading teacher or supervisor and a college supervisor.

**RED 560 Materials Workshop - 3 cr**

A topical workshop in which participants have experiences in creating, designing, constructing and using instructional materials and activities. This work will emphasize reading and language arts. No more than 6 hours can be applied toward a degree program. Prerequisite: Permission of instructor.

**RED 590 Sp Top - 3-6 cr**

Guided investigation of topics in reading education, such as curriculum revision, course or program design, newly evolved trends in reading education, and implications of research in reading education. No more than 6 hours can be applied toward a degree program.

**RED 594 Dir St - Research 1-3 cr**

Students explore through directed study research problems and issues of special interest or significance in reading education. No more than 3 hours of any departmental 594 courses can be applied toward a degree program. Prerequisite: Permission of department chair.

**RED 595 Internship in Reading Educ 1-9 cr**

The internship is a supervised learning experience in a work setting similar to that in which an educator will eventually be employed. The internship provides students with an opportunity to apply the theories and concepts learned during the graduate program.

**Prerequisite:** 5301 164 and RED 533 Minimum Grade of B and RED 534 Minimum Grade of B

**RED 599 Thesis 1-9 cr**

A student selects a project, study, or investigation which is related to reading education. The project will form the basis for the thesis. A thesis committee will provide direction during the investigation and during the writing of the thesis.

**RED 611 Theor Lang Dev Tchg Reading 3 cr**

Emphasizes theories of language acquisition and development. Includes linguistics, language development of the culturally different child, and application of theory to classroom practices in reading and related areas. Requires special permission.

**RED 612 Socio Influences in Rdg Instr 3 cr**

Focuses upon the history of reading instruction, sociological factors influencing reading, reading in relation to other media of communication, and ways of applying these findings in classroom and clinical practice. Requires special permission.

**RED 613 Admn and Supv the Rdg Program 3 cr**

Analyzes and interprets administrative and supervisory roles and functions as they relate to the total school program, elementary through high school. Stress is upon facilitating and enhancing all aspects of the program. Requires special permission.

**RED 615 Diag - Rem Severe Rdg Disab 3 cr**

Provides laboratory experiences in studying severe cases of reading disabilities and in developing plans and procedures for their remediation. Requires special permission.

**RED 630 Psy Factors in Tchg Reading 3 cr**

Relates pertinent psychological concepts and principles to (1) current definitions of the reading process, (2) methods of teaching, and (3) special procedures for reluctant and disabled readers. The student may apply these concepts and principles in regular or laboratory settings.

**RED 640 Research in Reading 3 cr**

A critical analysis and evaluation of the significant research studies in reading from which reading concepts emerge and from which implications for teaching and further research may be drawn.

**RED 648 Literacy Coaching Teacher/Ldrs 3 cr**

A purpose of this course is to prepare professional educators through teaching, research, and service to become committed to life-long learning and to facilitate the process of building better communities. Students will demonstrate best educational practices and professional dispositions and will learn how to create a positive, motivational learning environment in schools while recognizing, appreciating, and including diverse learners and perspectives. Additionally, students are expected to demonstrate satisfactory skills in curriculum leadership; to engage in action research related to schools; to engage in literacy coaching; to address current family, community, regional, and national issues related to scholastic achievement, and to use tenets of instructional leadership to guide teachers and other professionals toward improving student achievement.

**RED 690 Sp Top - 3 cr**

Guided investigation of topics in reading education such as curriculum revision, course or program design, newly evolved trends in reading education, and implications of research in reading education.

**RED 694 Dir St - Research 1-3 cr**

Students explore through directed study problems and issues of special interest or significance in reading education. No more than 3 hours of any departmental 694 courses can be accepted toward a degree program. Prerequisite: Permission of department chair.

**RED 699 Research Project 1-3 cr**

A supervised research project, study, or investigation in reading. Student will conduct an investigation, and apply concepts and skills learned during the sixth-year program. May be taken more than one semester. Prerequisite: Permission of department chair.

**Prerequisite:** IDE 692 Minimum Grade of B or EDU 692 Minimum Grade of B

**Secondary Education (SED)****SED 340 Fundamentals of Teaching - W 3 cr**

Theory and practice of planning for instruction. Conducted as a system for individually guided mastery.

**SED 341 Teaching Skills - W 3 cr**

Study and practice of selected instructional skills and classroom management focusing on middle level education and the transition to secondary education. Prerequisites: Junior standing and admission to candidacy.

**Prerequisite:** SED 340 Minimum Grade of C and (RED 351 (may be taken concurrently) Minimum Grade of C or RED 451 (may be taken concurrently) Minimum Grade of C) and (EPY 455 (may be taken concurrently) Minimum Grade of C or EPY 355 (may be taken concurrently) Minimum Grade of C) and (SED 453 (may be taken concurrently) Minimum Grade of C or SED 454 (may be taken concurrently) Minimum Grade of C or SED 456 (may be taken concurrently) Minimum Grade of C or SED 457 (may be taken concurrently) Minimum Grade of C)

**SED 342 Secondary Field Experience 1 cr**

Supervised practice in teaching curriculum areas in middle and high school classroom settings during the semester in which block courses are taken.

**Prerequisite:** SED 340 Minimum Grade of C

**SED 350 Intro to Teaching-Middle Sch 3 cr**

A study of the concerns of pre-service middle school teachers, including program development, characteristics of the middlescent learners, nature of student-oriented instruction, and facilitation of learning of exceptional youth within the regular learning groups. Prerequisite: Junior standing.

**SED 453 Tch Lang Subj Sec Sch 3 cr**

Assists the student in organizing materials and in developing methods of teaching language subjects in secondary schools. Offered in Fall Semester only. Prerequisites: Admission to candidacy, completion of two-thirds of teaching field(s), and SED 340 or SED 555.

**Prerequisite:** SED 340 Minimum Grade of C or SED 555 Minimum Grade of B

**SED 454 Tch Math Secondary Schools 3 cr**

Assists the student in organizing materials and in developing methods of teaching mathematics in secondary schools. Offered in Fall Semester only. Prerequisites: Admission to candidacy, completion of two-thirds of teaching field, and SED 340 or SED 555.

**Prerequisite:** SED 340 Minimum Grade of C or SED 555 Minimum Grade of B

**SED 455 Tch Music in Secondary Sch 3 cr**

Assists the student in organizing materials and in developing methods of teaching music in secondary schools. Offered in Fall Semester only.

Prerequisites: Admission to candidacy, completion of two-thirds of teaching field, and SED 340 and 341 or SED 555 and 559.

**Prerequisite:** (SED 340 Minimum Grade of C and SED 341 Minimum Grade of C) or (SED 555 Minimum Grade of B and SED 559 Minimum Grade of B)

**SED 456 Tch Science in Secondary Sch 3 cr**

Assists the student in organizing materials and in developing methods of teaching science in secondary schools. Offered in the Fall Semester only. Prerequisites: Admission to candidacy, completion of two-thirds of teaching field, and SED 340 or SED 555.

**Prerequisite:** SED 340 Minimum Grade of C or SED 555 Minimum Grade of B

**SED 457 Tch Social Studies in Sec Sch 3 cr**

Assists the student in organizing materials and in developing methods of teaching social studies in secondary schools. Offered in Fall Semester only. Prerequisites: Admission to candidacy, completion of two-thirds of teaching field, and SED 340 or SED 555.

**Prerequisite:** SED 340 Minimum Grade of C or SED 555 Minimum Grade of B

**SED 459 Creative Exper in Oral Lang 3 cr**

Background in the theory and function of oral language, and techniques for developing oral and dramatic communicative skills. Emphasis will be on everyday oral language, rather than on formal speech or theater.

**SED 463 Stu Tchg Middle School 9-12 cr**

Observation and supervised teaching in the middle schools with opportunity for study and discussion of the problems and issues encountered. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Prerequisite: Appropriate methods course

**SED 464 Stu Tchg in High School - 9-12 cr**

Observation and supervised teaching in high schools with opportunity for study and discussion of the problems and issues encountered. Students will be placed with person holding a valid teaching certificate in the appropriate field.

**Prerequisite:** SED 340 Minimum Grade of C and SED 341 Minimum Grade of C and (SED 453 Minimum Grade of C or SED 454 Minimum Grade of C or SED 456 Minimum Grade of C or SED 457 Minimum Grade of C)

**SED 465 Internship 3 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the N-12 program. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Prerequisite: Appropriate methods course.

**SED 466 Stu Tchg Lang Arts in the HS 9-12 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the N-12 program. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Prerequisites: Admission to candidacy, SED 340 and SED 341, appropriate methods course(s), completion of three fourths of teaching field(s), and a PRAXIS II score of 151 or higher.

**Prerequisite:** P041 151 and SED 340 Minimum Grade of C and SED 341 Minimum Grade of C and SED 453 Minimum Grade of C

**SED 467 Stu Tchg Soc Studies in the HS 9-12 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the N-12 program. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Prerequisites: Admission to candidacy, SED 340 and SED 341, appropriate methods course(s), completion of three-fourths of teaching field(s), and a PRAXIS II score of 151 or higher.

**Prerequisite:** P081 153 and SED 340 Minimum Grade of C and SED 341 Minimum Grade of C and SED 457 Minimum Grade of C

**SED 468 Student Tchg Science in the HS 9-12 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the N-12 program. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Prerequisites: Admission to candidacy, SED 340 and SED 341, appropriate methods course(s), completion of three-fourths of teaching field(s), and a PRAXIS II score of 146 or higher.

**Prerequisite:** P435 147 and SED 340 Minimum Grade of C and SED 341 Minimum Grade of C and SED 456 Minimum Grade of C

**SED 469 Student Tchg Math in the HS 9-12 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the N-12 program. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Prerequisites: Admission to candidacy, SED 340 and SED 341, appropriate methods course(s), completion of three-fourths of teaching field(s), and a PRAXIS score of 118 or higher.

**Prerequisite:** P061 126 and SED 340 Minimum Grade of C and SED 341 Minimum Grade of C and SED 454 Minimum Grade of C

**SED 470 Stu Tchg N-12 Program 9-12 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the N-12 program. Students will be placed with a person holding a valid teaching certificate in the appropriate field.

**Prerequisite:** 5113 161

**SED 490 Special Topics 3 cr**

Current topics of special concern to secondary educators. Not more than 6 hours may be earned in Special Topics courses.

**SED 494 Dir St - 1-3 cr**

Directed study. No more than 6 hours can be accepted for a Bachelor's Degree and Class B Certificate. Prerequisites: Permission of department chair.

**SED 499 Senior Honors Project - H 3-6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project, relevant to the field of secondary study, that will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty chaired by the honors mentor. This course is required for Honors recognition and may be repeated for up to 6 credit hours. Prerequisite: Participant in honors program and junior level status.

**SED 529 Grad Field Experience 3 cr**

Supervised practice in teaching curriculum areas in middle and high school classroom settings during the semester in which the corresponding methods course is taken.

**Prerequisite:** (AED 540 (may be taken concurrently) Minimum Grade of C or ELT 530 (may be taken concurrently) Minimum Grade of C or SED 553 (may be taken concurrently) Minimum Grade of C or SED 554 (may be taken concurrently) Minimum Grade of C or SED 556 (may be taken concurrently) Minimum Grade of C or SED 557 (may be taken concurrently) Minimum Grade of C or SED 565 (may be taken concurrently) Minimum Grade of C)

**SED 544 Guiding Lrng in the Sec School 3 cr**

Study of methods and techniques of teaching in the secondary schools. Assists students in organizing materials, developing strategies for teaching their discipline area in secondary school. Includes field experience.

**SED 547 Tchg Basic Writing Skills 3 cr**

Background in theories of the writing process and techniques to help students develop writing skills. The main emphasis will be on teaching the process of writing: evaluation of writing and the issue of non-standard English will also be considered.

**SED 551 The Secondary School Student 3 cr**

Study of the physical, mental, and social development of students at secondary school age levels. The objectives and procedures of American secondary education are related to the development of adolescents in our culture. Included are the level of significance of specific individual differences among students in the various fields, the relationship of student self-concept to learning, students study through use of records, a variety of diagnostic materials, and group study projects.

**SED 552 The High School Curriculum 3 cr**

The study of the purpose of American secondary education and how these are reflected in the school curriculum. Curriculum organization, professional roles in curriculum development, and forces shaping the curriculum today are examined.

**SED 553 Tchg Lang Subj in Sec School 3 cr**

Assists students in organizing materials and developing methods of teaching language subjects in secondary schools. Includes field component.

**Prerequisite:** SED 555 Minimum Grade of B

**SED 554 Tchng Math in Sec Schools 3 cr**

Assists students in organizing materials and developing methods of teaching mathematics in secondary schools. Includes field component.

**Prerequisite:** SED 555 Minimum Grade of B

**SED 555 Curriculum-Tchg in Sec School 3 cr**

This course provides an introduction to effective instructional practices in the secondary classroom. The focus is on planning for instruction and classroom management. This course has both required class meetings and field experiences.

**SED 556 Tchg Science in Sec Schools 3 cr**

Assists students in organizing materials and developing methods of teaching science in secondary schools. Includes field component.

**Prerequisite:** SED 555 Minimum Grade of B

**SED 557 Tchg SS in Secondary Schools 3 cr**

Assists students in organizing materials and developing methods of teaching social studies in secondary schools. Includes field component.

**Prerequisite:** SED 555 Minimum Grade of B

**SED 558 The Middle School Curriculum 3 cr**

A study of the Middle School program in light of the characteristics and educational needs of youth in early adolescence.

**SED 559 Adv Teaching Techniques 3 cr**

Study and practice of selected instructional strategies and classroom management for middle level education and secondary education.

**SED 560 Graduate Research Seminar 3 cr**

Research in problems confronting American secondary education. Selected topics are explored by students which provide the basis for seminar discussions. A seminar paper is presented by each student. This course also includes a field-based practicum. Prerequisite: Permission of the department chair.

**Prerequisite:** IDE 510 Minimum Grade of C

**SED 561 Trends-Prac Tchg Lang Sec 3 cr**

Current trends and practices in curriculum, instruction, selection of materials, and derivation of procedures for guiding learning in reading, listening, writing, and speaking.

**SED 562 Trends-Prac Tchg Soc St 3 cr**

Current trends and practices in organizing and teaching social studies in the secondary school. The selection and use of content, materials, methods, and the development and appraisal of typical units are emphasized.

**SED 563 Trends-Prac Tchg Math Sec 3 cr**

Current curriculum trends in teaching mathematics. Included are the selection of materials and a study of methods appropriate for teaching mathematics in the secondary school.

**SED 564 Trends-Prac Tchg Science 3 cr**

Current curriculum trends in teaching science in the secondary school. Included are the selection of materials and an evaluation of those methods which are appropriate for teaching the biological and physical sciences.

**SED 565 Trends - Prac Tchg Foreign Lan 3 cr**

Current trends and practices in curriculum, instruction, selection of materials, and derivation of procedures for guiding learning in reading, listening, writing, and speaking in Foreign Languages.

**Prerequisite:** SED 555 Minimum Grade of B

**SED 567 Multicultural Exper Sec School 3 cr**

In an increasingly diverse society, teachers must be able to work with students from a variety of backgrounds, some quite different from teachers' own cultural backgrounds. This course responds to the growing need for better training for teachers in how to work with a diverse population, increase academic achievement, and prepare students for a global workplace.

**SED 590 Sp Top - 3 cr**

Current topics of special concern to secondary educators. A different topic will be used each time the course is offered. No more than 6 hours may be applied toward a degree program.

**SED 593 Intern in Sec Educ Forgn Lang 3-6 cr**

The internship is a supervised learning experience in a work setting similar to that in which an educator will eventually be employed. The internship provides the student with an opportunity to apply the theories and concepts learned during the graduate secondary foreign language program. Not more than six hours may be taken. Prerequisite: An acceptable PRAXIS II test score.

**Prerequisite:** EDU 453 Minimum Grade of C and SED 555 Minimum Grade of C and SED 559 Minimum Grade of C and SED 565 Minimum Grade of B or 5174 162 or 5183 163 or 5195 168

**SED 594 Dir St - Research 1-3 cr**

Students explore through directed study problems and issues of special interest or significance in secondary education. No more than 3 hours of any departmental 594 courses can be applied toward degree program. Requires permission of department chair.

**SED 595 Intern in Sec Edu Lang Arts 3,6 cr**

The internship is a supervised learning experience in a work setting similar to that in which an educator will eventually be employed. The internship provides the student with an opportunity to apply the theories and concepts learned during the graduate secondary language arts program. Not more than 6 hours may be taken. Prerequisite: PRAXIS II test score of 151 or higher.

**Prerequisite:** (EDU 453 Minimum Grade of C or SED 553 Minimum Grade of B) and SED 555 Minimum Grade of C and SED 559 Minimum Grade of C and 5038 167

**SED 596 Intern in Sec Edu Soc Studies 3,6 cr**

The internship is a supervised learning experience in a work setting similar to that in which an educator will eventually be employed. The internship provides the student with an opportunity to apply the theories and concepts learned during the graduate secondary social studies program. Not more than six hours may be taken. Prerequisite: PRAXIS II test score of 151 or higher.

**Prerequisite:** (EDU 457 Minimum Grade of C or SED 557 Minimum Grade of B) and SED 555 Minimum Grade of C and SED 559 Minimum Grade of C and (P081 155 or 5081 155)

**SED 597 Intern in Sec Educ Science 3-6 cr**

The internship is a supervised learning experience in a work setting similar to that in which an educator will eventually be employed. The internship provides the student with an opportunity to apply the theories and concepts learned during the graduate secondary science program. Not more than six hours may be taken. Prerequisite: PRAXIS II test score of 146 or higher.

**Prerequisite:** (P435 152 or 5435 152) and (EDU 456 Minimum Grade of C or SED 556 Minimum Grade of B) and SED 555 Minimum Grade of C and SED 559 Minimum Grade of C or 5236 154 or 5246 146 or 5436 141 or 5266 145

**SED 598 Intern in Sec Educ Math 3-6 cr**

The internship is a supervised learning experience in a work setting similar to that in which an educator will eventually be employed. The internship provides the student with an opportunity to apply the theories and concepts learned during the graduate secondary math program. Not more than six hours may be taken. Prerequisite: PRAXIS II test score of 118 or higher.

**Prerequisite:** (EDU 454 Minimum Grade of C or SED 554 Minimum Grade of B) and SED 555 Minimum Grade of C and SED 559 Minimum Grade of C and 5161 160

**SED 599 Thesis 1-9 cr**

A student selects a project, study, or investigation in secondary education related to his area of specialization. The project forms a basis for the thesis. The thesis committee will give guidance during the investigation and during the writing of the thesis.

**SED 699 Research Project 1-3 cr**

The culminating experience which the candidate must synthesize and apply the various program components in a selected instructional setting. The student completes a research project in a public school setting under the guidance of a department faculty committee. May be taken more than one semester. Prerequisite: Permission of the department chair.

**Prerequisite:** IDE 692 Minimum Grade of B or EDU 692 Minimum Grade of B

**Special Education (SPE)****SPE 200 Field Exp in SPE Settings 1 cr**

A series of in-field opportunities for students in Special Education. A variety of appropriate placements will be employed depending on each student's interest and needs. May be repeated for credit.

**SPE 201 Field Exp in Sp Ed Setting 1 cr**

A series of in-field opportunities in special education. A variety of appropriate placements will be employed depending on each student's interests and needs. To be taken with SPE 312.

**SPE 202 Field Exp in Sp Ed Setting 1 cr**

A series of in-field opportunities in special education. A variety of appropriate placements will be employed depending on each student's interests and needs. To be taken with SPE 410.

**Corequisite:** SPE 410

**SPE 203 Field Exp in Sp Ed Setting 1 cr**

A series of in-field opportunities in special education. A variety of appropriate placements will be employed depending on each student's interests and needs. To be taken with SPE 410.

**Corequisite:** SPE 410

**SPE 205 Init Field Exp in SPE Setting 1 cr**

An in-field opportunity for early field-based practicum in a variety of placements. To be taken with SPE 400 by Special Education majors.

**SPE 311 Intro to Partnerships in SPE 3 cr**

Emphasis is on the special problems found in the home, community, and school of the exceptional child, the teacher, the family, and community resource agencies. Ways for the teacher to form teamships to work collaboratively with all human resources involved in the child's life are explored and ethical and moral standards examined.

**SPE 312 Intellect and Phys Disabs 3 cr**

A study of the intellectual and physical disability which usually require substantial curriculum adaptations or ecological accommodation. Historical perspectives, etiology, definitions, classification, treatment, social aspects and interdisciplinary team work will be explored.

**Corequisite:** SPE 201

**SPE 313 Lrng and Behavrl Disorders 3 cr**

An examination of the definitions, characteristics, and prevalence of children with learning and/or behavioral disabilities. Emphasis is placed on the causes of problems in motor, perceptual, social, academic, affective, and behavioral development. Students will be introduced to current service delivery models and the programming options for individuals with learning and behavioral disabilities.

**SPE 320 Special Education Law 3 cr**

This course provides an overview of the legislative history within the United States related to persons with various disabilities. Emphasis will be added to the role of the educator in the specific responsibilities and liabilities required to develop appropriate educational programs for students with disabilities. The course will highlight the collaborative nature required for education professionals and parents to facilitate a student's academic and social development.

**SPE 342 Dev-Tchg Ecological Curriculum 3 cr**

An ecological systems view which emphasizes curricular design as a multisystem interaction involving the individual, family, school, occupational setting, and society.

**SPE 362 Behav Mgt of Except Child - W 3 cr**

Presentation of the principles and applications of behavioral modification, data collection procedures, and single-subject research designs as related to exceptional children and youth in special education environments.

**Prerequisite:** SPE 313 Minimum Grade of C and SPE 342 Minimum Grade of C and SPE 454 Minimum Grade of C

**SPE 363 Tch Adpt Curr Spec Nds Lrn 3 cr**

An examination of regular and special education K-12 curricula, materials, and procedures. Specific emphasis will be placed on the selection modification, and adaptation of curricula, materials, and procedures to meet the needs of individuals with learning and behavioral disabilities.

**Prerequisite:** SPE 313 Minimum Grade of C and SPE 342 Minimum Grade of C and SPE 454 Minimum Grade of C

**SPE 373 Teaching Reading to Stu Dis 3 cr**

Introduces the student to the curriculum, teaching the methodologies and instructional activities and materials associated with effective and appropriate developmental and functional reading instruction for students with disabilities.

**Prerequisite:** SPE 313 Minimum Grade of C and SPE 342 Minimum Grade of C and SPE 454 Minimum Grade of C

**SPE 400 Edu for Except Child and Youth 3 cr**

Introduction to the field of exceptional children and youth, involving the study of various areas of exceptionality.

**SPE 410 Formal-Informal Assessment 3 cr**

Assesses developmental levels, academic, and non-academic performance of exceptional individuals through the administration and interpretation of criterion-referenced, formal and informal measures. Evaluation of classroom teaching and special education programs is also emphasized.

**SPE 432 Impact Typ and Atp Dev on Edu 3 cr**

An examination of typical child development and developmental characteristics of infants, toddlers, and young children with disabilities from the prenatal period through age 8. Characteristics of disabling conditions and their impact upon development are also discussed.

**SPE 433 Iss in Edu Young Child W-Dis 3 cr**

This course prepares students to work with infants, toddlers, and young children with disabilities and their families. Topics covered include specific teaching and intervention techniques, special education laws and regulations, and service delivery models.

**SPE 443 Voc Ed-Career Dev Dis Indiv 3 cr**

Issues and practices involved in the vocational preparation and training of students with disabilities, including career awareness, exploration, preparation, and use of vocational resources. Vocationally related programs and services, both within and outside the special education environment are included.

**Prerequisite:** SPE 313 Minimum Grade of C and SPE 342 Minimum Grade of C and SPE 454 Minimum Grade of C

**SPE 444 Senior Seminar - W 3 cr**

Topics based upon students' experiences in internship. Students develop personal growth plans to enhance professional functioning.

**SPE 454 Curric Meth Develop Young 3 cr**

Curriculum and methods of instruction for individuals who function in the lower levels of cognitive, motor, self care, communicative, and/or social behaviors. Emphasis is on physical management, class/individual scheduling, adapted aids and equipment, task analysis, and functional life skills.

**SPE 484 General Education Curriculum 3 cr**

A Curriculum course designed to emphasize general education and special education K-12 curriculum. Students learn content of general education curricula through study of scope and sequence charts and strategies for adapting the curricula for students with exceptionalities, especially in inclusionary settings.

**Prerequisite:** SPE 313 Minimum Grade of C and SPE 342 Minimum Grade of C and SPE 454 Minimum Grade of C

**SPE 489 Pre-Practicum 3 cr**

Supervised experience in the teaching field which allows the teacher's performance to be evaluated qualitatively.

**SPE 490 Sp Top - 3 cr**

Varies in content and deals with issues, trends, and topics of current interest in the field of educating exceptional individuals. May be repeated for credit when course content varies.

**SPE 494 Dir St - 3 cr**

Directed Study. No more than two directed studies may be applied to programs at the undergraduate level or for certification.

**SPE 495 Internship K-6 9 cr**

Observation and supervised K-6 classroom teaching experience providing the opportunity to synthesize all previous instruction. This culminating activity provides opportunity for study and discussion of problems and issues encountered in the practicum situation.

**Prerequisite:** P014 137 and SPE 363 Minimum Grade of C and SPE 410 Minimum Grade of C

**SPE 496 Internship 6-12 9 cr**

Observation and supervised 6-12 classroom teaching experiences providing the opportunity to synthesize all previous instruction. This culminating activity provides opportunity for study and discussion of problems and issues encountered in the practicum situation.

**Prerequisite:** SPE 363 Minimum Grade of C and SPE 410 Minimum Grade of C

**SPE 497 Internship ECSE 9 cr**

Observation and supervised ECSE classroom teaching experiences providing the opportunity to synthesize all previous instruction. This culminating activity provides opportunity for study and discussion of problems and issues encountered in the practicum situation.

**Prerequisite:** P014 137 and SPE 363 Minimum Grade of C and SPE 433 Minimum Grade of C

**SPE 499 Senior Honors Project-H 3-6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project, relevant to the field of study in Special Education, that will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty chaired by the honors mentor. This course is required for Honors recognition and may be repeated for up to 6 credit hours.

**Prerequisite:** Participate in honors program and junior level status.

**SPE 500 Nat-Needs of Exc Chld and Yth 3 cr**

Introduction to the field of special education involving the study of all exceptionality areas. Developmental and maturational sequences of exceptional children/youth are included.

**SPE 504 Seminar in Spec Educ 3 cr**

Designed to allow students an in-depth exploration of topics of special concern to them related to children with disabilities or high potential.

**SPE 505 Admn and Supv of SPE 3 cr**

Establishing, maintaining, supervising, and evaluating special education programs in school districts and systems. Legislation and litigation, budgeting and finance, trends and issues in special education are included.

**SPE 510 Intro to Lrng Char Tchg in SPE 3 cr**

An examination of the definitions, characteristics, and prevalence of children with learning disabilities, emotional and/or behavioral disabilities, mental retardation and multiple disabilities. Emphasis is placed on the environmental and biological causes of problems in motor, perceptual, social academic, affective, and behavioral development. Students will be introduced to current service delivery models and the programming for individuals with disabilities.

**SPE 511 Curr - Reg Class and Adapt 3 cr**

Examination of all curricula as represented by various state course of study documents. Students will study and develop relevant adaptations of curricula to meet needs of various exceptional children.

**SPE 512 Ecological Curr and Method 3 cr**

From an ecological systems view, methods of individually deriving a functional, life-centered curriculum for students with mild to severe disabilities as well as educational strategies for teaching and training within such a framework.

**SPE 514 Teaming and Collaboration 3 cr**

An intensive study of the nature of teaming and collaborative practices with an emphasis on developing skills to organize and participate in a variety of such situations.

**SPE 515 Data and Behav Mgmt 3 cr**

Behavioral assessment techniques and experimental designs for the evaluation of behavior change programs. Operant and respondent methods for deceleration of inappropriate behavior. Operant methods for accelerating appropriate behaviors, teaching new behaviors and maintaining behaviors. Data-Based decision making strategies for formative program evaluation and modifications.

**SPE 516 Methods Spec Needs Learners 3 cr**

An examination of the methodologies employed in teaching special needs learners. The course covers the theoretical underpinnings and practical application of techniques with media, and materials.

**SPE 517 Com Lang Read Stu Disability 3 cr**

Major topics include the nature of language, language development and language problems in exceptional students; and remedial procedures. Informal and formal language and reading assessment. Relationship of reading to writing, phonetic, sight and combination means of reading instruction.

**SPE 518 Assessment 3 cr**

Advanced assessment of developmental levels, academic and non-academic performance of exceptional individuals through the administration and interpretation of standardized tests, criterion-referenced instruments, and informal measures.

**SPE 521 Children W-High Potential 3 cr**

Study of the intellectual, creative, emotional, and other psychological facets of gifted and talented children. Attention will be paid both to those individuals whose potential is realized and those who are considered underachievers.

**SPE 522 Creative and Prod Thinking 3 cr**

Geared to understanding the creative process, personality, and product of gifted and talented children as well as how to foster creativity and productive thought in the classroom.

**SPE 523 Tchg Children W-High Potential 3 cr**

Various curricular emphases and program approaches employed for gifted, creative, and talented children are studied. Insights are offered into articulating educational efforts.

**SPE 524 Atyp Children W-High Potential 3 cr**

This course is an in-depth study of the unique needs of atypical populations of gifted students. Attention will be directed to the culturally diverse gifted, economically disadvantaged gifted, underachieving gifted, gifted in rural areas, gifted females, highly/profound gifted, gifted handicapped, gifted with ADD/ADHD/SLD, and gifted preschoolers.

**SPE 532 Impact of Typical Atypical Dev 3 cr**

An examination of typical child development and developmental characteristics of infants, toddlers, and young children with disabilities from the prenatal period through age eight. Characteristics of disabling conditions and their impact upon development are also discussed.

**SPE 533 Issue Edu Young Child Disabil 3 cr**

This course prepares students to work with infants, toddlers, and young children with disabilities and their families. Topics covered include specific teaching and intervention techniques, special education laws and regulations, and service delivery models.

**SPE 534 Assessment Devel Young 3 cr**

This course contains information on basic psychometric qualities of screening, evaluations, and assessments, tools for use with infants, toddlers, and young children with disabilities, conducting family assessments, adapting measures for children with disabilities and using screening assessment, and evaluation in individualized programming.

**SPE 535 Collaborating with Families 3 cr**

This course prepares students to work with families of children with special needs. It contains information on understanding families, working with traditional and non-traditional families, and providing family-centered services.

**SPE 588 Advanced Practicum Experience 3 cr**

The purpose of this course is to provide a field experience focusing on evaluation and program improvement in academic and behavioral assessment, program planning, and experiences in implementation of special education programming.

**SPE 589 Pre-Practicum Experience 3,6 cr**

Supervised experience in the teaching field which allows the teacher's performance to be evaluated qualitatively.

**SPE 590 Sp Top - 3 cr**

A course with varying content dealing with issues, trends, and topics of current interest in the field of education exceptional individuals. May be repeated for credit when course content varies. Composition of activity. Total credit cannot exceed 6 hours.

**SPE 591 Multicategory Prac Seminar 3 cr**

Combines field experiences and technology-based simulations and learning experiences with an ongoing seminar to address a wide-range of disabilities and educational implications. Course content will be individualized according to the students educational and professional background.

**SPE 592 Collaborative Pract-Seminar 3 cr**

A seminar which enables students to discuss controversial issues related to the role and function of the collaborative teacher. Students lead and respond to discussion on topics which include teaming, inclusion, and collaboration.

**SPE 593 Classroom Exp Prac - 3 cr**

Supervised experience in the teaching field which allow the teacher's performance to be evaluated qualitatively.

**SPE 594 Dir St - Research 3 cr**

Students explore through directed individual study and research, problems and issue of special interest or significance in Special Education.

**SPE 595 Intern/Prac SPE Coll Tch K-6 3,6 cr**

Supervised experiences in Collaborative Teaching K-6 in the teaching field which allow the teacher's performance to be evaluated qualitatively.

**Prerequisite:** SPE 500 Minimum Grade of B and SPE 514 Minimum Grade of B and SPE 512 Minimum Grade of B and SPE 516 Minimum Grade of B and SPE 515 Minimum Grade of B and SPE 591 Minimum Grade of B and (5003 157 or 5903 157) and (5004 154 or 5904 154) and (5005 158 or 5905 158) and 5205 159 or 190 233

**SPE 596 Intern/Prac SPE Coll Tch 6-12 3,6 cr**

Supervised experiences in Collaborative Teaching 6-12 in the teaching field which allow the teacher's performance to be evaluated qualitatively.

**Prerequisite:** SPE 500 Minimum Grade of B and SPE 514 Minimum Grade of B and SPE 512 Minimum Grade of B and SPE 516 Minimum Grade of B and SPE 515 Minimum Grade of B and SPE 591 Minimum Grade of B

**SPE 597 Intern/Prac SPE ECSE 3 cr**

Supervised experiences in Collaborative Teaching ECSE in the teaching field which allow the teacher's performance to be evaluated qualitatively

**Prerequisite:** P014 137

**SPE 598 Intern/Prac SPE G/T 3 cr**

Supervised experiences in Collaborative Teaching Gifted/Talented in the teaching field which allows the teacher's performance to be evaluated qualitatively.

**SPE 599 Thesis 3 cr**

A student selects a project, study, or investigation in Special Education related to the student's area of specialization. The project forms a basis for the thesis. A thesis committee will give guidance during the investigation and during the writing of the thesis.

**SPE 601 Advanced Eval in SPE 3 cr**

Methods and procedures for developing criterion-referenced instruments and assessment batteries for classroom use in evaluating exceptional children and youth.

**SPE 609 Adv Study of Excep Children 3 cr**

Comparison of the normal development progress and that usually seen in the various exceptionality categories of special education especially cognitive, communication, motor, social and emotional development.

**SPE 641 Seminar Behav Disorders 3 cr**

Advanced study and review of the state of present knowledge in areas relevant to the psycho-pathological disorders of childhood including etiology, assessment, treatment and education.

**SPE 642 Clinical Teaching I 3 cr**

A study of the principles of behavioral theory upon which strategies for change in cognitive and social behavior rest and the evaluative designs used to monitor behavioral change and validate strategies.

**Prerequisite:** SPE 515 Minimum Grade of B

**SPE 643 Clinical Teaching II 3 cr**

A study and review of clinical research relevant to the curriculum requirements in the education and treatment of exceptional children and the identification of research needs in the various areas of exceptionality.

**SPE 651 Seminar in LD 3 cr**

Current trends and issues in the education of learning disabled individuals are discussed, various theoretical approaches and current empirical evidence provide the basis for discussion.

**SPE 671 Seminar in ID Educ 3 cr**

Current trends and issues in the education of individuals with intellectual disabilities. Class and recent professional literature are the basis for developing perspectives.

**SPE 690 Sp Top - 3 cr**

A course with varying content dealing with issues, trends, and topics of current interest in the field of education exceptional individuals. May be repeated for credit when course content varies.

**SPE 694 Dir St - Research 3 cr**

Students explore through directed study problems and issues of special interest or significance in Special Education.

**SPE 699 Research Project 1-3 cr**

The Research Project, as the culminating experience in the Specialist Program, provides an opportunity for the candidate to synthesize and apply the various program components in a selected instructional setting. Suitable agreements are reached with the appropriate public school system by the candidate. MR majors may not take more than 8 hours.

**Prerequisite:** IDE 692 Minimum Grade of B or EDU 692 Minimum Grade of B

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
ALLDAY, RICHARD ALLAN (allday@southalabama.edu)	Leadership/Teacher Education	Professor	BA, Auburn University MED, Auburn University PHD, Auburn University
BARLOW, ANGELA TILL (abarlow@southalabama.edu)	Leadership/Teacher Education	Professor	BS, Auburn University BS, Auburn University MED, Auburn University MAM, Auburn University
BAXTER, ABIGAIL (abaxter@southalabama.edu)	Leadership/Teacher Education	Professor	AB, Guilford College MA, University of Maryland-Bal Cnt PHD, Vanderbilt University
BRANNAN, LAUREN RENEE (lbrannan@southalabama.edu)	Leadership/Teacher Education	Associate Professor	BS, University of South Alabama MED, University of South Alabama PHD, University of South Alabama

BYRD, KELLY O. (kbyrd@southalabama.edu)	Leadership/Teacher Education	Assistant Professor	BS, Florida State University MAT, University of Florida PHD, University of Southern Miss
CARMOUCHE, MILLICENT LEA (mccarmouche@southalabama.edu)	Leadership/Teacher Education	Asst Prof of Instruction	BA, University of Arkansas- PB MA, Eastern Kentucky University PHD, Georgia State University
CHEEK, ERIKA MARIE (echeek@southalabama.edu)	Leadership/Teacher Education	Instructor	BS, University of South Alabama MED, University of South Alabama
DELMAS, PEGGY MARLINE (pdelmas@southalabama.edu)	Leadership/Teacher Education	Associate Professor	BA, University of West Florida MA, University of Alabama PHD, Univ of Alabama-Birmingham
FERGUSON, SUSAN NICOLE (ferguson@southalabama.edu)	Leadership/Teacher Education	Associate Professor	BS, Auburn University MED, Auburn University MED, Auburn University PHD, Auburn University
GILES, REBECCA MCMAHON (rgiles@southalabama.edu)	Leadership/Teacher Education	Professor	BS, Texas State Univ - San Marcos MED, University of Texas- Austin PHD, University of Southern Miss
GOSSEN, ANDREW N (dgossen@southalabama.edu)	Leadership/Teacher Education	Assistant Professor	BS, Oklahoma State University MED, Southwestern Oklahoma State U PHD, Oklahoma State University
GREEN, WANDA MAULDING (wmauldin@southalabama.edu)	Leadership/Teacher Education	Associate Professor	BS, Millsaps College MED, Mississippi College EDD, University of North Texas
JOHNSON, TODD M (todjohnson@southalabama.edu)	Leadership/Teacher Education	Associate Professor	BBA, James Madison University MED, George Mason University PHD, George Mason University
MAY, TAMI KIM (tmay@southalabama.edu)	Leadership/Teacher Education	Instructor	BS, University of South Alabama MED, University of South Alabama
MCCORRISON, SARAH KATHRYN (skguffey@southalabama.edu)	Leadership/Teacher Education	Associate Professor	BS, University of NC-Wilmington MA, East Carolina University PHD, University of Wyoming
MORRISON, KAREN MICHELLE (karenmorrison@southalabama.edu)	Leadership/Teacher Education	Asst Prof of Instruction	BS, University of Montevallo MED, University of Montevallo EDS, University of West Alabama PHD, University of Alabama
MORTON, BENTERAH CHARLES (morton@southalabama.edu)	Leadership/Teacher Education	Associate Professor	BS, University of West Georgia MED, University of West Georgia EDS, Louisiana State University PHD, Louisiana State University
PARRISH, CHRISTOPHER WARREN (parrish@southalabama.edu)	Leadership/Teacher Education	Associate Professor	BS, Auburn University-Montgomery MED, University of West Alabama PHD, Auburn University
REEVES, LINDA M. (lreeves@southalabama.edu)	Leadership/Teacher Education	Assistant Professor	AB, Boston College MS, University of Oregon PHD, University of Arizona
SIMPSON, JENNIFER LEBLANC (jsimpson@southalabama.edu)	Leadership/Teacher Education	Senior Instructor	BA, Southeastern Louisiana U MED, University of South Alabama
SZATKOWSKI, HANNAH DUPRE (hdszatkowski@southalabama.edu)	Leadership/Teacher Education	Assistant Professor	BS, Auburn University MED, University of West Florida PHD, Auburn University

## Early Childhood Education (Alt. M.Ed.)

### Degree Requirements

In general, the program requires a minimum of 42 graduate hours and such additional undergraduate courses or experiences as the Department may require. Please visit <http://www.southalabama.edu/colleges/ceps/programs.html> for specific requirements. See College of Education and Professional Studies general section for program admission requirements.

The program for the Alternative M.Ed. in Elementary Education and Early Childhood Education is as follows: 42 minimum graduate hours requires (500 level).

Code	Title	Hours
<b>Curriculum and Teaching</b>		
EEC 523	Instr Plan Elem School	3
<b>Foundations/Special Education</b>		
SPE 500	Nat-Needs of Exc Chld and Yth	3
EPY 502	Psy Prin Learning	3
<b>Research and Evaluation</b>		
EPY 525	Assessment & Research in Educ	3
<b>Technology</b>		
EDM 510	Microcomputing Systems in Ed	3
<b>Teaching Field</b>		
EEC 532	Lit and Lang Dev in Elem Sch	3
EEC 535	Trends in Teaching Mathematics	3
EEC 537	Teaching Science	3
RED 531 & RED 520	Trends-Practices Tchg Reading and Reading Foundations	6
EEC 553	Org Patterns and Curr in ECE	3
<b>Field Experience</b>		
EEC 548	Early Childhood Practicum	3
<b>Clinical Field Experience</b>		
EEC 598	Internship Early Childhood Edu (Supervised practice in a school setting in the student's teaching field. The student will work full time in the school for an entire semester)	6
<b>Total Hours</b>		<b>42</b>

### Alabama State Department of Education Certification Requirements

A Student applying for initial teacher certification will be required to pass the appropriate Praxis II test(s) and have a successful score on his/her edTPA portfolio. ALSDE certification requirements are subject to change and students will be required to meet those which are in place the semester they are applying for certification. Prior to registering for any Praxis II exam, please verify current requirements by going directly to the ALABAMA portion of the Praxis II at <http://www.ets.org/praxis/al> (<http://www.ets.org/praxis/al/>)

## Early Childhood Education (M.Ed.)

### Degree Requirements

The Master of Education (M.Ed.) program in Early Childhood Education provides advanced study for teachers working with children preschool through third grade. Upon completion of the program, students are eligible for the Class A Professional Early Childhood Education Certificate provided they already hold the Class B Professional Early Childhood Certificate.

**Note:** The appropriate course of study sheet and the assigned departmental advisor should be consulted in all program matters.

### Thesis

A student may elect to write a thesis as part of the program. If the student decides to write a thesis, a thesis committee will be appointed to work with the student and to evaluate the thesis. (IDE 510 and IDE 620 are required.)

The program for the M.Ed. in Early Childhood Education is as follows: 30 minimum hours required (500 level)

Code	Title	Hours
<b>Curriculum and Teaching</b>		
EEC 553	Org Patterns and Curr in ECE	3
EEC 522	Elementary School Curriculum	3
EEC 523	Instr Plan Elem School	3
RED 531 & EEC 532	Trends-Practices Tchg Reading and Lit and Lang Dev in Elem Sch	6
<b>Diversity Elective</b>		
SPE 500	Nat-Needs of Exc Chld and Yth (required if introductory special education course not previously taken)	3
	or EDU 567 Multicultural Exp in Schools	
<b>Research and Evaluation (<a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote1/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote1/</a>)<sup>1</sup></b>		
IDE 510	Educ Research and Evaluation	3
IDE 620	Quantitative Methods I (see footnote table below (p. 532)) <sup>2</sup>	3
<b>Technology</b>		
EDM 510	Microcomputing Systems in Ed	3
<b>Teaching Field</b>		
	Advisor approved 500 level AED, EEC, RED courses	6
<b>Total Hours</b>		<b>33</b>

### Footnote

<sup>1</sup> Students who have previously not completed an evaluation course will be required to complete an approved evaluation course in addition to IDE 510.

<sup>2</sup> Thesis Option Only with IDE 510.

All certification programs require an introductory special education course SPE 500 required under B above, if not completed at the undergraduate level.

# Early Childhood Studies (BS)

## Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 533)		63-64
<b>Major Requirements</b>		
<i>Early Childhood Studies Core</i>		
A. Complete the following:		
AED 301	Visual Arts for Young Children	3
Select one of the following: <sup>2</sup>		3
CIS 150	Intro to Computer Applications	
CIS 250	Advanced Comp Applications	
EDM 310	Microcomputing Systems	
EEC 315	Creating Culturally Responsive Early Childhood Classrooms (Creat Culture Responsive Clrms)	3
EDU 400	Edu Except Child and Youth	3
EEC 300	Creating Envir for Lrng/Play	3
EEC 338	Curr App Music-Movement in EC	3
EEC 346	Early Child Prog(Birth-8)-W (see footnote table below (p. 533)) <sup>1,3</sup>	3
EEC 496	Internship- (see footnote table below (p. 533)) <sup>1</sup>	9
EEC 351	Child Development & Learning <sup>2</sup>	3
HS 262	Personal Health	3
or HS 361	School Comm Health-Impl Curric	
KIN 166	Movement-Rhythms and Dev Act (Select One of the Following)	3
MUE 301	Music Literacy Child and Youth	3
PSY 350	Child and Adolescent Dev	3
RED 334	Lit for the Young Child - W (see footnote table below (p. 533)) <sup>1,3</sup>	3
RED 348	Lang & Lit Dev in Early Child (see footnote table below (p. 533)) <sup>1,3</sup>	3
B. Advisor Approved Electives - Select three of the following:		9
MUE 236	Mus-Lit Integ for Early Chldhd	
Elective from the following prefixes: ACC, AED, IST, AN, ARH, ARS, BLY, BMD, BUS, CAS, CH, CLS, DRA, ECO, EDF, EDU, EEC, EH, EMS, FIN, GEO, GY, HS, HY, LGS, MA, MGT, MKT, MUE, PH, PSC, PY, RED, SHS, ST, SW, SY, PE 231- PE 499		
<b>Minor Requirements</b>		
A minor is not required for this degree program		0
<b>Total Hours</b>		<b>123-124</b>

## Footnote

<sup>1</sup> Courses require admission to Candidacy.

<sup>2</sup> Prerequisite course for candidacy

<sup>3</sup> Satisfies University Writing Requirement

## General Education Requirements

Code	Title	Hours
<b>Area I – Written Composition</b>		
EH 101	English Composition I <sup>1</sup>	3
EH 102	English Composition II <sup>1</sup>	3

## Area II – Humanities & Fine Arts

A. Complete the following:

CA 110 Public Speaking<sup>1</sup> 3

B. Select one of the following:<sup>1</sup> 3

EH 215 Brit Lit before 1785

EH 216 Brit Lit after 1785

EH 225 Am Lit before 1865

EH 226 Am Lit after 1865

EH 235 World Lit before 1650

EH 236 World Lit after 1650

C. Select one of the following: 3

ARH 100 Survey of Art

ARH 103 Art History I

ARH 123 Art History II

ARS 101 Art Appreciation

DRA 110 Introduction to Theatre

MUL 101 Introduction to Music

D. Select three hours of the following: 3

AFR 101 Intro to African Amer Studies

ARH 100 Survey of Art

ARH 103 Art History I

ARH 123 Art History II

ARH 203 Survey of Non-Western Art

ARS 101 Art Appreciation

CLA 110 Intro Anc Greek Roman Culture

DRA 110 Introduction to Theatre

EH 215 Brit Lit before 1785

EH 216 Brit Lit after 1785

EH 225 Am Lit before 1865

EH 226 Am Lit after 1865

EH 235 World Lit before 1650

EH 236 World Lit after 1650

LG 101 Introductory Latin I

LG 102 Introductory Latin II

LG 111 Introductory French I

LG 112 Introductory French II

LG 121 Introductory Chinese I

LG 122 Introductory Chinese II

LG 131 Introductory Spanish I

LG 132 Introductory Spanish II

LG 141 Intro Classical Greek I

LG 142 Intro Classical Greek II

LG 151 Introductory German I

LG 152 Introductory German II

LG 153 Accelerated Intro German

LG 171 Introductory Russian I

LG 172 Introductory Russian II

LG 173 Accelerated Intro Russian

LG 201 Intermediate Latin I

LG 202 Intermediate Latin II

LG 211 Intermediate French I

LG 212 Intermediate French II

LG 213	Accelerated Inter French - H
LG 221	Intermediate Chinese I
LG 222	Intermediate Chinese II
LG 231	Intermediate Spanish I
LG 232	Intermediate Spanish II
LG 234	Inter Spanish Accel -H
LG 241	Interm Classical Greek I
LG 242	Interm Classical Greek II
LG 251	Intermediate German I
LG 252	Intermediate German II
LG 271	Intermediate Russian I
LG 272	Intermediate Russian II
LG 273	Intensive Second Year Russian
LGS 101	Introductory Japanese I
LGS 102	Introductory Japanese II
LGS 106	Introductory Arabic I
LGS 107	Introductory Arabic II
LGS 110	Intro American Sign Language I
LGS 111	Intro American Sign Lang II
LGS 171	Introductory Korean I
LGS 172	Introductory Korean II
LGS 201	Intermediate Japanese I
LGS 202	Intermediate Japanese II
LGS 206	Intermediate Arabic I
LGS 207	Intermediate Arabic II
LGS 210	Intermediate ASL I
LGS 211	Intermediate ASL II
MUL 101	Introduction to Music
PHL 110	Introduction to Philosophy
PHL 120	Critical Thinking
PHL 121	Introduction to Logic
PHL 131	Introduction to Ethics
PHL 231	Social Ethics
PHL 240	Western Philosophy: Classical
REL 100	Intro to the Study of Religion
REL 200	Old Testament/Hebrew Bible
REL 201	Survey of the New Testament

**Area III – Natural Sciences & Mathematics**

A. Select 3-4 hours from the following:	3-4
MA 110	Finite Mathematics
MA 112	Precalculus Algebra
MA 113	Precalculus Trigonometry
MA 115	Precal Algebra-Trigonometry
MA 120	Calculus and Its Applications
MA 125	Calculus I
B. Select four hours from the following:	4
BLY 101 & 101L	Life Science I and Life Science I Laboratory
or BLY 121 & 121L	General Biology I and General Biology I Lab
C. Select four hours from the following:	4
BLY 102 & 102L	Life Science II and Life Science II Lab

or BLY 122 & 122L	General Biology II and General Biology II Laboratory
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab
CH 131 & 131L	General Chemistry I and General Chemistry I Lab
CH 132 & 132L	General Chemistry II and General Chemistry II Lab
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab
GY 111 & 111L	Physical Geology and Physical Geology Lab
GY 112 & 112L	Earth History and Earth History Lab
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab

**Area IV – History, Social & Behavioral Sciences (<http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote2/>)<sup>2</sup>**

PSY 120	Introduction to Psychology	3
Select one of the following:		3
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 121	World Civilization I	
HY 122	World Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
C. Select two of the following:		6
AN 100	Intro to Cultural Anthropology	
AN 101	Intro Archaeology-Bio Anthro	
ECO 215	Prin of Microeconomics	
ECO 216	Prin of Macroeconomics	
GEO 114	People, Places, Environment	
GEO 115	World Regional Geography	
HY 101	HY of Western Civilization I (D. Select one of the following:)	
HY 102	HY of Western Civilization II	
HY 121	World Civilization I	
HY 122	World Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
PSC 130	Intro to US Government	
PSY 250	Life Span Development	

SY 109	Introductory Sociology	
SY 112	Social Problems	
<b>Area V</b>		
A. Complete the following:		
KIN 100	Concepts of Health and Fitness	3
PE 101	PE Activity -	1
B. Electives <sup>3</sup>		15
<b>Total Hours</b>		<b>60-61</b>

## Footnote

<sup>1</sup> Prerequisite Course for Candidacy

<sup>2</sup> Students will only receive credit for 2 history courses.

<sup>3</sup> Maximum of 3 hours from PE 101-157 allowed.

## Additional Information

### Candidacy – Early Childhood Studies

This major contains a professional component (Candidacy) comprised of upper level courses (300-400 levels), as shown on the graduation plan, and are only available to students who have gained admission to Candidacy.

### Admission Requirements for Candidacy – Early Childhood Studies

- Courses: CA 110, EH 101, EH 102; CIS 150 or CIS 250 or EDM 310; EEC 351
- Hours: 60 credit hours of degree requirements completed
- Minimum Grade Point Averages: 2.20 Major GPA, 2.20 USA GPA
- Proof of clear DHR or SDE fingerprinting/background check and professional liability insurance
- Completion of satisfactory departmental interview with your assigned advisor. Recommendation of advisor and department chairperson.
- Sufficient physical ability and emotional stability to perform as a professional.
- Application/Admission Information:
  - Candidacy applications are due one semester prior to enrolling in classes that require Candidacy. The intent is for students to apply for Candidacy AND meet with their advisor prior to registration to enable appropriate planning decisions for upcoming semesters.
  - Students approaching eligibility will receive a link to the online application in their JagMail.
  - After final grades are posted and all requirements are verified as met, the Office of Student Services will notify students by JagMail when they are admitted to Candidacy. Students will then be able to register for Candidacy courses.

## Graduation Plan

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I (CP)	3
Fine Arts	Area II, C <sup>1</sup>	3
History	Area IV, B <sup>1</sup>	3
MA 110	Finite Mathematics (or higher; Area III, A) <sup>1</sup>	3

Social Science	Area IV, C <sup>1</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
CA 110	Public Speaking (CP)	3
EH 102	English Composition II (CP)	3
History, Social Science Elective	Area IV, C	3
KIN 100	Concepts of Health and Fitness	3
Science + Lab	Area III, C <sup>1</sup>	4
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
BLY 101 & 101L	Life Science I and Life Science I Laboratory	4
PSY 120	Introduction to Psychology (Area IV, A) <sup>1</sup>	3
Elective/Minor	(Early Childhood Studies Core, C) <sup>1</sup>	3
Literature	Area II, B <sup>1</sup>	3
KIN 166	Movement-Rhythms and Dev Act	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Select one from the following:		3
CIS 150	Intro to Computer Applications (CP)	
CIS 250	Advanced Comp Applications (CP)	
EDM 310	Microcomputing Systems (CP)	
EEC 351	Child Development & Learning	3
EEC 315	Creating Culturally Responsive Early Childhood Classrooms (Great Culture Responsive Clrms)	3
Elective/Minor	(Early Childhood Studies Core, C)	3
Literature Sequence or Fine Art/Humanities Elective	Area II, D <sup>1</sup>	3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
PSY 350	Child and Adolescent Dev (PR)	3
HS 262 or HS 361	Personal Health or School Comm Health-Impl Curric	3
EEC 338	Curr App Music-Movement in EC	3
MUE 301	Music Literacy Child and Youth	3
PE 101 - PE 157	PE activity course	1
Elective/Minor: <sup>1</sup>		3
<b>Apply for Candidacy</b>		<b>16</b>
<b>Hours</b>		
<b>Spring</b>		
EDU 400	Edu Except Child and Youth	3
EEC 300	Creating Envir for Lrng/Play	3
MUE 236	Mus-Lit Integ for Early Chldhd (Early Childhood Studies Core, C) <sup>1,2</sup>	3
AED 301	Visual Arts for Young Children	3
RED 348	Lang & Lit Dev in Early Child (Spring Only) <sup>3</sup>	3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
EEC 346	Early Child Prog(Birth-8)-W (Fall Only) <sup>3</sup>	3
Elective/Minor: <sup>1</sup>		3
Elective/Minor: <sup>1</sup>		3
Elective/Minor: <sup>1</sup>		3
RED 334	Lit for the Young Child - W (Fall Only)	3
<b>Apply for Graduation</b>		<b>15</b>
<b>Hours</b>		
<b>Spring</b>		
EEC 496	Internship <sup>3</sup>	9

Elective <sup>1</sup>	3
Hours	12
<b>Total Hours</b>	<b>120</b>

<sup>1</sup> See General Education Requirements

<sup>2</sup> Recommended Course

<sup>3</sup> Required for admission to Candidacy

#### Notes:

- (CP) Prerequisite for Candidacy
- Maximum of 3 hours from PE 101- PE 157 allowed for General Electives

## Educational Administration (M.Ed.) Degree Requirements

The department offers the M.Ed in Educational Administration for higher education administrators and the M.Ed in Educational Administration leading to Alabama Class "A" certification in Instructional Leadership. Instructional Leadership courses empower students for advancement in educational service. Leadership programs emphasize growth from the knowledge base through simulations to practical application and career mobility.

### Special Admission Requirements for Instructional Leadership Certification

Applications for Master's programs in Instructional Leadership are reviewed for admission to the fall, spring and summer semesters. Readmission to some programs in Education (i.e. Educational Administration, Doctoral Program, and some AA/Ed.S. Programs) require review by program faculty. Deadline for receipt of all application materials is November 1, April 1 and July 1.

In addition to the requirements listed in the College section of the bulletin, program specific requirements for admission to Instructional Leadership include:

1. Documents required to submit with the application can be found at <https://www.southalabama.edu/colleges/ceps/te/edlead-med-k12.html>.
2. Successful completion of a structured interview with a panel of Educational Leadership professors and a current K-12 practicing administrator.
3. Special admission requirements apply only to the Instructional Leadership certification and not to the Higher Administration Master's degree.

Admission decisions involve evaluation of the applicant's grade-point average, scores on the GRE and MAT (Master's only), all submitted documents, and structured interview. Program enrollment and availability will also be considered. The application, transcripts, test scores, and complete admissions portfolio must be received by November 1, April 1 and July 1:

The Office of Admissions  
2500 Meisler Hall, University of South Alabama  
Mobile, AL, 36688-0002

## Educational Administration for Higher Education Administrators Master of Education Degree

Program requirements include:

1. Completing a minimum of 30 semester hours as outlined below.
2. Passing a comprehensive examination.

Code	Title	Hours
<b>Supporting Courses in Other Areas</b>		
EDM 510	Microcomputing Systems in Ed	3
IDE 510	Educ Research and Evaluation	3
Select one of the following:		
EPY 502	Psy Prin Learning	3
EPY 521	Human Dev and Behavior	3
EDF 515	Multicultural Education	3
500-599 Advisor Approved Elective		
<b>Educational Leadership Courses</b>		
(3.0 Minimum GPA)		
EDL 512	Community Development	3
EDL 550	Prin of School Lead	3
EDL 561	Dev of Postsecondary Education	3
EDL 562	Student in Higher Education	3
EDL 575	Org and Plan Postsec Educ	3
EDL 578	Law and Postsecondary Educ	3
<b>Internship</b>		
EDL 595	Internship	3
<b>Total Hours</b>		<b>30</b>

### Class A Certificate in Instructional Leadership and Master of Education Degree

Students entering this program must have a bachelor's degree and Alabama Class B Certification in a teaching field. Program requirements include:

1. Completing a minimum of 30 semester hours as outlined below with at least a 3.25 grade-point average, including a grade of "B" or above in all courses with EDL prefix,
2. Passing the electronic portfolio assessment, and completing a School-based Residency focused on authentic assessments of performance on state standards.
3. Successful completion of ALSDE approved certification assessment (Praxis 5412 score 146 and above).

The Class A Certificate is valid for 5 years and is renewable.

Code	Title	Hours
<b>I. Instructional Leadership Core</b>		
EDL 501	Theories Instructnl Leadership	3
EDL 502	Data-Driven Instrucnl Leadrshp	3
EDL 503	Supervision & Prof Development	3
EDL 504	Ethical & Legal Dimens Sch Ldr	3
EDL 505	Bus Mgmt of Lrng Organizations	3
EDL 506	Teaching and Learning Leaders	3
<b>II. Residency</b>		
EDL 598	Residency -	6

Students must have a passing score on the appropriate Praxis II exam prior to a recommendation for certification.

### III. Diversity/Special Education

Select one of the following: (<http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote1/>)<sup>1</sup> 3

SPE 500 Nat-Needs of Exc Chld and Yth

EDU 567 Multicultural Exp in Schools

EDF 515 Multicultural Education

### Research

IDE 510 Educ Research and Evaluation 3

**Total Hours 30**

### Footnote

<sup>1</sup> If a survey course in special education was previously taken at the undergraduate or graduate level, EDU 567 is required in lieu of SPE 500.

### Instructional Leadership Add-on

Code	Title	Hours
EDL 501	Theories Instructnl Leadership	3
EDL 502	Data-Driven Instrcnl Leadrshp	3
EDL 503	Supervision & Prof Development	3
EDL 504	Ethical & Legal Dimens Sch Ldr	3
EDL 505	Bus Mgmt of Lrng Organizations	3
EDL 598	Residency -	3
<b>Total Hours</b>		<b>18</b>

- The option is referred to as the "Reduced Hour Option" and includes completing the 18-hour program and passing the appropriate Praxis Exam. It is available only for those already holding a master's degree and a valid Alabama "A" Certificate in another area.
- A survey of special education course is required if not previously completed. If a survey of special education course was previously completed, then an ALSDE-approved diversity course is required. If an ALSDE-approved diversity course was previously completed to meet requirements for Class A certification, then an additional diversity course is NOT required for an additional Class A certification. Requirement may be waived if a survey of special education course and an ALSDE-approved diversity course were previously completed. Contact your advisor, the certification officer, or the Office of Student Services to verify eligibility.

## Educational Leadership (Ed.D.)

### Degree Requirements

#### Doctor Of Education Program in Educational Leadership

The Educational Leadership EdD Program is an intensive 60 credit hour, cohort-based program designed for educators who wish to earn a terminal degree in educational leadership. The EdD program allows students to keep their current full-time jobs while also studying full-time. The program is intended to train an emerging generation of senior educational leaders with the knowledge and skills necessary to connect research, theory, and practice in leading high performing learning organizations to manage resources strategically, engage in evidence-based decision-making, promote continuous improvement, and

encourage innovation. The program prepares graduates to be: research informed, practice focused, transformational educational leaders.

Coursework is delivered using a combination of face-to-face (on campus), and blended, Hy-Flex, and fully online formats. Designed with a theory-to-practice focus, the program brings the research literature and best practices together with the problems of practice faced in day-to-day educational settings. The program design is aligned with the recommendations of the Carnegie Project on the Education Doctorate (CPED, 2022a) to improve the efficacy and reliability of the professional doctorate in education for the advancement and preparation of school practitioners and clinical faculty, academic leaders and professional staff for the nation's schools and colleges and the learning organizations that support them.

The program is further guided by the following principles for the professional doctorate in education:

- Is framed around questions of equity, ethics, and social justice to bring about solutions to complex problems of practice;
- Prepares leaders who can construct and apply knowledge to make a positive difference in the lives of individuals, families, organizations, and communities;
- Provides opportunities for candidates to develop and demonstrate collaboration and communication skills to work with diverse communities to build partnerships;
- Provides field-based opportunities to analyze problems and use multiple frames to develop meaningful solutions;
- Is grounded in and develops a professional knowledge base that integrates both practical and research knowledge, that links theory with systemic and systematic inquiry; and
- Emphasizes the generation, transformation, and use of professional knowledge and practice. (The Carnegie Project on the Education Doctorate, 2022b).

### Program Objectives

- In preparing graduates for careers as PK-12 or postsecondary administrators, the program curriculum includes a PK-12 concentration and a higher education (HED) concentration that will meet the following objectives:
- Serve as a local venue for constituents of the southernmost part of the State of Alabama for the terminal degree in the field;
- Meet the needs of the local constituency with a cadre of highly educated professionals who have been trained in and taught the unique and specialized practices and policies of the State of Alabama;
- Fulfill the currently dwindling pool of mid-career and senior administrators in fields with high retirement rates in both PK-12 school districts and postsecondary institutions in the southern region of the state; and
- Help fulfill the mission of the University of South Alabama.

## Admission Requirements

### EDD – K-12

- Master's degree from a regionally accredited institution with a minimum 3.25 cumulative graduate GPA.

Official transcripts\* can be sent by mail or electronically. Instructions can be found under "Help" on the application.

\*USA students applying to a USA graduate program in the College of Education and Professional Studies should complete a transcript request form (PDF) ([https://www.southalabama.edu/departments/eforms/registrar/transcript\\_request.pdf](https://www.southalabama.edu/departments/eforms/registrar/transcript_request.pdf)) found on the University Registrar's Office website.

In the Name/Organization field for the transcript recipient write, "USA Graduate School". There is no charge associated with this request. This option applies only to USA transcripts for students applying to USA graduate programs.

- ALABAMA Class A or Class AA Professional Leadership Certification in Instructional Leadership.
- Current service or experience at the level of PK-12 Assistant Principal or higher is preferred. Applicants must hold active professional positions that allow them to implement small-scale change.
- Completion of graduate level Research Methods and Evaluation course with minimum grade of "B".
- Three letters of recommendation from individual's familiar with the applicant's work (to include the applicant's principal or supervisor attesting to candidate's leadership and management potential). Recommendations MUST BE COMPLETED ONLY on the Recommendation Form for Graduate Admission to the Educational Leadership Program (PDF) (<https://www.southalabama.edu/colleges/ceps/lte/resources/gr-applicant-recommend-form.pdf>) and SUBMITTED by email to: [ceps@southalabama.edu](mailto:ceps@southalabama.edu).
- A two-page narrative indicating the applicant's career plan and goals in pursuing the Educational Doctorate in P-12 Leadership. Include how the program matches the applicant's career goals (upload within online application).
- A resume with chronology of academic and/or professional employment (upload within online application).
- Interview with program faculty

### EDD – HED

- Master's degree from a regionally accredited institution with a minimum 3.25 cumulative graduate GPA.

Official transcripts\* can be sent by mail or electronically. Instructions can be found under "Help" on the application.

\*USA students applying to a USA graduate program in the College of Education and Professional Studies should complete a transcript request form (PDF) ([https://www.southalabama.edu/departments/eforms/registrar/transcript\\_request.pdf](https://www.southalabama.edu/departments/eforms/registrar/transcript_request.pdf)) found on the University Registrar's Office website.

In the Name/Organization field for the transcript recipient write, "USA Graduate School". There is no charge associated with this request. This option applies only to USA transcripts for students applying to USA graduate programs.

- Academic and/or Professional experience as a manager or director of units, or other supervisory position. Applicants must hold active professional positions that allow them to implement small-scale change.
- Completion of graduate level Research Methods and Evaluation course with a minimum grade of "B".
- Three letters of recommendation from individual's familiar with the applicant's work (to include the applicant's principal or supervisor attesting to candidate's leadership and management potential). Recommendations MUST BE COMPLETED ONLY on the Recommendation Form for Graduate Admission to the Educational Leadership Program (PDF) (<https://www.southalabama.edu/colleges/ceps/lte/resources/gr-applicant-recommend-form.pdf>) and SUBMITTED by email to: [ceps@southalabama.edu](mailto:ceps@southalabama.edu).
- A two-page narrative indicating the applicant's career plan and goals in pursuing the Educational Doctorate in Higher Education Leadership. Include how the program matches the applicant's career goals (upload within online application).
- A resume with chronology of academic and/or professional employment (upload within online application).
- Interview with program faculty.

## Readmission Procedures

Under extraordinary circumstances, a student in good standing may desire to reapply to the program. The readmission procedures include:

- EDL readmittance procedures begin with USA's Graduate School Guidelines for Re-admission.
- Writing Samples (2)
  - Personal Statement: What has changed in the time since your last enrollment in the EdD program? What will be different this time to propel you to completion?
  - Scholarly Writing: Submit a previously submitted scholarly writing sample.
- A resume' with reverse chronology of academic and/or professional employment history including dates and locations
- Review of transcripts (transcripts from USA will be reviewed)

## Dismissal Procedures

The following headings in the EDL EDD Handbook contain items that may lead to dismissal from the program.

Information regarding program dismissal may be found at: <https://bulletin.southalabama.edu/programs-az/graduate/>

Assessment of Students' Professional Dispositions will be carried out systematically to ensure students are meeting the professional disposition requirements for the program.

Students must complete the requirements of their program within ten (10) years of their admission to the program. Failure to do so will result in dismissal from the program.

Code	Title	Hours
<b>Common Core</b>		
To be taken for Higher Ed and K-12 options		
EDL 695	Mentoring Leadership (see footnote table below (p. 539)) <sup>1</sup>	3
EDL 689	Quantitative/Action Research	3
EDL 699	Research Project (see footnote table below (p. 539)) <sup>1</sup>	3
EDL 694	Dir St and Research	3
EDU/IDEALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)692	Research Proj Seminar (see footnote table below (p. 539)) <sup>1</sup>	3
IDE 615	Assess & Eval for Leaders	3
IDE 631	Intro Qual/Mixed Methods Res (see footnote table below (p. 539)) <sup>1</sup>	3
<b>Higher Ed Concentration</b>		
To be taken only for Higher Ed option		
EDL 720	Global Education	3
HED 611	Human Relations in Higher Edu	3
HED 621	Program and Curriculum Develop	3
HED 631	Sem Higher Ed Mgt Skills	3
HED 701	Adv Org Theory for Higher Edu	3
HED 702	Higher Ed Finance	3
HED 703	Adv Leadership for Higher Ed	3
HED 707	Multiculturalism and Organizational Change in Higher Education	3
HED 732	Ethics and Law for Higher Ed	3
<b>P-12 Concentration</b>		
To be taken only for P-12 option		
EDL 607	Lead Schs/Multicultural Soc (see footnote table below (p. 539)) <sup>1</sup>	3
EDL 694	Dir St and Research (see footnote table below (p. 539)) <sup>1</sup>	3
EDL 611	Human Relations Skills (see footnote table below (p. 539)) <sup>1</sup>	3
EDL 621	Sem Prog Curriculum Dev (see footnote table below (p. 539)) <sup>1</sup>	3
EDL 631	Sem Ed Management Skills (see footnote table below (p. 539)) <sup>1</sup>	3
EDL 701	Adv Organizational Theory	3
EDL 702	School Finance	3
EDL 703	Adv School Leadership	3
EDL 732	Ethics and Law for Ed Leaders	3
EDU 650	Instructional Techniques (see footnote table below (p. 539)) <sup>1</sup>	3
<b>Culminating Project Hours</b>		

To be taken for Higher Ed and P-12 options.

(If culminating project is not complete in 12 semester hours, student must register for 1 hr of EDL 797 each semester until culminating project is complete.

EDL 797	(Research/Culminating Project)	12
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### Footnote

<sup>1</sup> Required courses for Ed.S. Instructional Leadership

## Educational Specialist (Ed.S.)

### Degree Requirements

#### Advanced Graduate Study: Sixth-year (Post-master's) Programs

(Ed.S. and Class AA Certification)

Post-Master's or Sixth-Year Graduate Programs for Educational Specialist which lead to an (Ed.S.) Degree and Class AA (State of Alabama) Professional Certification for Instructional Specialist are available for qualified individuals in the areas listed below.

In addition to college requirements students seeking certification will have a graduate program committee plan a program based upon the student's training, experience and needs. This committee will determine if any prerequisite courses are needed.

#### Elementary Education/Early Childhood

Code	Title	Hours
<b>Core Courses</b>		
IDE 615	Assess & Eval for Leaders	3
EDU/IDEALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)650	Instructional Techniques	3
EDU/IDEALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)692	Research Proj Seminar	3
Departmental 699		3
SPE 500 is taken only if the student has not had a recent equivalent. The course then becomes an added course to the program.		

#### Elementary Education/Early Childhood Courses

EDF 615 or EPY 602	Sem in Ed Policy Studies Advanced Theories of Learning	3
EDU/IDEALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)640	Instructional Development	3
EEC 601	Advanced Seminar -	3
EEC 610	Diag and Prescriptive Teaching	3
EEC 622	Seminar in Curr-Inst Problems	3
EDL 607	Lead Schs/Multicultural Soc	3
<b>Total Hours</b>		<b>30</b>

**Secondary Education**

Code	Title	Hours
<b>Core Courses</b>		
IDE 615	Assess & Eval for Leaders	3
EDU/IDEALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)650	Instructional Techniques	3
EDU/IDEALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)692	Research Proj Seminar	3
Departmental 699		3
SPE 500 is taken only if the student has not had a recent equivalent. The course then becomes an added course to the program.		

**Secondary Education Courses**

EDU/IDEALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)640	Instructional Development	3
EDL 607	Lead Schs/Multicultural Soc	3
12 semester hours from appropriate teaching field: English language arts, mathematics, science, or social science.		12
<b>Total Hours</b>		<b>30</b>

**Instructional Leadership Support Field**

Code	Title	Hours
<b>Core Courses</b>		
IDE 615	Assess & Eval for Leaders	3
EDU/IDEALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)650	Instructional Techniques	3
EDU/IDEALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)692	Research Proj Seminar	3
Departmental 699		3
SPE 500 is taken only if the student has not had a recent equivalent. The course then becomes an added course to the program.		
<b>Instructional Leadership Support Field Courses</b>		
EDL 694	Dir St and Research	3
EDL 607	Lead Schs/Multicultural Soc	3
EDL 611	Human Relations Skills	3
EDL 621	Sem Prog Curriculum Dev	3
EDL 631	Sem Ed Management Skills	3
EDL 695	Mentoring Leadership	3
<b>Total Hours</b>		<b>30</b>

**Reading Specialist**

Code	Title	Hours
<b>Core Courses</b>		
IDE 615	Assess & Eval for Leaders	3
EDU/IDEALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)650	Instructional Techniques	3
EDU/IDEALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)692	Research Proj Seminar	3
Departmental 699		3
SPE 500 is taken only if the student has not had a recent equivalent. The course then becomes an added course to the program.		
<b>Reading Specialist Courses</b>		
EDL 607	Lead Schs/Multicultural Soc	3
EDU/IDEALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)640	Instructional Development	3
Select 12 hours from the following:		12
RED 611	Theor Lang Dev Tchg Reading	
RED 612	Socio Influences in Rdg Instr	
RED 613	Admn and Supv the Rdg Program	
RED 615	Diag - Rem Severe Rdg Disab	
RED 630	Psy Factors in Tchg Reading	
RED 640	Research in Reading	
RED 648	Literacy Coaching Teacher/Ldrs	
<b>Total Hours</b>		<b>30</b>

**Teacher Leader**

Code	Title	Hours
<b>Core Courses</b>		
IDE 615	Assess & Eval for Leaders	3
EDU/IDEALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)650	Instructional Techniques	3
EDU/IDEALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)692	Research Proj Seminar	3
Departmental 699		3
SPE 500 is taken only if the student has not had a recent equivalent. The course then becomes an added course to the program.		
<b>Teacher Leader Courses</b>		
EDL 607	Lead Schs/Multicultural Soc	3
EDU/IDEALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)640	Instructional Development	3
LTE 645	Curriculum Leadership	3
LTE 646	Community Leadership	3
LTE 647	Instructional Coaching	3
RED 648	Literacy Coaching Teacher/Ldrs	3
<b>Total Hours</b>		<b>30</b>
<b>Special Education</b>		
Code	Title	Hours
<b>Core Courses</b>		
IDE 615	Assess & Eval for Leaders	3

EDU/IDEALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)650	Instructional Techniques		
EDU/IDEALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)692	Research Proj Seminar	3	
Departmental 699		3	
SPE 500 is taken only if the student has not had a recent equivalent. The course then becomes an added course to the program.			
<b>Special Education Courses</b>			
EDU/IDEALL REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)640	Instructional Development	3	
EDF 615 or EPY 602	Sem in Ed Policy Studies Advanced Theories of Learning	3	
SPE 601	Advanced Eval in SPE	3	
SPE 609	Adv Study of Excep Children	3	
SPE 642	Clinical Teaching I	3	
SPE 643	Clinical Teaching II	3	
<b>Total Hours</b>		<b>30</b>	

## Elementary Education (Alt. M.Ed.) Degree Requirements

In general, the program requires a minimum of 42 graduate hours and such additional undergraduate courses or experiences as the Department may require. Please visit <http://www.southalabama.edu/colleges/ceps/programs.html> for specific requirements. See College of Education and Professional Studies general section for program admission requirements.

- 3 The program for the Alternative M.Ed. in Elementary Education is as follows: 42 minimum graduate hours requires (500 level).

Code	Title	Hours
<b>Curriculum and Teaching</b>		
EEC 522	Elementary School Curriculum	3
EEC 523	Instr Plan Elem School	3
<b>Foundations/Special Education Elective</b>		
SPE 500	Nat-Needs of Exc Chld and Yth	3
EPY 502	Psy Prin Learning	3
<b>Research and Evaluation</b>		
EPY 525	Assessment & Research in Educ	3
<b>Technology</b>		
EDM 510	Microcomputing Systems in Ed	3
<b>Teaching Field</b>		
EEC 532	Lit and Lang Dev in Elem Sch	3
EEC 535	Trends in Teaching Mathematics	3
EEC 537	Teaching Science	3
RED 520	Reading Foundations	3
RED 531	Trends-Practices Tchg Reading	3
Select three hours from the following: AED, EEC, RED		
<b>Field Experience</b>		
EEC 557	Elementary Practicum	3
<b>Clinical Field Experience</b>		
EEC 595	Internship-Elementary (Supervised practice in a school setting in the student's teaching field. The student will work full time in the school for an entire semester)	6
<b>Total Hours</b>		<b>45</b>

## Alabama State Department of Education Certification Requirements

A Student applying for initial teacher certification will be required to pass the appropriate Praxis II test (s) and have a successful score on his/her edTPA portfolio. ALSDE certification requirements are subject to change and students will be required to meet those which are in place the semester they are applying for certification. Prior to registering for any Praxis II exam, please verify current requirements by going directly to the ALABAMA portion of the Praxis II website at <http://www.ets.org/praxis/al> (<http://www.ets.org/praxis/al/>).

## Elementary Education (M.Ed.) Degree Requirements

The Master of Education (M.Ed.) program in Elementary Education provides advanced study for teachers working with children kindergarten through sixth grade. Upon completion of the program, students are eligible for the Class A Professional Elementary Education Certificate provided they already hold a Class B Professional Elementary Education Certificate.

**Note:** The appropriate course of study sheet and the assigned department advisor should be consulted in all program matters.

### Thesis

A student may elect to write a thesis as part of the program. If the student decides to write a thesis, a thesis committee will be appointed

to work with the student and to evaluate the thesis. (IDE 510 and IDE 620 are required.)

The program for the M.Ed. in Elementary Education is 30 min credit hours (500 level).

Code	Title	Hours
<b>Curriculum and Teaching</b>		
EEC 522	Elementary School Curriculum	3
EEC 523	Instr Plan Elem School	3
RED 531	Trends-Practices Tchg Reading	3
Select one of the following:		3
EEC 532	Lit and Lang Dev in Elem Sch	
EEC 535	Trends in Teaching Mathematics	
EEC 537	Teaching Science	
<b>Diversity Elective</b>		
Select one of the following:		3
SPE 500	Nat-Needs of Exc Chld and Yth (Required if introductory special education course not previously taken)	
EDU 567	Multicultural Exp in Schools	
ELT 525	Found Tchg Eng as Sec Lang	
<b>Research and Evaluation (<a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote1/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote1/</a>)<sup>1</sup></b>		
IDE 510	Educ Research and Evaluation	3
IDE 620	Quantitative Methods I (see footnote table below (p. 543)) <sup>2</sup>	3
<b>Technology</b>		
EDM 510	Microcomputing Systems in Ed	3
<b>Teaching Field</b>		
Advisor approved 500 level AED, EEC, RED courses		9
<b>Total Hours</b>		<b>33</b>

### Footnote

<sup>1</sup> Students who have previously not completed an evaluation course will be required to complete an approved evaluation course in addition to IDE 510.

<sup>2</sup> Thesis Option Only with IDE 510

All certification programs require an introductory special education course SPE 500 required under B above, if not completed at the undergraduate level.

## Elementary Education: K-6 (BS) Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 543)		60-65
<b>Major Requirements</b>		
<i>Professional Studies</i>		
A. Complete the following:		
EDU 330	Foundations Read Instruct - W	3

EDU 345	Field Experience (see footnote table below (p. 543)) <sup>1</sup>	2
EDU 346	K-6 Education	3
EDM 310	Microcomputing Systems	3
EPY 351	Human Growth & Development	3
EDU 430	K-6 Internship (see footnote table below (p. 543)) <sup>1</sup>	10

### Teaching Field Core

A. Complete the following:

EDU 301	Arts in the Elementary School	3
HS 365	HPE Curr/Methods-Elem Teachers	3
EDU 300	Classroom Management 1 (see footnote table below (p. 543)) <sup>1</sup>	2
EDU 303	Field Experience SPE (see footnote table below (p. 543)) <sup>1</sup>	1
EDU 311	Partnerships in SPE (see footnote table below (p. 543)) <sup>1</sup>	3
EDU 312	Intell and Physical Disabilit (see footnote table below (p. 543)) <sup>1</sup>	3
EDU 313	Learning & Behav Disorders (see footnote table below (p. 543)) <sup>1</sup>	3
EDU 331	Teaching Reading (see footnote table below (p. 543)) <sup>1</sup>	3
EDU 332	Teaching Language Arts (see footnote table below (p. 543)) <sup>1</sup>	3
EDU 335	Teaching Mathematics - W (see footnote table below (p. 543)) <sup>1</sup>	3
EDU 336	Teaching Social Studies (see footnote table below (p. 543)) <sup>1</sup>	3
EDU 337	Teaching Science (see footnote table below (p. 543)) <sup>1</sup>	3
EDU 362	Behavior Mgmt of Except Child (see footnote table below (p. 543)) <sup>1</sup>	3

### Minor Requirements

A minor is not required for this degree program		0
<b>Total Hours</b>		<b>120-125</b>

### Footnote

<sup>1</sup> Required for admission to Candidacy as a prerequisite

## General Education Requirements

60 Hours: 47 Hours Plus 13 Hours to Meet ALSDE 4x12 Requirements

Code	Title	Hours
<b>Area I – Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II – Humanities &amp; Fine Arts</b>		
A. Complete the following:		
CA 110	Public Speaking	3

B. Select one of the following: (<http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote2/>)<sup>1</sup> 3

EH 215	Brit Lit before 1785
EH 216	Brit Lit after 1785
EH 225	Am Lit before 1865
EH 226	Am Lit after 1865
EH 235	World Lit before 1650
EH 236	World Lit after 1650

C. Select one of the following: 3

ARH 100	Survey of Art
ARH 103	Art History I
ARH 123	Art History II
ARS 101	Art Appreciation
DRA 110	Introduction to Theatre (see footnote table below (p. 545)) <sup>2</sup>
MUL 101	Introduction to Music

D. Select three hours of the following: 3

AFR 101	Intro to African Amer Studies
ARH 100	Survey of Art
ARH 103	Art History I
ARH 123	Art History II
ARS 101	Art Appreciation
DRA 110	Introduction to Theatre (see footnote table below (p. 545)) <sup>2</sup>
EH 215	Brit Lit before 1785
EH 216	Brit Lit after 1785
EH 225	Am Lit before 1865
EH 226	Am Lit after 1865
EH 235	World Lit before 1650
EH 236	World Lit after 1650
LG 101	Introductory Latin I
LG 102	Introductory Latin II
LG 111	Introductory French I
LG 112	Introductory French II
LG 121	Introductory Chinese I
LG 122	Introductory Chinese II
LG 131	Introductory Spanish I
LG 132	Introductory Spanish II
LG 141	Intro Classical Greek I
LG 142	Intro Classical Greek II
LG 151	Introductory German I
LG 152	Introductory German II
LG 153	Accelerated Intro German
LG 171	Introductory Russian I
LG 172	Introductory Russian II
LG 173	Accelerated Intro Russian
LG 201	Intermediate Latin I
LG 202	Intermediate Latin II
LG 211	Intermediate French I
LG 212	Intermediate French II
LG 213	Accelerated Inter French - H
LG 221	Intermediate Chinese I

LG 222	Intermediate Chinese II
LG 231	Intermediate Spanish I
LG 232	Intermediate Spanish II
LG 234	Inter Spanish Accel -H
LG 241	Interm Classical Greek I
LG 242	Interm Classical Greek II
LG 251	Intermediate German I
LG 252	Intermediate German II
LG 271	Intermediate Russian I
LG 272	Intermediate Russian II
LG 273	Intensive Second Year Russian
LGS 101	Introductory Japanese I
LGS 102	Introductory Japanese II
LGS 106	Introductory Arabic I
LGS 107	Introductory Arabic II
LGS 110	Intro American Sign Language I
LGS 111	Intro American Sign Lang II
LGS 171	Introductory Korean I
LGS 172	Introductory Korean II
LGS 201	Intermediate Japanese I
LGS 202	Intermediate Japanese II
LGS 206	Intermediate Arabic I
LGS 207	Intermediate Arabic II
LGS 210	Intermediate ASL I
LGS 211	Intermediate ASL II
MUL 101	Introduction to Music
PHL 110	Introduction to Philosophy
PHL 120	Critical Thinking
PHL 121	Introduction to Logic
PHL 131	Introduction to Ethics
PHL 231	Social Ethics
PHL 240	Western Philosophy: Classical
REL 100	Intro to the Study of Religion
REL 200	Old Testament/Hebrew Bible
REL 201	Survey of the New Testament

### Area III – Natural Sciences & Mathematics

MA 201 Math for Elem Teachers I 3

A. Select three courses (9 hours) from the following: 9

MA 110	Finite Mathematics
MA 112	Precalculus Algebra
MA 113	Precalculus Trigonometry
MA 115	Precal Algebra-Trigonometry
MA 120	Calculus and Its Applications
MA 125	Calculus I
MA 126	Calculus II
MA 227	Calculus III
MA 237	Linear Algebra I
MA 238	Differential Equations I
ST 210	Stat Reason and Application

B. Select four hours of the following: 4

BLY 101 & 101L	Life Science I and Life Science I Laboratory
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or BLY 121 & 121L	General Biology I and General Biology I Lab	
C. Select 8 hours of the following:		8
BLY 102 & 102L	Life Science II and Life Science II Lab	
or BLY 122 & 122L	General Biology II and General Biology II Laboratory	
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab	
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab	
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab	
GY 111 & 111L	Physical Geology and Physical Geology Lab (see footnote table below (p. 545)) <sup>2</sup>	
GY 112 & 112L	Earth History and Earth History Lab	
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab	
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory (see footnote table below (p. 545)) <sup>2</sup>	
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab	
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab	
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	
<b>Area IV – History, Social &amp; Behavioral Sciences (<a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote2/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote2/</a>)<sup>1</sup></b>		
A. Select one of the following:		3
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 121	World Civilization I	
HY 122	World Civilization II	
HY 135	US History to 1877 <sup>1</sup>	
HY 136	US History since 1877 <sup>1</sup>	
B. Select three of the following:		9
AN 100	Intro to Cultural Anthropology	
AN 101	Intro Archaeology-Bio Anthro	
ECO 215	Prin of Microeconomics	
ECO 216	Prin of Macroeconomics	
GEO 114	People, Places, Environment	
GEO 115	World Regional Geography (see footnote table below (p. 545)) <sup>2</sup>	
GS 101	Intro to Gender Studies	
HY 101	HY of Western Civilization I	

HY 102	HY of Western Civilization II	
HY 121	World Civilization I	
HY 122	World Civilization II	
HY 135	US History to 1877 (see footnote table below (p. 545)) <sup>2</sup>	
HY 136	US History since 1877 (see footnote table below (p. 545)) <sup>2</sup>	
PSC 130	Intro to US Government (see footnote table below (p. 545)) <sup>2</sup>	
PSY 120	Introduction to Psychology	
PSY 250	Life Span Development	
SY 109	Introductory Sociology	
SY 112	Social Problems	
<b>Health/Physical Education</b>		
A. Complete the following:		
KIN 100	Concepts of Health and Fitness	3
PE 101	PE Activity -	1
<b>General Electives</b>		
Electives		2
<b>Total Hours</b>		<b>60</b>

### Footnote

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 121 & HY 122 or HY 135 & HY 136).

<sup>2</sup> Recommended Course

### Additional Information

#### E-portfolio and Assessment

Students enrolled in education classes are required to purchase a LiveText membership.

- <https://www.southalabama.edu/colleges/ceps/livetext.html>

#### Teacher Candidacy – Elementary Education K6

This major contains a professional component of upper level education courses (300-400 levels), grouped into three consecutive semesters (as shown on graduation plan: Tier 2, Tier 3, Tier 4), and are only available to students who have gained admission to Teacher Candidacy.

Admission Requirements for Teacher Candidacy:

Courses and GPA

- Courses: 4 x 12 (12 semester hours in each of the four areas: English/ Language Arts, Math, Science, Social Science with a grade of C or better). Plus, CA 110, EH 101, EH 102, EDM 310, EPY 351, EDU 330, and EDU 346
- Hours: 60 credit hours of degree requirements completed
- Minimum Grade Point Averages: 2.5 Program, 2.5 Professional Studies, 2.5 Teaching Field, and 2.5 USA GPA (all GPAs found in degree audit). No grade below a "C" is accepted in the 4 x 12, the Professional Studies, or Teaching Field.

ALSDE Background Check

- [https://www.alabamaachieves.org/teacher-center/teacher-preparation/#Background\\_Clearance](https://www.alabamaachieves.org/teacher-center/teacher-preparation/#Background_Clearance)

#### Application, Liability Insurance, and Interview

- Completed and scheduled in the UCOM Advising Center during the semester prior to beginning Teacher Candidacy

#### Tier Prerequisites and Certification/Graduation Requirements:

##### Tier 2 Prerequisite

- Admission to Teacher Candidacy

##### Tier 3 Prerequisites

- Praxis – Elementary Education: Multi Subjects – All Passing Scores (Math, Science, Social Studies) [https://www.ets.org/praxis/al/al\\_teacher\\_ed/](https://www.ets.org/praxis/al/al_teacher_ed/)
- GPAs at Admission Requirement Levels
- Successful Completion of Tier 2 with Grades of C or Higher

##### Tier 4 Prerequisites

- Praxis – Teaching Reading: Elementary – Passing Score [https://www.ets.org/praxis/al/al\\_teacher\\_ed/](https://www.ets.org/praxis/al/al_teacher_ed/)
- GPAs at Admission Requirement Levels
- Successful Completion of Tier 3 with Grades of C or higher
- Student Teaching Application

#### Certification/Graduation Requirements

- Successful Completion of Tier 4 with Grades of C or higher
- GPAs at Admission Requirement Levels
- Passing Score on edTPA
- Applications for Certification and Graduation

Add-on Certification (s) available for K6 Teacher Education Majors (9-21 Hours plus required Praxis)

CT K-6 Add-on Certificate: No additional coursework required. Praxis Test Requirements: Subject Area-Special ED (required for certification).

P-3 ECE Add-On Certificate: 9 hours of coursework required EDU 348, EDU 398, EDU 498. Praxis Test Requirements: Subject Area: Early Childhood (required for certification).

P-3 ECE/SPE Add-On Certificate: 9-12 hours of coursework required: EDU 432, EDU 433, and EDU 497. Praxis Test Requirements: Subject Area: Early Childhood and Special Education (both required for certification).

**Note: Praxis tests requirements are subject to change as prescribed by the ALSDE. Prior to registering for any Praxis exam, please verify current requirements by going directly to the Alabama portion of the ETS Praxis website at <http://ets.org/praxis/al> (<http://ets.org/praxis/al/>).**

## Graduation Plan

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I (CP)	3
Fine Art	Area II, C <sup>1</sup>	3

MA 110	Finite Mathematics (or higher (CP) Area III, A) <sup>1</sup>	3
KIN 100	Concepts of Health and Fitness	3
PE 101 - PE 157	PE activity course	1
EDU 100	Role of the Teacher (Area V, I) <sup>1,2</sup>	2

**Hours 15**

<b>Spring</b>		
CA 110	Public Speaking (CP)	3
EH 102	English Composition II (CP)	3
BLY 101	Life Science I (CP)	3
BLY 101L	Life Science I Laboratory (CP)	1
HY 135	US History to 1877 (CP, Area IV, A) <sup>1,2</sup>	3
MA 201	Math for Elem Teachers I (CP)	3

**Hours 16**

<b>Second Year</b>		
<b>Fall</b>		
HY 136	US History since 1877 (or Social Science (CP, Area IV, B)) <sup>1,2</sup>	3
Literature (CP)	Area II, B <sup>1</sup>	3
GY 111 or PH 104	Physical Geology (CP, Area III, B or Area V, B) <sup>1,2</sup> or Concepts of Physics	3
MA 202	Math for Elem Teachers II (CP, Area V, A) <sup>1,2</sup>	3
GY 111L or PH 104L	Physical Geology Lab (CP, Area III, B or Area V, B) <sup>1,2</sup> or Concepts of Physics Laboratory	1
GEO 115 or PSC 130	World Regional Geography (CP, Area IV, B) <sup>1,2</sup> or Intro to US Government	3

Take Core Exams

**Hours 16**

<b>Spring</b>		
EPY 351	Human Growth & Development (CP)	3
HS 365	HPE Curr/Methods-Elem Teachers	3
Literature Sequence or Fine Art/Humanities Elective	Area II, D <sup>1</sup>	3
ST 210	Stat Reason and Application (CP, Area V, B) <sup>1,2</sup>	3
GY 111 or PH 104	Physical Geology (CP, Area III, B or Area V, B) <sup>1,2</sup> or Concepts of Physics	3
GY 111L or PH 104L	Physical Geology Lab (CP, Area III, B or Area V, B) <sup>1,2</sup> or Concepts of Physics Laboratory	1

Take Elem Ed Praxis Exams (excluding reading subtest)

**Hours 16**

<b>Third Year</b>		
<b>Fall</b>		
EDM 310	Microcomputing Systems (CP)	3
EDU 330	Foundations Read Instruct - W (CP)	3
EDU 346	K-6 Education (CP)	3
EDU 301	Arts in the Elementary School	3
GEO 115 or PSC 130	World Regional Geography (CP, Area IV, B) <sup>1,2</sup> or Intro to US Government	3
Apply for Candidacy		

**Hours 15**

<b>Spring</b>		
EDU 303	Field Experience SPE <sup>3</sup>	1
EDU 312	Intell and Physical Disabilit <sup>3</sup>	3
EDU 313	Learning & Behav Disorders <sup>3</sup>	3
EDU 331	Teaching Reading <sup>3</sup>	3
EDU 336	Teaching Social Studies <sup>3</sup>	3
EDU 362	Behavior Mgmt of Except Child <sup>3</sup>	3

**Hours 16**

<b>Fourth Year</b>		
<b>Fall</b>		
EDU 311	Partnerships in SPE <sup>3</sup>	3
EDU 335	Teaching Mathematics - W <sup>3</sup>	3
EDU 337	Teaching Science <sup>3</sup>	3

EDU 345	Field Experience <sup>3</sup>	2
EDU 332	Teaching Language Arts <sup>3</sup>	3
Apply for Graduation		
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
EDU 430	K-6 Internship <sup>3</sup>	10
EDU 300	Classroom Management 1 <sup>3</sup>	2
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> See General Education Requirements

<sup>2</sup> Recommended Course

<sup>3</sup> Require admission to Candidacy

#### Notes:

- (CP) Candidacy Prerequisite
- (W) Courses that satisfy USA writing requirement (2 required)

## Reading Specialist Certification

### Degree Requirements

#### Reading Specialist Class A Certification

##### Admission

Requirements for admission to the Class A Reading Specialist program shall include:

- At least baccalaureate-level professional educator certification in any area of education and master's degree; Candidates without a master's degree may pursue the reading specialist certification along with the master's degree in Elementary or Early Childhood Education. See advising sheets for details.
- Two years of successful classroom teaching experience; **and**
- Certification in Early Childhood Education, Elementary Education, Collaborative Teacher (K-6 or 6-12), **or**
- Certification in any other area of education and completion of two reading courses including an introduction to reading course.  
**Note:** All certification programs require an introductory course, special education SPE 500, if not completed at the undergraduate level.

#### Program Requirements

Code	Title	Hours
<b>Curriculum and Teaching</b>		
EEC 552 or SED 552	Comm Svcs Families-Children <sup>1</sup> The High School Curriculum	3
EDM 510	Microcomputing Systems in Ed	3
<b>Foundations/Special Education Elective</b>		
SPE 500	Nat-Needs of Exc Chld and Yth <sup>2</sup>	
<b>Research and Evaluation</b>		
IDE 510	Educ Research and Evaluation	3
<b>Teaching Field</b>		
18 hrs with a grade of "B" or above		
EEC 532	Lit and Lang Dev in Elem Sch	3
RED 531	Trends-Practices Tchg Reading	3
RED 533	Diag-Corr Reading Disabilities	3
RED 534	Remed-Clinic Proced in Reading	3

RED 541	Literacy in the Content Area	3
RED 548	Literacy Coaching	3
<b>Internship</b>		
RED 595	Internship in Reading Educ	3
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> EEC 522 taken by those with an undergraduate secondary certificate. SED 552 taken by those with an undergraduate elementary certificate.

<sup>2</sup> SPE 500 required if introductory special education course not previously taken or EDU 567 or an ALSDE-Approved diversity course if not completed with Class A certification.

## State Board Of Education Praxis II Test Information

Applicants completing coursework for Class A Reading Specialist certification are required to pass Praxis II in their area of certification. Please see specific program requirements on advising sheets. Praxis II test requirements are subject to change as dictated by the ALSDE. Prior to registering for any Praxis II exam, please verify current requirements by going directly to the **Alabama** portion of the Praxis II website at <http://www.ets.org/praxis/al> (<http://www.ets.org/praxis/al/>)

## Secondary Education (Alt. M.Ed.)

### Degree Requirements

This program is designed to provide initial teacher preparation at the graduate level primarily for students interested in pursuing a career in teaching but whose undergraduate degree did not include a teacher education program. See College of Education and Professional Studies general section for program admission requirements.

Secondary Grades 6-12 (42 semester hours 500 level)

Code	Title	Hours
<b>Curriculum and Teaching</b>		
SED 555	Curriculum-Tchg in Sec School (see footnote table below (p. 548)) <sup>1</sup>	3
SED 559	Adv Teaching Techniques	3
Appropriate methods course for teaching specialization		3
<b>Foundations/Special Education Elective</b>		
SPE 500	Nat-Needs of Exc Chld and Yth	3
<b>Evaluation</b>		
EPY 525	Assessment & Research in Educ	3
<b>Reading</b>		
RED 541	Literacy in the Content Area	3
<b>Technology</b>		
EDM 510	Microcomputing Systems in Ed	3
<b>Teaching Field</b>		
Selected from approved electives in the student's teaching field. These fields are presently available in this program:		15
Art Education		
English Language Arts Composite		
English for Speakers of Other Languages		
General Science Composite		
Mathematics		

Social Science Composite	
French	
German	
Spanish	
<b>Internship</b>	
Select one from the following: ( <a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote1/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote1/</a> ) <sup>2</sup> 6	
Supervised practice in a school setting in the student's teaching field. The student will be under the mentorship of a cooperating teacher full time in the school for an entire semester.	
AED 595	Internship (Art Education)
ELT 595	ESOL Internship (ESOL)
SED 595	Intern in Sec Edu Lang Arts (Language Arts)
SED 593	Intern in Sec Educ Forgn Lang (Foreign Language)
SED 598	Intern in Sec Educ Math (Math)
SED 597	Intern in Sec Educ Science (Science)
SED 596	Intern in Sec Edu Soc Studies (Social Science)
<b>Total Hours</b>	<b>42</b>

## Footnote

<sup>1</sup> Students must have A or B in this course on order to be eligible for student teaching.

<sup>2</sup> This course has a field component. See advisor for details.

Each comprehensive teaching field of English language arts, general science, and general social science shall ensure that the candidate has completed at least one course in at least two of the comprehensive fields.

Successful completion of PRAXIS II test appropriate to the teaching field and grade level of certification sought is required **prior** to enrollment in internship.

## Alabama State Department of Education Certification Requirements

A Student applying for initial teacher certification will be required to pass the appropriate Praxis II test (s) and have a successful score on his/her edTPA portfolio. ALSDE certification requirements are subject to change and students will be required to meet those which are in place the semester they are applying for certification. Prior to registering for any Praxis II exam, please verify current requirements by going directly to the ALABAMA portion of the Praxis II website at: <http://www.ets.org/praxis/al> (<http://www.ets.org/praxis/al/>).

Student must take a comprehensive end of program examination or submit an end of degree portfolio during the semester in which the internship is completed.

Please visit <http://www.southalabama.edu/colleges/ceps/programs.html> for specific requirements.

# Secondary Education (M.Ed.)

## Degree Requirements

### Programs in Secondary Education - Master of Education Degree Programs

M.Ed. programs are designed to enhance and extend the knowledge and qualifications of secondary teachers. See College of Education and Professional Studies general section for program admission requirements.

Code	Title	Hours
<b>Curriculum and Teaching</b>		
Select two of the following:		6
EEC 522	Elementary School Curriculum (For ESOL - for those with secondary undergraduate cert)	
or SED 552	The High School Curriculum	
AED 501	Trn-Prac Tch Art Elem Sc	
ELT 530	Methods and Materials Tch ESL	
SED 561	Trends-Prac Tchg Lang Sec	
SED 563	Trends-Prac Tchg Math Sec	
SED 564	Trends-Prac Tchg Science	
SED 562	Trends-Prac Tchg Soc St	
<b>Foundations/Special Education Elective</b>		
Select one of the following:		3
SPE 500	Nat-Needs of Exc Chld and Yth (required if introductory special education course not previously taken)	
EDU 567	Multicultural Exp in Schools	
ELT 525	Found Tchg Eng as Sec Lang	
<b>Research and Evaluation</b>		
IDE 510	Educ Research and Evaluation	3
Research Seminar 560 (ESOL requires ELT 595 Internship instead of 560 Research Seminar)		3
<b>Teaching Field</b>		
Select 12 hours from the following:		12
Courses selected with advisor approval from student's teaching field		
Art Education: Courses selected with advisor approval from Art		
Language Arts: Courses selected from at least two of these fields with advisor approval: English, speech, communication, drama, and reading		
English for Speakers of Other Languages (ESOL): ELT 525, ELT 545, ELT 553, ELT 558 and ELT 595		
Mathematics: Courses selected with advisor approval from Mathematics		
Science Programs: Science Composite; Courses selected from at least two of these fields with advisor approval: biology, chemistry, geology, physics		
Social Studies Programs: Social Studies Composite: Courses selected from at least two of these fields with advisor approval: economics, geography, history, political science, psychology and sociology		

## Technology

EDM 510	Microcomputing Systems in Ed	3
<b>Total Hours</b>		<b>30</b>

Please visit <http://www.southalabama.edu/colleges/ceps/programs.html> for specific requirements.

All certification programs require an introductory special education course SPE 500, if not completed at the undergraduate level. This is in addition to the 30 semester hour requirement for the ESOL program.

## Secondary Education Biology (BS)

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 549)		45-46
<b>Major Requirements</b>		
<i>Professional Studies Core</i>		
A. Complete the following:		
EDM 310	Microcomputing Systems	3
EDU 400	Edu Except Child and Youth	3
EPY 351	Human Growth & Development	3
EDU 340	Fundamentals of Teaching - W	3
EDU 341	Middle Level Education - W	3
EDU 342	Secondary Field Experience	3
EDU 363	Tchg Adptve Cur Thru Beh/Clsm	3
EDU 451	Content Area Literacy	3
EDU 456	Teaching Science	3
EDU 468	Internship - Science	9
<i>Teaching Field Core</i>		
Includes 12 hours from <b>General Education Area III</b>		
A. Complete the following:		
ST 210	Stat Reason and Application	3
or MA 125	Calculus I	
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab	4
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab	4
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
CH 201 & 201L	Organic Chemistry I and Organic Chemistry I Lab	4
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab	4-5
or PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab	4-5
or PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	
BLY 301	Cell Biology	3
BLY 302	Genetics	3
B. Select 20 hours from BLY 300-499		20

<b>Minor Requirements</b>	
A minor is not required for this degree program	0
<b>Total Hours</b>	<b>138-141</b>

### General Education Requirements

Includes 11 hours of Math and Science courses from Area III that will satisfy requirements in the **Teaching Field Core**.

Code	Title	Hours
<b>Area I – Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II – Humanities &amp; Fine Arts</b>		
A. Complete the following:		
CA 110	Public Speaking	3
B. Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote1/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote1/</a> ) <sup>1</sup>		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
C. Select one of the following:		
ARH 100	Survey of Art	3
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	
D. Select three hours of the following:		
AFR 101	Intro to African Amer Studies	3
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
LG 101	Introductory Latin I	
LG 102	Introductory Latin II	
LG 111	Introductory French I	
LG 112	Introductory French II	
LG 121	Introductory Chinese I	
LG 122	Introductory Chinese II	
LG 131	Introductory Spanish I	

LG 132	Introductory Spanish II		
LG 141	Intro Classical Greek I		
LG 142	Intro Classical Greek II		
LG 151	Introductory German I		
LG 152	Introductory German II		
LG 153	Accelerated Intro German		
LG 171	Introductory Russian I		
LG 172	Introductory Russian II		
LG 173	Accelerated Intro Russian		
LG 201	Intermediate Latin I		
LG 202	Intermediate Latin II		
LG 211	Intermediate French I		
LG 212	Intermediate French II		
LG 213	Accelerated Inter French - H		
LG 221	Intermediate Chinese I		
LG 222	Intermediate Chinese II		
LG 231	Intermediate Spanish I		
LG 232	Intermediate Spanish II		
LG 234	Inter Spanish Accel -H		
LG 241	Interm Classical Greek I		
LG 242	Interm Classical Greek II		
LG 251	Intermediate German I		
LG 252	Intermediate German II		
LG 271	Intermediate Russian I		
LG 272	Intermediate Russian II		
LG 273	Intensive Second Year Russian		
LGS 101	Introductory Japanese I		
LGS 102	Introductory Japanese II		
LGS 106	Introductory Arabic I		
LGS 107	Introductory Arabic II		
LGS 110	Intro American Sign Language I		
LGS 111	Intro American Sign Lang II		
LGS 171	Introductory Korean I		
LGS 172	Introductory Korean II		
LGS 201	Intermediate Japanese I		
LGS 202	Intermediate Japanese II		
LGS 206	Intermediate Arabic I		
LGS 207	Intermediate Arabic II		
LGS 210	Intermediate ASL I		
LGS 211	Intermediate ASL II		
MUL 101	Introduction to Music		
PHL 110	Introduction to Philosophy		
PHL 120	Critical Thinking		
PHL 121	Introduction to Logic		
PHL 131	Introduction to Ethics		
PHL 231	Social Ethics		
PHL 240	Western Philosophy: Classical		
REL 100	Intro to the Study of Religion		
REL 200	Old Testament/Hebrew Bible		
REL 201	Survey of the New Testament		
<b>Area III – Natural Sciences &amp; Mathematics</b>			
A. Complete the following:			
MA 115	Precal Algebra-Trigonometry		4
B. Complete the following:			
BLY 101 & 101L	Life Science I and Life Science I Laboratory		4
BLY 122 & 122L	General Biology II and General Biology II Laboratory		4
<b>Area IV – History, Social &amp; Behavioral Sciences (<a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote1/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote1/</a>)<sup>1</sup></b>			
A. Select one of the following:			
HY 101	HY of Western Civilization I		3
HY 102	HY of Western Civilization II		
HY 121	World Civilization I		
HY 122	World Civilization II		
HY 135	US History to 1877		
HY 136	US History since 1877		
B. Select three of the following:			
AN 100	Intro to Cultural Anthropology		9
AN 101	Intro Archaeology-Bio Anthro		
ECO 215	Prin of Microeconomics		
ECO 216	Prin of Macroeconomics		
GEO 114	People, Places, Environment		
GEO 115	World Regional Geography		
GS 101	Intro to Gender Studies		
HY 101	HY of Western Civilization I		
HY 102	HY of Western Civilization II		
HY 121	World Civilization I		
HY 122	World Civilization II		
HY 135	US History to 1877		
HY 136	US History since 1877		
PSC 130	Intro to US Government		
PSY 250	Life Span Development		
SY 109	Introductory Sociology		
SY 112	Social Problems		
<b>Area V</b>			
A. Complete the following:			
KIN 100	Concepts of Health and Fitness		3
B. Complete the following:			
PE activity course			1
<b>Total Hours</b>			<b>46</b>
<b>Footnote</b>			
<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 121 & HY 122 or HY 135 & HY 136)			

## Additional Information

### E-portfolio and Assessment

Students enrolled in education classes are required to purchase a LiveText membership.

- <https://www.southalabama.edu/colleges/ceps/livetext.html>

## Teacher Candidacy – Secondary Education

This major contains a professional component (Candidacy) comprised of upper level education courses (300-400 levels), grouped into three semesters (as shown on graduation plan), and are only available to students who have gained admission to Teacher Candidacy.

### Admission Requirements for Teacher Candidacy

Courses and GPA

- Courses: CA 110, EH 101, EH 102, EDM 310, EDU 400, EPY 351, and 75% of Teaching Field (or no more than one semester of Teaching Field courses between methods and internship)
- Hours: 60 credit hours of degree requirements completed
- Minimum Grade Point Averages: 2.5 Program, 2.5 Professional Studies, 2.5 Teaching Field, and 2.5 USA GPA (all GPAs found in degree audit). No grade below a "C" is accepted in Professional Studies.

ALSDE Background Check

- [https://www.alabamaachieves.org/teacher-center/teacher-preparation/#Background\\_Clearance](https://www.alabamaachieves.org/teacher-center/teacher-preparation/#Background_Clearance)

Application, Liability Insurance, and Interview

- Completed and scheduled in the UCOM Advising Center during the semester prior to beginning Teacher Candidacy

### Prerequisites and Certification/Graduation Requirements

Semester 1 of Teacher Candidacy: EDU 340 (Prerequisite Below)

- Admission to Teacher Candidacy

Semester 2 of Teacher Candidacy: Methods Block (Fall Only-15 Credit Hours) (Prerequisites Below)

- Successful Completion of EDU 340 with a Grade of C or better
- GPAs at Admission Requirements Levels

Semester 3 of Teacher Candidacy: Internship (Prerequisites Below)

- Praxis - Teaching Field Content Knowledge - Passing Score [https://www.ets.org/praxis/al/al\\_teacher\\_ed/](https://www.ets.org/praxis/al/al_teacher_ed/)
- Successful Completion of Methods Block with Grades of C or better
- GPAs at Admission Requirement Levels
- Student Teaching Application

Certification/Graduation Requirements

- Successful Completion of Student Teaching
- GPAs at Admission Requirement Level
- Passing Score on edTPA
- Application for Certification and Graduation

Secondary students will be required to participate in an opening of school experience during the fall immediately preceding either their methods block classes or their student teaching. This experience will take place at the beginning of the public school year which is prior to the beginning of U.S.A. classes.

**Note: Praxis tests requirements are subject to change as prescribed by the ALSDE. Prior to registering for any Praxis exam, please verify current requirements by going directly to the Alabama portion of the ETS Praxis website at <http://ets.org/praxis/al> (<http://ets.org/praxis/al/>).**

## Graduation Plan

(146 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I (CP)	3
BLY 121	General Biology I (PR)	3
BLY 121L	General Biology I Lab (PR)	1
Fine Arts	Area II, C <sup>1</sup>	3
MA 112 or MA 115	Precalculus Algebra (PR, Area IV, B) <sup>1</sup> or Precal Algebra-Trigonometry	3
Social Science	Area IV, B <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
EH 102	English Composition II (CP)	3
BLY 122	General Biology II (PR)	3
BLY 122L	General Biology II Laboratory (PR)	1
History	Area IV, A <sup>1</sup>	3
MA 113 or MA 115	Precalculus Trigonometry (PR) or Precal Algebra-Trigonometry	3
KIN 100	Concepts of Health and Fitness	3
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
CA 110	Public Speaking (CP)	3
CH 131	General Chemistry I (PR)	3
CH 131L	General Chemistry I Lab (PR)	1
GEO 101	Environmental Geography	3
GEO 101L	Environmental Geography Lab	1
Literature	Area II, B <sup>1</sup>	3
PE 101-PE 157	PE Activity Course	1
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
BLY 301	Cell Biology	3
BLY 302	Genetics	3
CH 132	General Chemistry II (PR)	3
CH 132L	General Chemistry II Lab (PR)	1
Social Science Elective	Area IV, B <sup>1</sup>	3
ST 210	Stat Reason and Application	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
EDU 400	Edu Except Child and Youth (CP)	3
CH 201	Organic Chemistry I	3
CH 201L	Organic Chemistry I Lab	1
PH 114	Physics with Algebra-Trig I (PR)	5
PH 114L	Alg-Trig Based Physics I Lab (PR)	0
<b>Hours</b>		<b>12</b>
<b>Spring</b>		
EPY 351	Human Growth & Development (CP)	3
BLY 300-BLY 499 Elective	Upper Level Biology Course	4
BLY 300-BLY 499 Elective	Upper Level Biology Course	4
PH 115	Physics with Algebra -Trig II	5
PH 115L	Alg-Trig Based Physics II Lab	0
<b>Hours</b>		<b>16</b>
<b>Fourth Year</b>		
<b>Fall</b>		
EDM 310	Microcomputing Systems (CP)	3
BLY 300-BLY 499 Elective	Upper Level Biology Course	4
BLY 300-BLY 499 Elective	Upper Level Biology Course	4

PH 101	Introduction to Astronomy	4
PH 101L	Introduction to Astronomy Lab	0
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EDU 340	Fundamentals of Teaching - W (Spring or Summer Only) <sup>2</sup>	3
BLY 300-BLY 499 Elective	Upper Level Biology Course	4
History/Social Science Elective	Area IV, B <sup>1</sup>	3
Literature/Fine Arts or Humanities	Area II, D <sup>1</sup>	3
<b>Hours</b>		<b>13</b>
<b>Fifth Year</b>		
<b>Fall</b>		
EDU 341	Middle Level Education - W (Fall Only) <sup>2</sup>	3
EDU 342	Secondary Field Experience (Fall Only) <sup>2</sup>	3
EDU 363	Tchg Adptve Cur Thru Beh/Clstrm (Fall Only - Teaching Special Need Learners) <sup>2</sup>	3
EDU 363	Tchg Adptve Cur Thru Beh/Clstrm (Fall Only - Content Area Literacy) <sup>2</sup>	3
EDU 456	Teaching Science (Fall Only) <sup>2</sup>	3
Apply for Graduation		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EDU 468	Internship - Science <sup>2</sup>	9
<b>Hours</b>		<b>9</b>
<b>Total Hours</b>		<b>143</b>

<sup>1</sup> See General Education Requirements

<sup>2</sup> Required for admission to Candidacy

#### Notes:

- (PR) Prerequisite for course(s) taking in next semester
- (CP) Prerequisite for Candidacy
- (W) Courses that satisfy USA writing requirement (2 required)

## Secondary Education English Language Arts (BS)

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 553)		45-48
<b>Major Requirements</b>		
<i>Professional Studies Core</i>		
A. Complete the following:		
EDM 310	Microcomputing Systems	3
EDU 400	Edu Except Child and Youth	3
EPY 351	Human Growth & Development	3
EDU 340	Fundamentals of Teaching - W (see footnote table below (p. 553)) <sup>1</sup>	3
EDU 341	Middle Level Education - W (see footnote table below (p. 553)) <sup>1</sup>	3
EDU 342	Secondary Field Experience (see footnote table below (p. 553)) <sup>1</sup>	3
EDU 363	Tchg Adptve Cur Thru Beh/Clstrm (see footnote table below (p. 553)) <sup>1</sup>	3

EDU 451	Content Area Literacy (see footnote table below (p. 553)) <sup>1</sup>	3
EDU 453	Teaching Language Subjects (see footnote table below (p. 553)) <sup>1</sup>	3
EDU 466	Internship-Language Arts (see footnote table below (p. 553)) <sup>1</sup>	9

#### Teaching Field Core

Includes 12 hours from **General Education Area II**

##### A. Complete the following:

CA 100	Intro to Communication	3
CA 220	Writing Comm Media - W	3
EH 300	Intro to Literary Study	3
EH 371	Approaches to Eng Grammar - W	3
EH 401	Teaching Composition-W	3

B. Select six hours from the following: (<http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote1/>)<sup>2</sup>

EH 215	Brit Lit before 1785	
or EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
or EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
or EH 236	World Lit after 1650	

##### C. Select six hours from the following:

EH 400 - EH 499		6
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##### D. Select one of the following:

EH 402	Rhetoric-Ancient and Modern-W	
EH 421	Literary Criticism to 1900-W	
EH 422	Lit Criticism Since 1900-W	

#### Literature Prior to 1660

E. Select one of the following:

EH 314	Medieval Literature	
EH 315	Chaucer	
EH 321	Renaissance Literature	
EH 342	Later 18th Century Lit - W	
EH 461	Tudor and Stuart Drama	
EH 465	Middle English Literature	
EH 467	Milton	
EH 470	Medieval Lit	
EH 471	Renaissance Lit	
EH 472	Shakespeare	

#### British or American Literature from 1660-1900

F. Select one of the following:

EH 331	American Novel to 1900	
EH 332	American Nonfiction Prose	
EH 334	American Poetry to 1900	
EH 340	Restoration Early 18th Lit	
EH 342	Later 18th Century Lit - W	
EH 343	18th Century British Novel	
EH 351	British Romanticism	
EH 352	Victorian Poetry	
EH 353	Victorian Prose	
EH 354	19th Century British Novel	

EH 462	Restor-18th Century Drama - W	
EH 474	Restoration Lit	
EH 475	19th Century Lit	
<i>Literature after 1900</i>		
G. Select one of the following:		3
EH 360	Anglo-Am Poetry since 1900	
EH 361	American Novel since 1900	
EH 362	Am. Novel from 1900 to 1945	
EH 363	American Novel since 1945	
EH 364	Brit. Novel from 1900 to 1945	
EH 365	British Novel since 1945	
EH 366	Contemporary Fiction	
EH 367	British Novel since 1900	
EH 369	Modern Short Story	
EH 380	Science Fiction	
EH 463	Drama 1890 to Present	
EH 468	Contemporary Black Fiction	
EH 476	Studies in 20th Century Lit	
EH 478	Film	
EH 479	Mod/Postmodern Poetry	
<b>Minor Requirements</b>		
A minor is not required for this degree program		0
<b>Total Hours</b>		<b>120-123</b>

## Footnote

<sup>1</sup> Required for admission to Candidacy as a prerequisite

<sup>2</sup> One course in each area with a **sequence** included in Area II, B, D

## General Education Requirements

Includes 12 hours of Humanities and Fine Arts courses from Area II that will satisfy requirements in the **Teaching Field Core**.

Code	Title	Hours
<b>Area I – Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II – Humanities &amp; Fine Arts</b>		
A. Complete the following:		
CA 110	Public Speaking	3
B. Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote2/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote2/</a> ) <sup>1</sup>		
EH 215	Brit Lit before 1785	
EH 225	Am Lit before 1865	
EH 235	World Lit before 1650	
C. Complete the following:		
DRA 110	Introduction to Theatre	3
D. Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote2/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote2/</a> ) <sup>1</sup>		
EH 226	Am Lit after 1865	

EH 226	Am Lit after 1865	
EH 236	World Lit after 1650	
<b>Area III – Natural Sciences &amp; Mathematics</b>		
A. Select 3-4 hours from the following:		3-4
MA 110	Finite Mathematics	
MA 112	Precalculus Algebra	
MA 113	Precalculus Trigonometry	
MA 115	Precal Algebra-Trigonometry	
MA 120	Calculus and Its Applications	
MA 125	Calculus I	
B. Select 8-10 hours from the following:		8-10
AN 121 & 121L	Biological Anthropology and Biological Anthropology Lab	
BLY 101 & 101L	Life Science I and Life Science I Laboratory	
or BLY 121 & 121L	General Biology I and General Biology I Lab	
BLY 102 & 102L	Life Science II and Life Science II Lab	
or BLY 122 & 122L	General Biology II and General Biology II Laboratory	
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab	
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab	
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab	
GY 111 & 111L	Physical Geology and Physical Geology Lab	
GY 112 & 112L	Earth History and Earth History Lab	
MAS 134 & 134L	Ocean Science and Ocean Science Lab	
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab	
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory	
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab	
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab	
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	
<b>Area IV – History, Social &amp; Behavioral Sciences (<a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote2/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote2/</a>)<sup>1</sup></b>		
A. Select one of the following:		3
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	

HY 121	World Civilization I	
HY 122	World Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
B. Select three of the following:		9
AN 100	Intro to Cultural Anthropology	
AN 101	Intro Archaeology-Bio Anthro	
ECO 215	Prin of Microeconomics	
ECO 216	Prin of Macroeconomics	
GEO 114	People, Places, Environment	
GEO 115	World Regional Geography	
GS 101	Intro to Gender Studies	
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 121	World Civilization I	
HY 122	World Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
PSC 130	Intro to US Government	
PSY 250	Life Span Development	
SY 109	Introductory Sociology	
SY 112	Social Problems	
<b>Area V</b>		
A. Complete the following:		
KIN 100	Concepts of Health and Fitness	3
B. Complete the following:		
PE activity course		1
<b>Total Hours</b>		<b>45-48</b>

### Footnote

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216 EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 121 & HY 122 or HY 135 & HY 136)

## Additional Information

### E-portfolio and Assessment

Students enrolled in education classes are required to purchase a LiveText membership.

- <https://www.southalabama.edu/colleges/ceps/livetext.html>

### Teacher Candidacy – Secondary Education

This major contains a professional component (Candidacy) of upper level education courses (300-400 levels), grouped into three semesters (as shown on graduation plan), and are only available to students who have gained admission to Teacher Candidacy.

### Admission Requirements for Teacher Candidacy

Courses and GPA

- Courses: CA 110, EH 101, EH 102, EDM 310, EDU 400, EPY 351, and 75% of Teaching Field (or no more than one semester of Teaching Field courses between methods and internship)>
- Hours: 60 credit hours of degree requirements completed

- Minimum Grade Point Averages: 2.5 Program, 2.5 Professional Studies, 2.5 Teaching Field, and 2.5 USA GPA (all GPAs found in degree audit). No grade below a “C” is accepted in Professional Studies.

### ALSDE Background Check

- [https://www.alabamaachievers.org/teacher-center/teacher-preparation/#Background\\_Clearance](https://www.alabamaachievers.org/teacher-center/teacher-preparation/#Background_Clearance)

### Application, Liability Insurance, and Interview

- Completed and scheduled in the UCOM Advising Center during the semester prior to beginning Teacher Candidacy

### Prerequisites and Certification/Graduation Requirements

Semester 1 of Teacher Candidacy: EDU 340 (Prerequisite Below)

- Admission to Teacher Candidacy

Semester 2 of Teacher Candidacy: Methods Block (Fall Only-15 Credit Hours) (Prerequisites Below)

- Successful Completion of EDU 340 with a Grade of C or better
- GPAs at Admission Requirements Levels

Semester 3 of Teacher Candidacy: Internship (Prerequisites Below)

- Praxis - Teaching Field Content Knowledge - Passing Score [https://www.ets.org/praxis/al/al\\_teacher\\_ed/](https://www.ets.org/praxis/al/al_teacher_ed/)
- Successful Completion of Methods Block with Grades of C or better
- GPAs at Admission Requirement Levels
- Student Teaching Application

### Certification/Graduation Requirements

- Successful Completion of Student Teaching
- GPAs at Admission Requirement Level
- Passing Score on edTPA
- Application for Certification and Graduation

Secondary students will be required to participate in an opening of school experience during the fall immediately preceding either their methods block classes or their student teaching. This experience will take place at the beginning of the public school year which is prior to the beginning of U.S.A. classes.

**Note: Praxis tests requirements are subject to change as prescribed by the ALSDE. Prior to registering for any Praxis exam, please verify current requirements by going directly to the Alabama portion of the ETS Praxis website at <http://ets.org/praxis/al> (<http://ets.org/praxis/al/>).**

## Graduation Plan

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I (CP)	3
DRA 110	Introduction to Theatre	3
MA 110	Finite Mathematics (or higher, Area III, A) <sup>1</sup>	3
KIN 100	Concepts of Health and Fitness	3
Social Science	Area IV, B <sup>1</sup>	3
<b>Hours</b>		<b>15</b>

<b>Spring</b>		
CA 110	Public Speaking (CP)	3
EH 102	English Composition II (CP)	3
CA 100	Intro to Communication	3
History	Area IV, A <sup>1</sup>	3
Science and Lab	Area III, B <sup>1</sup>	4
<b>Hours</b>		<b>16</b>

<b>Second Year</b>		
<b>Fall</b>		
CA 220	Writing Comm Media - W	3
EH 215 or EH 216	Brit Lit before 1785 or Brit Lit after 1785	3
EH 225 or EH 226	Am Lit before 1865 or Am Lit after 1865	3
Science and Lab	Area III, B <sup>1</sup>	4
Social Science Elective	Area IV, B <sup>1</sup>	3
<b>Hours</b>		<b>16</b>

<b>Spring</b>		
EH 314	Medieval Literature <sup>2</sup>	3
EH 371	Approaches to Eng Grammar - W	3
EH 235 or EH 236	World Lit before 1650 or World Lit after 1650	3
EH 300	Intro to Literary Study	3
PE 101-PE 157	PE activity course	1
Take Core Exams		
<b>Hours</b>		<b>13</b>

<b>Third Year</b>		
<b>Fall</b>		
EH 360	Anglo-Am Poetry since 1900 <sup>2</sup>	3
EH 331	American Novel to 1900 <sup>2</sup>	3
EH 401	Teaching Composition-W (Fall Semester Only)	3
EPY 351	Human Growth & Development (CP)	3
EDM 310	Microcomputing Systems (CP)	3
<b>Hours</b>		<b>15</b>

<b>Spring</b>		
EDU 340	Fundamentals of Teaching - W (Spring or Summer Only) <sup>3</sup>	3
EH 400 - EH 499 Elective	Upper Level English Course	3
EH 400 - EH 499 Elective	Upper Level English Course	3
Social Science	Area IV, B <sup>1</sup>	3
<b>Hours</b>		<b>12</b>

<b>Fourth Year</b>		
<b>Fall</b>		
EDU 341	Middle Level Education - W (Fall Only) <sup>3</sup>	3
EDU 342	Secondary Field Experience (Fall Only) <sup>3</sup>	3
EDU 363	Tchg Adptve Cur Thru Beh/Clstrm (Fall Only) <sup>3</sup>	3
EDU 451	Content Area Literacy (Fall Only) <sup>3</sup>	3
EDU 453	Teaching Language Subjects (Fall Only) <sup>3</sup>	3
<b>Hours</b>		<b>15</b>

<b>Spring</b>		
EDU 466	Internship-Language Arts <sup>3</sup>	9
EH 216 - EH 236 Elective	Survey of British, American, or World Literature	3
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>114</b>

<sup>1</sup> See General Education Requirements

<sup>2</sup> First Course in list. Please refer to degree audit/course of study for list of other course options that would meet the requirement

<sup>3</sup> Required for admission to Candidacy

- (CP) Prerequisite for Candidacy
- (W) Courses that satisfy USA writing requirement (2 required)

## Secondary Education General Sciences (BS)

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 556)		46

#### Major Requirements

##### Professional Studies Core

##### A. Complete the following:

EDM 310	Microcomputing Systems	3
EDU 400	Edu Except Child and Youth	3
EPY 351	Human Growth & Development	3
EDU 340	Fundamentals of Teaching - W (see footnote table below (p. 556)) <sup>1</sup>	3
EDU 341	Middle Level Education - W (see footnote table below (p. 556)) <sup>1</sup>	3
EDU 342	Secondary Field Experience (see footnote table below (p. 556)) <sup>1</sup>	3
EDU 363	Tchg Adptve Cur Thru Beh/Clstrm (see footnote table below (p. 556)) <sup>1</sup>	3
EDU 451	Content Area Literacy (see footnote table below (p. 556)) <sup>1</sup>	3
EDU 456	Teaching Science (see footnote table below (p. 556)) <sup>1</sup>	3
EDU 468	Internship - Science (see footnote table below (p. 556)) <sup>1</sup>	9

##### Teaching Field Core

Includes 12 hours from **General Education Area III**

##### A. Complete the following:

MA 238	Differential Equations I	3
ST 210	Stat Reason and Application	3
BLY 301	Cell Biology	3
BLY 302	Genetics	3
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
CH 201 & 201L	Organic Chemistry I and Organic Chemistry I Lab	4
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab	4
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab	4
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab	4-5
or PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab	4-5

#### Notes:

or PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	
B. Select 20 hours from BLY 300 - BLY 499		20
<b>Minor Requirements</b>		
A minor is not required for this degree program		0
<b>Total Hours</b>		<b>142-144</b>

## Footnote

<sup>1</sup> Required for admission to Candidacy as a prerequisite

## General Education Requirements

Includes 11 hours of Math and Science courses from Area III that will satisfy requirements in the **Teaching Field Core**.

Code	Title	Hours
<b>Area I – Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II – Humanities &amp; Fine Arts</b>		
A. Complete the following:		
CA 110	Public Speaking	3
B. Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote2/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote2/</a> ) <sup>1</sup>		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
C. Select one of the following:		
ARH 100	Survey of Art	3
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	
D. Select one of the following:		
AFR 101	Intro to African Amer Studies	3
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
LG 101	Introductory Latin I	

LG 102	Introductory Latin II
LG 111	Introductory French I
LG 112	Introductory French II
LG 121	Introductory Chinese I
LG 122	Introductory Chinese II
LG 131	Introductory Spanish I
LG 132	Introductory Spanish II
LG 141	Intro Classical Greek I
LG 142	Intro Classical Greek II
LG 151	Introductory German I
LG 152	Introductory German II
LG 153	Accelerated Intro German
LG 171	Introductory Russian I
LG 172	Introductory Russian II
LG 173	Accelerated Intro Russian
LG 201	Intermediate Latin I
LG 202	Intermediate Latin II
LG 211	Intermediate French I
LG 212	Intermediate French II
LG 213	Accelerated Inter French - H
LG 221	Intermediate Chinese I
LG 222	Intermediate Chinese II
LG 231	Intermediate Spanish I
LG 232	Intermediate Spanish II
LG 234	Inter Spanish Accel -H
LG 241	Interm Classical Greek I
LG 242	Interm Classical Greek II
LG 251	Intermediate German I
LG 252	Intermediate German II
LG 271	Intermediate Russian I
LG 272	Intermediate Russian II
LG 273	Intensive Second Year Russian
LGS 101	Introductory Japanese I
LGS 102	Introductory Japanese II
LGS 106	Introductory Arabic I
LGS 107	Introductory Arabic II
LGS 110	Intro American Sign Language I
LGS 111	Intro American Sign Lang II
LGS 171	Introductory Korean I
LGS 172	Introductory Korean II
LGS 201	Intermediate Japanese I
LGS 202	Intermediate Japanese II
LGS 206	Intermediate Arabic I
LGS 207	Intermediate Arabic II
LGS 210	Intermediate ASL I
LGS 211	Intermediate ASL II
MUL 101	Introduction to Music
PHL 110	Introduction to Philosophy
PHL 120	Critical Thinking
PHL 121	Introduction to Logic
PHL 131	Introduction to Ethics
PHL 231	Social Ethics

PHL 240	Western Philosophy: Classical	
REL 100	Intro to the Study of Religion	
REL 200	Old Testament/Hebrew Bible	
REL 201	Survey of the New Testament	

**Area III – Natural Sciences & Mathematics**

A. Complete the following:		
MA 125	Calculus I	4
B. Complete the following:		
BLY 121 & 121L	General Biology I and General Biology I Lab	4
BLY 122 & 122L	General Biology II and General Biology II Laboratory	4

**Area IV – History, Social & Behavioral Sciences (<http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote2/>)<sup>1</sup>**

A. Select one of the following:			3
HY 101	HY of Western Civilization I		
HY 102	HY of Western Civilization II		
HY 121	World Civilization I		
HY 122	World Civilization II		
HY 135	US History to 1877		
HY 136	US History since 1877		
B. Select three of the following:			9
AN 100	Intro to Cultural Anthropology		
AN 101	Intro Archaeology-Bio Anthro		
ECO 215	Prin of Microeconomics		
ECO 216	Prin of Macroeconomics		
GEO 114	People, Places, Environment		
GEO 115	World Regional Geography		
GS 101	Intro to Gender Studies		
HY 101	HY of Western Civilization I		
HY 102	HY of Western Civilization II		
HY 121	World Civilization I		
HY 122	World Civilization II		
HY 135	US History to 1877		
HY 136	US History since 1877		
PSC 130	Intro to US Government		
PSY 250	Life Span Development		
SY 109	Introductory Sociology		
SY 112	Social Problems		

**Area V**

A. Complete the following:		
KIN 100	Concepts of Health and Fitness	3
B. Complete the following:		
PE activity course		1

**Total Hours 46****Footnote**

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 121 & HY 122 or HY 135 & HY 136)

**Additional Information****E-portfolio and Assessment**

Students enrolled in education classes are required to purchase a LiveText membership.

- <https://www.southalabama.edu/colleges/ceps/livetext.html>

**Teacher Candidacy – Secondary Education**

This major contains a professional component (Candidacy) comprised of upper level education courses (300-400 levels), grouped into three semesters (as shown on graduation plan), and are only available to students who have gained admission to Teacher Candidacy.

**Admission Requirements for Teacher Candidacy**

Courses and GPA

- Courses: CA 110, EH 101, EH 102, EDM 310, EDU 400, EPY 351, and 75% of Teaching Field (or no more than one semester of Teaching Field courses between methods and internship)
- Hours: 60 credit hours of degree requirements completed
- Minimum Grade Point Averages: 2.5 Program, 2.5 Professional Studies, 2.5 Teaching Field, and 2.5 USA GPA (all GPAs found in degree audit). No grade below a "C" is accepted in Professional Studies.

ALSDE Background Check

- [https://www.alabamaachievers.org/teacher-center/teacher-preparation/#Background\\_Clearance](https://www.alabamaachievers.org/teacher-center/teacher-preparation/#Background_Clearance)

Application, Liability Insurance, and Interview

- Completed and scheduled in the UCOM Advising Center during the semester prior to beginning Teacher Candidacy

**Prerequisites and Certification/Graduation Requirements**

Semester 1 of Teacher Candidacy: EDU 340 (Prerequisite Below)

- Admission to Teacher Candidacy

Semester 2 of Teacher Candidacy: Methods Block (Fall Only-15 Credit Hours) (Prerequisites Below)

- Successful Completion of EDU 340 with a Grade of C or better
- GPAs at Admission Requirements Levels

Semester 3 of Teacher Candidacy: Internship (Prerequisites Below)

- Praxis - Teaching Field Content Knowledge - Passing Score [https://www.ets.org/praxis/al/al\\_teacher\\_ed/](https://www.ets.org/praxis/al/al_teacher_ed/)
- Successful Completion of Methods Block with Grades of C or better
- GPAs at Admission Requirement Levels
- Student Teaching Application

Certification/Graduation Requirements

- Successful Completion of Student Teaching
- GPAs at Admission Requirement Level
- Passing Score on edTPA
- Application for Certification and Graduation

Secondary students will be required to participate in an opening of school experience during the fall immediately preceding either their methods block classes or their student teaching. This experience will take place at

the beginning of the public school year which is prior to the beginning of U.S.A. classes.

**Note: Praxis tests requirements are subject to change as prescribed by the ALSDE. Prior to registering for any Praxis exam, please verify current requirements by going directly to the Alabama portion of the ETS Praxis website at <http://ets.org/praxis/al> (<http://ets.org/praxis/al/>).**

## Graduation Plan

(155 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I (CP)	3
BLY 121	General Biology I (PR)	3
BLY 121L	General Biology I Lab (PR)	1
Social Science	Area IV, B <sup>1</sup>	3
MA 125	Calculus I (PR)	4
PE 101 - PE 157	PE Activity Course	1
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EH 102	English Composition II (CP)	3
BLY 122	General Biology II (PR)	3
BLY 122L	General Biology II Laboratory (PR)	1
History	Area IV, A <sup>1</sup>	3
MA 126	Calculus II (PR)	4
KIN 100	Concepts of Health and Fitness	3
<b>Hours</b>		<b>17</b>
<b>Second Year</b>		
<b>Fall</b>		
CA 110	Public Speaking (CP)	3
CH 131	General Chemistry I (PR)	3
CH 131L	General Chemistry I Lab (PR)	1
Fine Art	Area II, C <sup>1</sup>	3
Literature	Area II, B <sup>1</sup>	3
MA 227	Calculus III (PR)	4
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
BLY 301	Cell Biology	3
BLY 302	Genetics	3
CH 132	General Chemistry II (PR)	3
CH 132L	General Chemistry II Lab (PR)	1
GEO 101	Environmental Geography	3
GEO 101L	Environmental Geography Lab	1
MA 238	Differential Equations I	3
Take Core Exams		
<b>Hours</b>		<b>17</b>
<b>Third Year</b>		
<b>Fall</b>		
CH 201	Organic Chemistry I	3
CH 201L	Organic Chemistry I Lab	1
PH 114	Physics with Algebra-Trig I (PR)	5
PH 114L	Alg-Trig Based Physics I Lab (PR)	0
ST 210	Stat Reason and Application	3
<b>Hours</b>		<b>12</b>
<b>Spring</b>		
EPY 351	Human Growth & Development (CP)	3
BLY 300 - BLY 499 Elective	Upper Level Biology Course	4
BLY 300 - BLY 499 Elective	Upper Level Biology Course	4
PH 115	Physics with Algebra -Trig II	4
PH 115L	Alg-Trig Based Physics II Lab	1

Social Science	Area IV, B <sup>1</sup>	3
<b>Hours</b>		<b>19</b>
<b>Fourth Year</b>		
<b>Fall</b>		
EDM 310	Microcomputing Systems (CP)	3
EDU 400	Edu Except Child and Youth (CP)	3
EPY 351	Human Growth & Development (CP)	3
BLY 300-BLY 499 Elective	Upper Level Biology Course	4
PH 101	Introduction to Astronomy	4
PH 101L	Introduction to Astronomy Lab	0
Apply for Candidacy		
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
BLY 300 - BLY 499 Elective	Upper Level Biology Course	4
BLY 300 - BLY 499 Elective	Upper Level Biology Course	4
History/Social Science Elective	Area IV, B <sup>1</sup>	3
Literature/Fine Art or Humanities	Area II, D <sup>1</sup>	3
EDU 340	Fundamentals of Teaching - W (Spring or Summer Only) <sup>2</sup>	3
<b>Hours</b>		<b>17</b>
<b>Fifth Year</b>		
<b>Fall</b>		
EDU 341	Middle Level Education - W (Fall Only) <sup>2</sup>	3
EDU 342	Secondary Field Experience (Fall Only) <sup>2</sup>	3
EDU 363	Tchg Adpvt Cur Thru Beh/Clstrm (Fall Only) <sup>2</sup>	3
EDU 363	Tchg Adpvt Cur Thru Beh/Clstrm (Fall Only) <sup>2</sup>	3
EDU 456	Teaching Science (Fall Only) <sup>2</sup>	3
Apply for Graduation		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EDU 468	Internship - Science <sup>2</sup>	9
<b>Hours</b>		<b>9</b>
<b>Total Hours</b>		<b>155</b>

<sup>1</sup> See General Education Requirements

<sup>2</sup> Required for admission to Candidacy

### Notes:

- (PR) Prerequisite for course(s) taking in next semester
- (CP) Prerequisite for Candidacy
- (W) Courses that satisfy USA writing requirement (2 required)

## Secondary Education Mathematics (BS)

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 559)		46-48
<b>Major Requirements</b>		
<i>Professional Studies Core</i>		
A. Complete the following:		
EDM 310	Microcomputing Systems	3
EDU 400	Edu Except Child and Youth	3

EPY 351	Human Growth & Development	3
EDU 340	Fundamentals of Teaching - W (see footnote table below (p. 559)) <sup>1</sup>	3
EDU 341	Middle Level Education - W (see footnote table below (p. 559)) <sup>1</sup>	3
EDU 342	Secondary Field Experience (see footnote table below (p. 559)) <sup>1</sup>	3
EDU 363	Tchg Adptve Cur Thru Beh/Clstrm (see footnote table below (p. 559)) <sup>1</sup>	3
EDU 451	Content Area Literacy (see footnote table below (p. 559)) <sup>1</sup>	3
EDU 454	Teaching Mathematics (see footnote table below (p. 559)) <sup>1</sup>	3
EDU 469	Internship - Math (see footnote table below (p. 559)) <sup>1</sup>	9

### Teaching Field Core

Includes 4 hours from **General Education Area III**

#### A. Complete the following:

MA 126	Calculus II	4
MA 227	Calculus III	4
MA 237	Linear Algebra I	3
MA 238	Differential Equations I	3
MA 311	Intro to Number Theory	3
MA 320	Foundations of Math - W	3
MA 321	Elementary Geometry	3
MA 410	History of Mathematics - W	3
MA 413	Abstract Algebra I - W	3
ST 335	Applied Regression Analysis	3

#### B. Complete the following:

ST 210	Stat Reason and Application	3
or ST 315	Applied Probability-Statistics	

C. Select three hours from MA 300 - MA 499 3

D. Select three hours from MA 300 - MA 499 3

#### Minor Requirements

A minor is not required for this degree program 0

**Total Hours 123-125**

## Footnote

<sup>1</sup> Required for admission to Candidacy as a prerequisite

## General Education Requirements

Includes 3 hours of Math from Area III that will satisfy requirements in the **Teaching Field Core**.

Code	Title	Hours
<b>Area I – Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II – Humanities &amp; Fine Arts</b>		
A. Complete the following:		
CA 110	Public Speaking	3

B. Select one of the following: (<http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote2/>)<sup>1</sup> 3

EH 215	Brit Lit before 1785
EH 216	Brit Lit after 1785
EH 225	Am Lit before 1865
EH 226	Am Lit after 1865
EH 235	World Lit before 1650
EH 236	World Lit after 1650

C. Select one of the following: 3

ARH 100	Survey of Art
ARH 103	Art History I
ARH 123	Art History II
ARS 101	Art Appreciation
DRA 110	Introduction to Theatre
MUL 101	Introduction to Music

D. Select one from the following: 3

AFR 101	Intro to African Amer Studies
ARH 100	Survey of Art
ARH 103	Art History I
ARH 123	Art History II
ARS 101	Art Appreciation
DRA 110	Introduction to Theatre
EH 215	Brit Lit before 1785
EH 216	Brit Lit after 1785
EH 225	Am Lit before 1865
EH 226	Am Lit after 1865
EH 235	World Lit before 1650
EH 236	World Lit after 1650
LG 101	Introductory Latin I
LG 102	Introductory Latin II
LG 111	Introductory French I
LG 112	Introductory French II
LG 121	Introductory Chinese I
LG 122	Introductory Chinese II
LG 131	Introductory Spanish I
LG 132	Introductory Spanish II
LG 141	Intro Classical Greek I
LG 142	Intro Classical Greek II
LG 151	Introductory German I
LG 152	Introductory German II
LG 153	Accelerated Intro German
LG 171	Introductory Russian I
LG 172	Introductory Russian II
LG 173	Accelerated Intro Russian
LG 201	Intermediate Latin I
LG 202	Intermediate Latin II
LG 211	Intermediate French I
LG 212	Intermediate French II
LG 213	Accelerated Inter French - H
LG 221	Intermediate Chinese I
LG 222	Intermediate Chinese II

LG 231	Intermediate Spanish I
LG 232	Intermediate Spanish II
LG 234	Inter Spanish Accel -H
LG 241	Interm Classical Greek I
LG 242	Interm Classical Greek II
LG 251	Intermediate German I
LG 252	Intermediate German II
LG 271	Intermediate Russian I
LG 272	Intermediate Russian II
LG 273	Intensive Second Year Russian
LGS 101	Introductory Japanese I
LGS 102	Introductory Japanese II
LGS 106	Introductory Arabic I
LGS 107	Introductory Arabic II
LGS 110	Intro American Sign Language I
LGS 111	Intro American Sign Lang II
LGS 171	Introductory Korean I
LGS 172	Introductory Korean II
LGS 201	Intermediate Japanese I
LGS 202	Intermediate Japanese II
LGS 206	Intermediate Arabic I
LGS 207	Intermediate Arabic II
LGS 210	Intermediate ASL I
LGS 211	Intermediate ASL II
MUL 101	Introduction to Music
PHL 110	Introduction to Philosophy
PHL 120	Critical Thinking
PHL 121	Introduction to Logic
PHL 131	Introduction to Ethics
PHL 231	Social Ethics
PHL 240	Western Philosophy: Classical
REL 100	Intro to the Study of Religion
REL 200	Old Testament/Hebrew Bible
REL 201	Survey of the New Testament

**Area III – Natural Sciences & Mathematics**

A. Complete the following:

MA 125 Calculus I 4

B. Select 8-10 hours from the following: 8-10

AN 121 & 121L	Biological Anthropology and Biological Anthropology Lab
BLY 101 & 101L	Life Science I and Life Science I Laboratory
or BLY 121 & 121L	General Biology I and General Biology I Lab
BLY 102 & 102L	Life Science II and Life Science II Lab
or BLY 122 & 122L	General Biology II and General Biology II Laboratory
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab
CH 131 & 131L	General Chemistry I and General Chemistry I Lab

CH 132 & 132L	General Chemistry II and General Chemistry II Lab
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab
GY 111 & 111L	Physical Geology and Physical Geology Lab
GY 112 & 112L	Earth History and Earth History Lab
MAS 134 & 134L	Ocean Science and Ocean Science Lab
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab

**Area IV – History, Social & Behavioral Sciences (<http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote2/>)<sup>1</sup>**

A. Select one of the following: 3

HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 121	World Civilization I
HY 122	World Civilization II
HY 135	US History to 1877
HY 136	US History since 1877

B. Select three of the following: 9

AN 100	Intro to Cultural Anthropology
AN 101	Intro Archaeology-Bio Anthro
ECO 215	Prin of Microeconomics
ECO 216	Prin of Macroeconomics
GEO 114	People, Places, Environment
GEO 115	World Regional Geography
GS 101	Intro to Gender Studies
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 121	World Civilization I
HY 122	World Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
PSC 130	Intro to US Government
PSY 250	Life Span Development
SY 109	Introductory Sociology
SY 112	Social Problems

**Area V**

A. Complete the following:

KIN 100	Concepts of Health and Fitness	3
B. Complete the following:		
PE activity course		1
<b>Total Hours</b>		<b>46-48</b>

**Footnote**

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 121 & HY 122 or HY 135 & HY 136)

**Additional Information**

**E-portfolio and Assessment**

Students enrolled in education classes are required to purchase a LiveText membership.

- <https://www.southalabama.edu/colleges/ceps/livertext.html>

**Teacher Candidacy – Secondary Education**

This major contains a professional component (Candidacy) comprised of upper level education courses (300-400 levels), grouped into three semesters (as shown on graduation plan), and are only available to students who have gained admission to Teacher Candidacy.

**Admission Requirements for Teacher Candidacy**

Courses and GPA

- Courses: CA 110, EH 101, EH 102, EDM 310, EDU 400, EPY 351, and 75% of Teaching Field (or no more than one semester of Teaching Field courses between methods and internship)>
- Hours: 60 credit hours of degree requirements completed
- Minimum Grade Point Averages: 2.5 Program, 2.5 Professional Studies, 2.5 Teaching Field, and 2.5 USA GPA (all GPAs found in degree audit). No grade below a “C” is accepted in Professional Studies.

ALSDE Background Check

- [https://www.alabamaachieves.org/teacher-center/teacher-preparation/#Background\\_Clearance](https://www.alabamaachieves.org/teacher-center/teacher-preparation/#Background_Clearance)

Application, Liability Insurance, and Interview

- Completed and scheduled in the UCOM Advising Center during the semester prior to beginning Teacher Candidacy

**Prerequisites and Certification/Graduation Requirements**

Semester 1 of Teacher Candidacy: EDU 340 (Prerequisite Below)

- Admission to Teacher Candidacy

Semester 2 of Teacher Candidacy: Methods Block (Fall Only-15 Credit Hours) (Prerequisites Below)

- Successful Completion of EDU 340 with a Grade of C or better
- GPAs at Admission Requirements Levels

Semester 3 of Teacher Candidacy: Internship (Prerequisites Below)

- Praxis - Teaching Field Content Knowledge - Passing Score [https://www.ets.org/praxis/al/al\\_teacher\\_ed/](https://www.ets.org/praxis/al/al_teacher_ed/)
- Successful Completion of Methods Block with Grades of C or better

- GPAs at Admission Requirement Levels
- Student Teaching Application

Certification/Graduation Requirements

- Successful Completion of Student Teaching
- GPAs at Admission Requirement Level
- Passing Score on edTPA
- Application for Certification and Graduation

Secondary students will be required to participate in an opening of school experience during the fall immediately preceding either their methods block classes or their student teaching. This experience will take place at the beginning of the public school year which is prior to the beginning of U.S.A. classes.

**Note: Praxis tests requirements are subject to change as prescribed by the ALSDE. Prior to registering for any Praxis exam, please verify current requirements by going directly to the Alabama portion of the ETS Praxis website at <http://ets.org/praxis/al> (<http://ets.org/praxis/al/>).**

**Graduation Plan**

(123 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I (CP)	3
Fine Art	Area II, C <sup>1</sup>	3
History	Area IV, A <sup>1</sup>	3
MA 125	Calculus I (PR)	4
Science and Lab	Area III, B <sup>1</sup>	4
		<b>Hours</b>
		<b>17</b>
<b>Spring</b>		
EH 102	English Composition II (CP)	3
History/Social Science	Area IV, B <sup>1</sup>	3
MA 126	Calculus II (PR)	4
Science and Lab	Area III, B <sup>1</sup>	4
ST 210	Stat Reason and Application (PR)	3
		<b>Hours</b>
		<b>17</b>
<b>Second Year</b>		
<b>Fall</b>		
CA 110	Public Speaking (CP)	3
Literature	Area II, B <sup>1</sup>	3
MA 227	Calculus III (PR)	4
MA 237	Linear Algebra I (PR)	3
ST 335	Applied Regression Analysis	3
		<b>Hours</b>
		<b>16</b>
<b>Spring</b>		
EDU 400	Edu Except Child and Youth (CP)	3
Literature/Fine Arts/Humanities	Area II, D <sup>1</sup>	3
MA 238	Differential Equations I (PR)	3
MA 320	Foundations of Math - W (PR - Fall and Spring Only)	3
KIN 100	Concepts of Health and Fitness	3
PE 101 - PE 157	PE Activity Course	1
Take Core Exams		
		<b>Hours</b>
		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
EDM 310	Microcomputing Systems (CP)	3
EPY (CP)	Human Growth and Development	3

MA 311	Intro to Number Theory (PR - Fall Only)	3
MA 410	History of Mathematics - W (Fall Only)	3
MA 300 - MA 400	Upper Level Math Course	3
Apply for Candidacy		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EDU 340	Fundamentals of Teaching - W (Spring or Summer Only) <sup>2</sup>	3
MA 321	Elementary Geometry (Spring Only)	3
MA 413	Abstract Algebra I - W (Spring Only)	3
MA 400 - MA 499	Upper Level Math Course	3
Social Science	Area IV, B <sup>1</sup>	3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
EDU 341	Middle Level Education - W (Fall Only) <sup>2</sup>	3
EDU 342	Secondary Field Experience (Fall Only) <sup>2</sup>	3
EDU 363	Tchg Adpvtv Cur Thru Beh/Clstrm (Fall Only) <sup>2</sup>	3
EDU 451	Content Area Literacy (Fall Only) <sup>2</sup>	3
EDU 454	Teaching Mathematics (Fall Only) <sup>2</sup>	3
Apply for Graduation		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EDU 469	Internship - Math <sup>2</sup>	9
Social Science	Area IV, B <sup>1</sup>	3
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>123</b>

<sup>1</sup> See General Education Requirements

<sup>2</sup> Required for admission to Candidacy

#### Notes:

- (PR) Prerequisite for course(s) taking in next semester
- (CP) Prerequisite for Candidacy
- (W) Courses that satisfy USA writing requirement (2 required)

## Secondary Education Social Science (BS)

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 563)		45
<b>Major Requirements</b>		
<i>Professional Studies Core</i>		
A. Complete the following:		
EDM 310	Microcomputing Systems	3
EDU 400	Edu Except Child and Youth	3
EPY 351	Human Growth & Development	3
EDU 340	Fundamentals of Teaching - W (see footnote table below (p. 563)) <sup>1</sup>	3
EDU 341	Middle Level Education - W (see footnote table below (p. 563)) <sup>1</sup>	3
EDU 342	Secondary Field Experience (see footnote table below (p. 563)) <sup>1</sup>	3

EDU 363	Tchg Adpvtv Cur Thru Beh/Clstrm (see footnote table below (p. 563)) <sup>1</sup>	3
EDU 451	Content Area Literacy (see footnote table below (p. 563)) <sup>1</sup>	3
EDU 457	Teaching Social Studies (see footnote table below (p. 563)) <sup>1</sup>	3
EDU 467	Internship - Social Studies (see footnote table below (p. 563)) <sup>1</sup>	9

#### Teaching Field Core

Includes 12 hours from **General Education Area IV**

A. Select 3-6 hours from the following:

ECO 300	Introduction to Economics	3-6
or ECO 215 & ECO 216	Prin of Microeconomics and Prin of Macroeconomics	

B. Complete the following:

GEO 114	People, Places, Environment	3
or GEO 115	World Regional Geography	

C. Complete the following:

PSC 250	Comparative Politics	3
or PSC 270	International Relations	

D. Complete the following:

PSY 120	Introduction to Psychology	3
HY 101	HY of Western Civilization I	3
HY 102	HY of Western Civilization II	3

E. Select one from the following Non-Western History courses:

HY 103	HY of Asian Civilization I	
HY 104	HY of Asian Civilization II	
HY 228	Latin America	
HY 321	The Caribbean	
HY 362	History of Africa since 1500	
HY 364	Islamic Civilization to 1453	
HY 365	Islamic Civilization 1453 - W	
HY 366	Traditional China	
HY 367	Modern China	
HY 368	Japan	
HY 429	Studies Latin Amer History-W	
HY 461	Studies in Asian History -	
HY 465	Studies in HY of Islamic Civ -	

F. Select one from the following:

HY 441	Research Seminar-U.S. History	3
HY 442	Research Seminar European Hy	
HY 443	Research Seminar-World HY	

G. Select one from the following:

HY 432	Colonial America	3
HY 433	The American Revolution	
HY 434	The Early Republic - W	
HY 435	Civil War and Reconstruction	
HY 436	Modern US I 1877-1945	
HY 437	Modern US II Since 1945 - W	

H. Select 12 hours from HY 300 - HY 499

I. Complete three hours from HY 400 - HY 499

#### Minor Requirements

A minor is not required for this degree program	0
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<b>Total Hours</b>	<b>123-126</b>
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## Footnote

<sup>1</sup> Required for admission to Candidacy as a prerequisite

## General Education Requirement

Includes 12 hours of History Social and Behavioral Sciences courses from Area IV that will satisfy requirements in the **Teaching Field Core**.

Code	Title	Hours
<b>Area I – Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II – Humanities &amp; Fine Arts</b>		
A. Complete the following:		
CA 110	Public Speaking	3
B. Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote2/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote2/</a> ) <sup>1</sup>		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
C. Select one of the following:		
ARH 100	Survey of Art	3
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	
D. Select three hours of the following:		
AFR 101	Intro to African Amer Studies	3
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
LG 101	Introductory Latin I	
LG 102	Introductory Latin II	
LG 111	Introductory French I	
LG 112	Introductory French II	

LG 121	Introductory Chinese I
LG 122	Introductory Chinese II
LG 131	Introductory Spanish I
LG 132	Introductory Spanish II
LG 141	Intro Classical Greek I
LG 142	Intro Classical Greek II
LG 151	Introductory German I
LG 152	Introductory German II
LG 153	Accelerated Intro German
LG 171	Introductory Russian I
LG 172	Introductory Russian II
LG 173	Accelerated Intro Russian
LG 201	Intermediate Latin I
LG 202	Intermediate Latin II
LG 211	Intermediate French I
LG 212	Intermediate French II
LG 213	Accelerated Inter French - H
LG 221	Intermediate Chinese I
LG 222	Intermediate Chinese II
LG 231	Intermediate Spanish I
LG 232	Intermediate Spanish II
LG 234	Inter Spanish Accel -H
LG 241	Interm Classical Greek I
LG 242	Interm Classical Greek II
LG 251	Intermediate German I
LG 252	Intermediate German II
LG 271	Intermediate Russian I
LG 272	Intermediate Russian II
LG 273	Intensive Second Year Russian
LGS 101	Introductory Japanese I
LGS 102	Introductory Japanese II
LGS 106	Introductory Arabic I
LGS 107	Introductory Arabic II
LGS 110	Intro American Sign Language I
LGS 111	Intro American Sign Lang II
LGS 171	Introductory Korean I
LGS 172	Introductory Korean II
LGS 201	Intermediate Japanese I
LGS 202	Intermediate Japanese II
LGS 206	Intermediate Arabic I
LGS 207	Intermediate Arabic II
LGS 210	Intermediate ASL I
LGS 211	Intermediate ASL II
MUL 101	Introduction to Music
PHL 110	Introduction to Philosophy
PHL 120	Critical Thinking
PHL 121	Introduction to Logic
PHL 131	Introduction to Ethics
PHL 231	Social Ethics
PHL 240	Western Philosophy: Classical
REL 100	Intro to the Study of Religion
REL 200	Old Testament/Hebrew Bible

REL 201	Survey of the New Testament	
<b>Area III – Natural Sciences &amp; Mathematics</b>		
A. Select three hours from the following:		3
MA 110	Finite Mathematics	
MA 112	Precalculus Algebra	
MA 113	Precalculus Trigonometry	
MA 115	Precal Algebra-Trigonometry	
MA 120	Calculus and Its Applications	
MA 125	Calculus I	
B. Select eight hours from the following:		8
BLY 101 & 101L	Life Science I and Life Science I Laboratory	
BLY 121 & 121L	General Biology I and General Biology I Lab	
BLY 122 & 122L	General Biology II and General Biology II Laboratory	
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab	
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab	
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab	
GY 111 & 111L	Physical Geology and Physical Geology Lab	
GY 112 & 112L	Earth History and Earth History Lab	
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab	
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab	
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab	
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	
<b>Area IV – History, Social &amp; Behavioral Sciences (<a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote2/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote2/</a>)<sup>1</sup></b>		
A. Complete the following:		
HY 135	US History to 1877	3
HY 136	US History since 1877	3
B. Select one of the following:		
AN 100 or SY 109	Intro to Cultural Anthropology or Introductory Sociology	3
C. Complete the following:		
PSC 130	Intro to US Government	3
<b>Area V</b>		
A. Complete the following:		
KIN 100	Concepts of Health and Fitness	3
B. Complete the following:		

PE activity course	1
<b>Total Hours</b>	<b>45</b>

### Footnote

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 121 & HY 122 or HY 135 & HY 136)

### Additional Information

#### E-portfolio and Assessment

Students enrolled in education classes are required to purchase a LiveText membership.

- <https://www.southalabama.edu/colleges/ceps/livertext.html>

### Teacher Candidacy – Secondary Education

This major contains a professional component (Candidacy) comprised of upper level education courses (300-400 levels), grouped into three semesters (as shown on graduation plan), and are only available to students who have gained admission to Teacher Candidacy.

### Admission Requirements for Teacher Candidacy

Courses and GPA

- Courses: CA 110, EH 101, EH 102, EDM 310, EDU 400, EPY 351, and 75% of Teaching Field (or no more than one semester of Teaching Field courses between methods and internship)
- Hours: 60 credit hours of degree requirements completed
- Minimum Grade Point Averages: 2.5 Program, 2.5 Professional Studies, 2.5 Teaching Field, and 2.5 USA GPA (all GPAs found in degree audit). No grade below a “C” is accepted in Professional Studies.

ALSDE Background Check

- [https://www.alabamaachieves.org/teacher-center/teacher-preparation/#Background\\_Clearance](https://www.alabamaachieves.org/teacher-center/teacher-preparation/#Background_Clearance)

Application, Liability Insurance, and Interview

- Completed and scheduled in the UCOM Advising Center during the semester prior to beginning Teacher Candidacy

### Prerequisites and Certification/Graduation Requirements

Semester 1 of Teacher Candidacy: EDU 340 (Prerequisite Below)

- Admission to Teacher Candidacy

Semester 2 of Teacher Candidacy: Methods Block (Fall Only-15 Credit Hours) (Prerequisites Below)

- Successful Completion of EDU 340 with a Grade of C or better
- GPAs at Admission Requirements Levels

Semester 3 of Teacher Candidacy: Internship (Prerequisites Below)

- Praxis - Teaching Field Content Knowledge - Passing Score [https://www.ets.org/praxis/al/al\\_teacher\\_ed/](https://www.ets.org/praxis/al/al_teacher_ed/)
- Successful Completion of Methods Block with Grades of C or better
- GPAs at Admission Requirement Levels
- Student Teaching Application

## Certification/Graduation Requirements

- Successful Completion of Student Teaching
- GPAs at Admission Requirement Level
- Passing Score on edTPA
- Application for Certification and Graduation

Secondary students will be required to participate in an opening of school experience during the fall immediately preceding either their methods block classes or their student teaching. This experience will take place at the beginning of the public school year which is prior to the beginning of U.S.A. classes.

**Note: Praxis tests requirements are subject to change as prescribed by the ALSDE. Prior to registering for any Praxis exam, please verify current requirements by going directly to the Alabama portion of the ETS Praxis website at <http://ets.org/praxis/al> (<http://ets.org/praxis/al/>).**

## Graduation Plan

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CA 110	Public Speaking (CP)	3
EH 101	English Composition I (CP)	3
HY 101	HY of Western Civilization I	3
MA 110	Finite Mathematics (or higher - Area III, A) <sup>1</sup>	3
PSC 130	Intro to US Government	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EH 102	English Composition II (CP)	3
Fine Art	Area II, C <sup>1</sup>	3
HY 135	US History to 1877	3
KIN 100	Concepts of Health and Fitness	3
Science and Lab	Area III, B <sup>1</sup>	4
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
Fine Art or Humanities	Area II, D <sup>1</sup>	3
HY 102	HY of Western Civilization II	3
HY 136	US History since 1877	3
Literature	Area II, B <sup>1</sup>	3
Science and Lab	Area III <sup>1</sup>	4
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
EDM 310	Microcomputing Systems (CP)	3
EDU 400	Edu Except Child and Youth (CP)	3
HY 103	HY of Asian Civilization <sup>1 2</sup>	3
PSC 250 or PSC 270	Comparative Politics or International Relations	3
PSY 120	Introduction to Psychology	3
ECO 215	Prin of Microeconomics	3
Take Core Exams		
<b>Hours</b>		<b>18</b>
<b>Third Year</b>		
<b>Fall</b>		
EPY 351	Human Growth & Development (CP)	3
ECO 216	Prin of Macroeconomics	3
HY 300 - HY 499 Elective	Upper Level History Course	3
Select one of the following:		
HY 441	Research Seminar-U.S. History	3

HY 442	Research Seminar European Hy	
HY 443	Research Seminar-World HY	
HY 432	Colonial America <sup>2</sup>	3
SY 109 or AN 100	Introductory Sociology or Intro to Cultural Anthropology	3
Apply for Candidacy		
<b>Hours</b>		<b>18</b>
<b>Spring</b>		
EDU 340	Fundamentals of Teaching - W (Spring or Summer Only) <sup>3</sup>	3
GEO 114 or GEO 115	People, Places, Environment or World Regional Geography	3
HY 300 - HY 499 Elective	Upper Level History Course	3
HY 300 - HY 499 Elective	Upper Level History Course	3
HY 400 - HY 499 Elective	Upper Level History Course	3
PE 101 - PE 157	PE Activity Course	1
<b>Hours</b>		<b>16</b>
<b>Fourth Year</b>		
<b>Fall</b>		
EDU 341	Middle Level Education - W (Fall Only) <sup>3</sup>	3
EDU 342	Secondary Field Experience (Fall Only) <sup>3</sup>	3
EDU 363	Tchg Adptve Cur Thru Beh/Clstrm (Fall Only) <sup>3</sup>	3
EDU 451	Content Area Literacy (Fall Only) <sup>3</sup>	3
EDU 457	Teaching Social Studies (Fall Only) <sup>3</sup>	3
Apply for Graduation		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EDU 467	Internship - Social Studies	9
HY 300 - HY 499 Elective	Upper Level History Course	3
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>126</b>

<sup>1</sup> See General Education Requirements

<sup>2</sup> First Course in list. Please refer to degree audit/course of study for list of other course options that would meet the requirement.

<sup>3</sup> Required for admission to Candidacy

### Notes:

- (CP) Prerequisite for Candidacy
- (W) Courses that satisfy USA writing requirement (2 required)

## Special Education (Alt. M.Ed.)

### Degree Requirements

#### Alternative M.Ed. in Collaborative Teaching

This is a special alternative program for individuals with a baccalaureate degree in non-teacher education fields and individuals without Class "B" certification in an area of Education. In general the program requires a minimum of 42 graduate hours. See College of Education and Professional Studies general section for program admission requirements.

All pre-requisites must be completed prior to admission to the program.

### Academic Standards and Student Responsibility

Students should be aware that the Special Education Program requires that certain courses be taken in sequence. Advisors should be consulted to obtain information about sequencing and pre-requisite coursework.

A committee consisting of graduate faculty members within the program will be selected by program advisors to assist the student in planning their courses of study following the schedule of course offerings. Such programs of study should be approved before the completion of nine semester hours of work.

The Special Education Program requires that students who receive a grade of "C" in a Special Education course, must repeat that course and attain a grade of "B" or better.

Satisfactory performance in all course work (GPA of 3.0 or greater) is required of all graduate Special Education majors; in the event of unsatisfactory performance (below "C") in a course not in their major area, a student's Graduate Program Committee selects the option of repeating the course and demonstrating satisfactory performance or demonstrating satisfactory performance in an approved alternate course. A minimum GPA of 3.25 is required for graduation.

Students must do their internship/practicum in the Mobile area or arrange to be supervised through another university out of our area. Contact Field Services for info regarding the out of area option.

Students are assigned to advisors in their respective program areas. The student has the sole responsibility for initiating applications and meeting test and other deadline requirements.

Code	Title	Hours
<b>Foundation Requirements</b>		
EDM 510	Microcomputing Systems in Ed	3
EPY 525	Assessment & Research in Educ	3
RED 531	Trends-Practices Tchg Reading	3
SPE 500	Nat-Needs of Exc Chld and Yth	3
Select one of the following:		3
RED 520	Reading Foundations (K-6 Majors)	
EPY 502	Psy Prin Learning (Majors)	
<b>Teaching Field</b>		
SPE 589	Pre-Practicum Experience	3
SPE 512	Ecological Curr and Method	3
SPE 514	Teaming and Collaboration	3
SPE 515	Data and Behav Mgmt	3
SPE 516	Methods Spec Needs Learners	3
SPE 592	Collaborative Pract-Seminar	3
Select one of the following:		3
SPE 517	Com Lang Read Stu Disability (K-6 Majors)	
SPE 591	Multicategory Prac Seminar (6-12 Majors)	
<b>Internship</b>		
Select one of the following:		6
SPE 595	Intern/Prac SPE Coll Tch K-6 (K-6 Majors)	
SPE 596	Intern/Prac SPE Coll Tch 6-12 (6-12 Majors)	
Students must have a passing score on the appropriate Praxis II prior to enrollment in the internship		
<b>Total Hours</b>		<b>42</b>

#### Notes

Current admission procedures require a passing score on the appropriate Praxis II prior to admission to the program.

## Alabama State Department of Education Certification Requirements

A Student applying for initial teacher certification will be required to pass the appropriate Praxis II test (s) and have a successful score on his/her edTPA portfolio. ALSDE certification requirements are subject to change and students will be required to meet those which are in place the semester they are applying for certification. Prior to registering for any Praxis II exam, please verify current requirements by going directly to the ALABAMA portion of the Praxis II website at <http://www.ets.org/praxis/al> (<http://www.ets.org/praxis/al/>).

## Special Education (BS) Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 567)		58-63
<b>Major Requirements</b>		
<i>Professional Studies</i>		
A. Complete the following:		
EDM 310	Microcomputing Systems	3
EDU 330	Foundations Read Instruct - W	3
EDU 400	Edu Except Child and Youth	3
EPY 351	Human Growth & Development	3
EDU 340	Fundamentals of Teaching - W (see footnote table below (p. 567)) <sup>1</sup>	3
EDU 341	Middle Level Education - W (see footnote table below (p. 567)) <sup>1</sup>	3
EDU 342	Secondary Field Experience (see footnote table below (p. 567)) <sup>1</sup>	3
EDU 451	Content Area Literacy (see footnote table below (p. 567)) <sup>1</sup>	3
Select one of the following:		3
EDU 453	Teaching Language Subjects (see footnote table below (p. 567)) <sup>1</sup>	
EDU 454	Teaching Mathematics (see footnote table below (p. 567)) <sup>1</sup>	
EDU 456	Teaching Science (see footnote table below (p. 567)) <sup>1</sup>	
EDU 457	Teaching Social Studies (see footnote table below (p. 567)) <sup>1</sup>	
EDU 496	Internship 6-12 (see footnote table below (p. 567)) <sup>1</sup>	9
<i>Teaching Field Core CT SPE 6-12</i>		
A. Complete the following:		
EDU 321	Field Experience in SpeEd Sett	1
EDU 322	Field Experience in SpeEd Sett (see footnote table below (p. 567)) <sup>1</sup>	1
EDU 354	Serving Studnts Severe Disabil (see footnote table below (p. 567)) <sup>1</sup>	3
EDU 363	Tchg Adptve Cur Thru Beh/Clstrm (see footnote table below (p. 567)) <sup>1</sup>	3
EDU 372	Behav Mgt Exceptional Child (see footnote table below (p. 567)) <sup>1</sup>	3

EDU 410	Formal and Informal Assessment (see footnote table below (p. 567)) <sup>1</sup>	3
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**Content Teaching Field**

Select one content area from the following:

16 hours of 300-499 Content Coursework not already used in Areas (IIV)	16
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A. English/Language Arts: EH 300 - EH 499

B. General Science: BLY 300 - BLY 499, CH 300 - CH 499, NS 300 - NS 499, or PH 300 - PH 499

C. Mathematics: MA 300 - MA 499 or ST 300 - ST 499

D. Social Science: See Area IV, History Social and Behavioral Sciences

**Minor Requirements**

A minor is not required for this degree program	0
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<b>Total Hours</b>	<b>124-129</b>
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**Footnote**<sup>1</sup> Required for admission to Candidacy as a pre-requisite**General Education Requirements**

45 Hours Plus 13 Hours To Meet ALSDE 4x12 Requirements

Code	Title	Hours
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**Area I - Written Composition**

A. Complete the following:

EH 101	English Composition I	3
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B. Complete the following:

EH 102	English Composition II	3
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**Area II - Humanities & Fine Arts**

A. Complete the following:

CA 110	Public Speaking	3
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B. Select one of the following: (<http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote2/>)<sup>1</sup>

EH 215 Brit Lit before 1785

EH 216 Brit Lit after 1785

EH 225 Am Lit before 1865

EH 226 Am Lit after 1865

EH 235 World Lit before 1650

EH 236 World Lit after 1650

C. Select one of the following: 3

ARH 100 Survey of Art

ARH 103 Art History I

ARH 123 Art History II

ARS 101 Art Appreciation

DRA 110 Introduction to Theatre (see footnote table below (p. 569))<sup>2</sup>

MUL 101 Introduction to Music

D. Select one of the following: 3

AFR 101 Intro to African Amer Studies

ARH 100 Survey of Art

ARH 103 Art History I

ARH 123 Art History II

ARS 101 Art Appreciation

DRA 110 Introduction to Theatre

EH 215 Brit Lit before 1785

EH 216 Brit Lit after 1785

EH 225 Am Lit before 1865

EH 226 Am Lit after 1865

EH 235 World Lit before 1650

EH 236 World Lit after 1650

LG 101 Introductory Latin I

LG 102 Introductory Latin II

LG 111 Introductory French I

LG 112 Introductory French II

LG 121 Introductory Chinese I

LG 122 Introductory Chinese II

LG 131 Introductory Spanish I

LG 132 Introductory Spanish II

LG 141 Intro Classical Greek I

LG 142 Intro Classical Greek II

LG 151 Introductory German I

LG 152 Introductory German II

LG 153 Accelerated Intro German

LG 171 Introductory Russian I

LG 172 Introductory Russian II

LG 173 Accelerated Intro Russian

LG 201 Intermediate Latin I

LG 202 Intermediate Latin II

LG 211 Intermediate French I

LG 212 Intermediate French II

LG 213 Accelerated Inter French - H

LG 221 Intermediate Chinese I

LG 222 Intermediate Chinese II

LG 231 Intermediate Spanish I

LG 232 Intermediate Spanish II

LG 234 Inter Spanish Accel -H

LG 241 Interm Classical Greek I

LG 242 Interm Classical Greek II

LG 251 Intermediate German I

LG 252 Intermediate German II

LG 271 Intermediate Russian I

LG 272 Intermediate Russian II

LG 273 Intensive Second Year Russian

LGS 101 Introductory Japanese I

LGS 102 Introductory Japanese II

LGS 106 Introductory Arabic I

LGS 107 Introductory Arabic II

LGS 110 Intro American Sign Language I

LGS 111 Intro American Sign Lang II

LGS 171 Introductory Korean I

LGS 172 Introductory Korean II

LGS 201 Intermediate Japanese I

LGS 202 Intermediate Japanese II

LGS 206 Intermediate Arabic I

LGS 207	Intermediate Arabic II	
LGS 210	Intermediate ASL I	
LGS 211	Intermediate ASL II	
MUL 101	Introduction to Music	
PHL 110	Introduction to Philosophy	
PHL 120	Critical Thinking	
PHL 121	Introduction to Logic	
PHL 131	Introduction to Ethics	
PHL 231	Social Ethics	
PHL 240	Western Philosophy: Classical	
REL 100	Intro to the Study of Religion	
REL 200	Old Testament/Hebrew Bible	
REL 201	Survey of the New Testament	
<b>Area III – Natural Sciences &amp; Mathematics</b>		
MA 201	Math for Elem Teachers I	3
A. Select 9 hours from the following:		9
MA 110	Finite Mathematics	
MA 112	Precalculus Algebra	
MA 113	Precalculus Trigonometry	
MA 115	Precal Algebra-Trigonometry	
MA 120	Calculus and Its Applications	
MA 125	Calculus I	
MA 126	Calculus II	
MA 227	Calculus III	
MA 237	Linear Algebra I	
MA 238	Differential Equations I	
ST 210	Stat Reason and Application	
B. Select four hours from the following:		4
BLY 101 & 101L	Life Science I and Life Science I Laboratory	
or BLY 121 & 121L	General Biology I and General Biology I Lab	
C. Select 8 hours from the following:		4-6
AN 121 & 121L	Biological Anthropology and Biological Anthropology Lab	
BLY 101 & 101L	Life Science I and Life Science I Laboratory	
or BLY 121 & 121L	General Biology I and General Biology I Lab	
BLY 102 & 102L	Life Science II and Life Science II Lab	
or BLY 122 & 122L	General Biology II and General Biology II Laboratory	
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab	
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab	
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab	

GY 111 & 111L	Physical Geology and Physical Geology Lab (linkurl^../footnote2/^ ) <sup>2</sup>	
GY 112 & 112L	Earth History and Earth History Lab	
MAS 134 & 134L	Ocean Science and Ocean Science Lab	
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab	
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory (linkurl^../footnote2/^ ) <sup>2</sup>	
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab	
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab	
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	
<b>Area IV – History, Social &amp; Behavioral Sciences (<a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote2/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote2/</a>)<sup>1</sup></b>		
A. Select one of the following:		3
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 121	World Civilization I	
HY 122	World Civilization II	
HY 135	US History to 1877 (linkurl^../footnote2/^ ) <sup>2</sup>	
HY 136	US History since 1877 (linkurl^../footnote2/^ ) <sup>2</sup>	
B. Select three of the following:		9
AN 100	Intro to Cultural Anthropology	
AN 101	Intro Archaeology-Bio Anthro	
ECO 215	Prin of Microeconomics	
ECO 216	Prin of Macroeconomics	
GEO 114	People, Places, Environment	
GEO 115	World Regional Geography (see footnote table below (p. 569)) <sup>2</sup>	
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 121	World Civilization I	
HY 122	World Civilization II	
HY 135	US History to 1877 (see footnote table below (p. 569)) <sup>2</sup>	
HY 136	US History since 1877 (see footnote table below (p. 569)) <sup>2</sup>	
IS 100	Global Issues	
PSC 130	Intro to US Government (see footnote table below (p. 569)) <sup>2</sup>	
PSY 120	Introduction to Psychology	
PSY 250	Life Span Development	
SY 109	Introductory Sociology	
SY 112	Social Problems	

**Health/Physical Education**

A. Complete the following:

KIN 100	Concepts of Health and Fitness	3
PE 101	Activity course	1
<b>Total Hours</b>		<b>54-56</b>

### Footnote

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 121 & HY 122 or HY 135 & HY 136)

<sup>2</sup> Recommended Course

## Additional Information

### E-portfolio and Assessment

Students enrolled in education classes are required to purchase a LiveText membership.

- <https://www.southalabama.edu/colleges/ceps/livetext.html>

### Teacher Candidacy – Special Education 6-12

This major contains a professional component comprised of upper level education courses (300-400 levels), grouped into three semesters (as shown in blocks on graduation plan), and are only available to students who have gained admission to Teacher Candidacy.

Admission Requirements for Teacher Candidacy:

#### Courses and GPA

- Courses: 4 x 12 (12 semester hours in each of the four areas: English/Language Arts, Math, Science, Social Science with a grade of C or better). Plus, CA 110, EH 101, EH 102, EDM 310, EDU 400, and EPY 351
- Hours: 60 credit hours of degree requirements completed
- Minimum Grade Point Averages: 2.5 Program, 2.5 Professional Studies, 2.5 Teaching Field, and 2.5 USA GPA (all GPAs found in degree audit). No grade below a “C” is accepted in the 4 x 12, the Professional Studies, or Teaching Field.

#### ALSDE Background Check

- [https://www.alabamaachieves.org/teacher-center/teacher-preparation/#Background\\_Clearance](https://www.alabamaachieves.org/teacher-center/teacher-preparation/#Background_Clearance) ([https://www.alabamaachieves.org/teacher-center/teacher-preparation/#Background\\_Clearance](https://www.alabamaachieves.org/teacher-center/teacher-preparation/#Background_Clearance))

#### Application, Liability Insurance, and Interview

- Completed and scheduled in the UCOM Advising Center during the semester prior to beginning Teacher Candidacy

## Internship Pre-requisites and Certification/Graduation Requirements

### Internship Pre-requisites

- Student Teaching Application
- GPAs at Admission Requirement Levels
- Successful Completion of the Two Previous Teacher Candidacy Blocks with Grades of C or Higher
- Praxis – Special Education: Core Knowledge and Applications – Pass Score [https://www.ets.org/praxis/al/al\\_teacher\\_ed/](https://www.ets.org/praxis/al/al_teacher_ed/)

### Certification/Graduation Requirements

- Successful Completion of the Internship with a Grade of C or Higher
- GPAs at Admission Requirement Levels
- Passing Score on edTPA
- Applications for Certification and Graduation

**Note: Praxis tests requirements are subject to change as prescribed by the ALSDE. Prior to registering for any Praxis exam, please verify current requirements by going directly to the Alabama portion of the ETS Praxis website at <http://ets.org/praxis/al> (<http://ets.org/praxis/al/>).**

## Graduation Plan

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I (CP)	3
BLY 101	Life Science I (CP)	3
BLY 101L	Life Science I Laboratory (CP)	1
Fine Art	Area II, C <sup>1</sup>	3
MA 110	Finite Mathematics (or higher (CP) Area III, A) <sup>1</sup>	3
KIN 100	Concepts of Health and Fitness	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
CA 110	Public Speaking (CP)	3
EH 102	English Composition II (CP)	3
History (CP)	Area IV, A <sup>1</sup>	3
MA 201	Math for Elem Teachers I (CP)	3
Science and Lab (CP)	Area III, C <sup>1</sup>	4
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
History/Social Science (CP)	Area IV, B <sup>1,2</sup>	3
Literature (CP)	Area II, B <sup>1</sup>	3
MA 202	Math for Elem Teachers II (CP, Area V, B) <sup>1,2</sup>	3
PE 101 - PE 157	PE activity course	1
Science and Lab (CP)	Area V, C <sup>1</sup>	4
Social Science Elective (CP)	Area IV, B <sup>1</sup>	3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
EDM 310	Microcomputing Systems (CP)	3
Content Teaching Field 300 - 499	Upper Level Course in Chosen Content Area <sup>3</sup>	3
Content Teaching Field 300 - 499	Upper Level Course in Chosen Content Area <sup>3</sup>	3
Literature/Fine Art or Humanities	Area II, D <sup>1</sup>	3
Social Science Elective (CP)	Area IV, B <sup>1</sup>	3
ST 210	Stat Reason and Application (or MA Elective (CP), Area IV, B) <sup>1,2</sup>	3
<b>Hours</b>		<b>18</b>
<b>Third Year</b>		
<b>Fall</b>		
EDU 400	Edu Except Child and Youth (CP)	3
EPY 351	Human Growth & Development (CP)	3
EDU 330	Foundations Read Instruct - W	3
Content Teaching Field 300 - 499	Upper Level Course in Chosen Content Area <sup>3</sup>	3

Content Teaching Field 300 - 499	Upper Level Course in Chosen Content Area <sup>3</sup>	3
Apply for Candidacy		
	<b>Hours</b>	<b>15</b>
<b>Spring</b>		
EDU 322	Field Experience in SpeEd Sett (Spring Only) <sup>4</sup>	1
EDU 340	Fundamentals of Teaching - W (Spring or Summer only) <sup>4</sup>	3
EDU 354	Serving Studnts Severe Disabil (Spring Only) <sup>4</sup>	3
EDU 372	Behav Mgt Exceptional Child (Spring Only) <sup>4</sup>	3
EDU 410	Formal and Informal Assessment (Spring Only) <sup>4</sup>	3
EDU 321	Field Experience in SpeEd Sett	1
	<b>Hours</b>	<b>14</b>
<b>Fourth Year</b>		
<b>Fall</b>		
EDU 341	Middle Level Education - W (Fall Only) <sup>4</sup>	3
EDU 342	Secondary Field Experience (Fall Only) <sup>4</sup>	3
EDU 363	Tchg Adpvt Cur Thru Beh/Clstrm (Fall Only) <sup>4</sup>	3
EDU 451	Content Area Literacy (Fall Only) <sup>4</sup>	3
Select one of the following (Fall Only): <sup>4</sup>		3
EDU 453	Teaching Language Subjects	
EDU 454	Teaching Mathematics	
EDU 456	Teaching Science	
EDU 457	Teaching Social Studies	
Apply for Graduation		
	<b>Hours</b>	<b>15</b>
<b>Spring</b>		
EDU 496	Internship 6-12	9
	<b>Hours</b>	<b>9</b>
	<b>Total Hours</b>	<b>120</b>

<sup>1</sup> See General Education Requirements

<sup>2</sup> Recommended Course

<sup>3</sup> Must choose to complete Content Teaching in either English/Language Arts, General Science, Math or Social Science

<sup>4</sup> Required for admission to Candidacy

#### Notes:

- (CP) Candidacy Pre-requisite
- (W) Course that satisfy USA writing requirement (2 required)

## Special Education (M.Ed.)

### Degree Requirements

#### Special Education Graduate

The graduate program in Special Education prepares individuals with or without special education backgrounds to work with exceptional children and youth. Students seeking Alabama Class A Professional Certification may select programs of study in the areas of Collaborative Teaching K-6 or 6-12.

Post-master's or Sixth-Year Graduate Programs which lead to an Instructional Specialist Degree are available, and for qualified individuals, an Alabama Professional Certificate at the AA level.

#### Academic Standards and Student Responsibility

Students should be aware that the Special Education Program requires that certain courses be taken in sequence. Advisors should be consulted to obtain information about sequencing and prerequisite course work.

A committee consisting of graduate faculty members within the program will be selected by program advisors to assist the student in planning their courses of study following the schedule of course offerings. Such programs of study should be approved before the completion of nine semester hours of work.

The Special Education Program requires that students who receive a grade of "C" in a Special Education course, must repeat that course and attain a grade of "B" or better.

Satisfactory performance in all course work (GPA of 3.0 or greater) is required of all graduate Special Education majors; in the event of unsatisfactory performance (below "C") in a course not in their major area, a student's Graduate Program Committee selects the option of repeating the course and demonstrating satisfactory performance or demonstrating satisfactory performance in an approved alternate course. A minimum GPA of 3.25 is required for graduation.

Students must do their internship/practicum during their final semesters in the Mobile area or arrange to be supervised through another university. Contact Field Services for information regarding the out of area option.

Students are assigned to advisors in their respective program areas. The student has the sole responsibility for initiating applications and meeting test and other deadline requirements.

#### Master of Education Degree Program in Special Education

The requirements for the Master of Education include a minimum of 30 semester hours in the program specialization. All graduate majors will have a graduate program committee plan the individual program of study based upon the student's training, experience, needs and schedule of course offerings.

Those students seeking teacher certification must complete one of the program areas detailed as follows:

#### Program for Collaborative Teaching, K-6 or 6-12

For students with a valid Class "B" certificate in an area of Education. The 30 semester hour minimum program for the M.Ed. in the area of Collaborative Teaching includes:

Code	Title	Hours
<b>Curriculum and Teaching</b>		
SPE 512	Ecological Curr and Method	3
SPE 516	Methods Spec Needs Learners	3
<b>Educational Foundations</b>		
EDM 510	Microcomputing Systems in Ed	3
SPE 500	Nat-Needs of Exc Chld and Yth	3
<b>Research and Evaluation</b>		
IDE 510	Educ Research and Evaluation	3
<b>Teaching Field</b>		
SPE 515	Data and Behav Mgmt	3
SPE 591	Multicategory Prac Seminar	3
SPE 592	Collaborative Pract-Seminar	3
Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote1/">http://bulletin.southalabama.edu/programs-az/education-professional-studies/leadership-teacher-education/footnote1/</a> ) <sup>1</sup>		6
EEC 523 & SPE 588	Instr Plan Elem School and Advanced Practicum Experience (K-6 Majors)	

SED 552 & SPE 588	The High School Curriculum and Advanced Practicum Experience (6-12 Majors)
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<b>Total Hours</b>	<b>30</b>
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#### Footnote

<sup>1</sup> Students seeking certification in both K-6 and 6-12 must complete a practicum at each level.

## College of Engineering General Information

(251) 460-6140

College of Engineering website: <https://www.southalabama.edu/colleges/engineering/>

### College of Engineering Administration

Title	Name
Dean	Dr. John Usher
Associate Dean, Undergraduate Affairs	Dr. Eric Steward
Associate Dean, Research and Graduate Affairs	Dr. Clive Woods
Director of Graduate Studies	Dr. Clive Woods

### Summary

Today's society is permeated by an extensive technology that affects the lives of everyone. The engineering function in this modern society – while basically unchanged from the goal of using natural resources for the betterment of mankind – has more far-reaching and immediate consequences than ever before through the social, economic, environmental, and political reactions that follow technological developments.

The engineering profession has recognized that to fulfill the social as well as technical responsibilities incumbent upon today's engineer, engineering graduates must not only be technically competent, but must also be as broadly educated as possible within the allotted educational time period. To this end, the College of Engineering strives to prepare its students ultimately to assume their responsibilities by providing technically sound programs of instruction that incorporate a strong component in the humanities and social sciences. Students are prepared so they may take industrial positions, assume positions with government, or pursue graduate studies.

Engineering students may also qualify as premedical students. Students interested in admission to medical school leading to a medical career should consult a Pre-Medicine (<https://www.southalabama.edu/departments/academicadvising/pre-health/pre-medicine.html>) advisor in Academic Advising & Transfer Services (<https://www.southalabama.edu/departments/academicadvising/>).

### Mission Statement

The mission of the College of Engineering is to provide students with quality accessible undergraduate and graduate engineering education, to prepare graduates for professional careers and lifelong learning, to promote the creation and dissemination of knowledge, to serve society through professional practice and community outreach and to act as a

catalyst for economic and technological development of the Gulf Coast region, the State of Alabama and the Nation.

### Cooperative Education Program

The College of Engineering also offers an attractive five year cooperative Education Program. This program allows students to gain valuable engineering experience as they pursue their degree. The freshman year is spent as a full-time student at the university. During the sophomore and junior years the students alternate working full time with an excellent salary for one semester and taking full-time course work the next semester. Students return to study full time for the senior year. This program offers many advantages for students. Interested students should consult with either the Career Development Center or the College of Engineering Dean's Office.

### Master's Programs

The College of Engineering offers programs leading to degrees of Master of Science in Chemical, Civil, Electrical, Mechanical, and Systems Engineering. The programs of study are designed to provide knowledge of modern engineering concepts and practices; to prepare the graduate for the practice of engineering at a higher level of proficiency than attainable with the bachelor's degree; and to prepare the graduate for further study toward the doctoral degree should the graduate so desire. The programs comprise course work and direct theoretical and experimental inquiry in thesis or project research. Details are given under the bulletin entries and websites for the respective programs.

### Doctor of Philosophy (Ph.D.) in Systems Engineering

The Doctor of Philosophy (Ph.D.) in Systems Engineering offers students a holistic approach to the design and understanding of complex systems. NASA defines systems engineering as "a holistic, integrative discipline, wherein the contributions of structural engineers, electrical engineers, mechanism designers, power engineers, human factors engineers, and many more disciplines are evaluated and balanced, one against another, to produce a coherent whole that is not dominated by the perspective of a single discipline." At USA, we emphasize a model-based systems engineering approach (MBSE) in many of our courses. The main objectives of the Ph.D. program are to:

1. provide our graduates with the ability to approach all systems (engineered, environmental, coastal, biological, social/organizational, etc.) with the ability to understand the entire system lifecycle in a manner that meets the needs of industry, and
2. prepare our graduates for leadership positions requiring applied research along with critical and creative thinking.

This program is appropriate for students who want to pursue research-based careers in industry, government, or academia. The program requires coursework across multiple engineering disciplines, and specific, validated systems research resulting in a publicly defended doctoral thesis.

### Programs of Instruction

- Chemical And Biomolecular Engineering (p. 573)
  - Chemical Engineering (BS) (p. 577)
  - Chemical Engineering (MS) (p. 580)
- Civil, Coastal, And Environmental Engineering (p. 581)
  - Civil Engineering (BS) (p. 587)
  - Civil Engineering (MS) (p. 589)
  - Civil Engineering - Coastal Engineering Certificate (p. 590)

- Civil Engineering - Structural Engineering Certificate (p. 591)
- Civil Engineering - Water/Wastewater Engineering Certificate (p. 591)
- Electrical and Computer Engineering (p. 592)
  - Computer Engineering (BS) (p. 602)
  - Electrical Engineering (BS) - General Track (p. 605)
  - Electrical Engineering (BS) - Premed Track (p. 607)
  - Electrical Engineering (MS) (p. 610)
- Systems Engineering (p. 612)
  - Systems Engineering (MS) (p. 615)
  - Systems Engineering (Ph.D.) (p. 615)
  - Systems Engineering Certificate Program (p. 616)
- William B. Burnsed, Jr. Mechanical, Aerospace, and Biomedical Engineering (p. 617)
  - Mechanical Engineering (BS) (p. 623)
  - Mechanical Engineering (BS) - Aerospace Track (p. 626)
  - Mechanical Engineering (BS) - Biomedical Engineering Track (p. 628)
  - Mechanical Engineering (MS) (p. 631)
  - Mechanical Engineering - Accelerated Bachelor's to Master's Program (p. 632)

## Admission Requirements

### Undergraduate Admission

All students, whether domestic or international, are strongly encouraged to submit standardized test scores, either ACT or SAT.

### Admission to Graduate Programs

The minimum requirements for admission to the graduate degree programs in this College differ slightly between programs and are listed in the Bulletin entry for each program.

Each application will be reviewed by the Admissions Committee of the appropriate department which may need to evaluate additional credentials, such as, but not limited to, course work taken, and letters of recommendation.

The minimum requirements for non-degree graduate admission (or admission prior to declaring a graduate degree program) are the same as the minimum requirements for admission to the Graduate School and are listed in the Bulletin entry for the Graduate School, but applicants wishing to register later for a graduate degree must ensure that they will at that time satisfy the requirements for that degree.

## College Requirements

### Undergraduate Study Requirements

Admission to the University of South Alabama constitutes admission to the College of Engineering for those students wishing to major in engineering. Incoming students should specify a particular discipline in the College as a major as soon as practical in order to receive proper counseling to pursue their engineering course work. Transfer students must declare a major and have all transfer credit evaluated by the Admissions Office. The department chair will approve transfer credit for engineering degree credit except where substitutions are involved; substitutions require the approval of the dean. Transfer students are encouraged to have departmental evaluations accomplished prior to their first registration for classes.

Entering freshmen students not adequately prepared to enter the degree program may be required to take additional preparatory course work. Such preparatory work will not be counted toward the major degree program.

Engineering students with less than 15 credit hours are required to take EG 101 Intro to Engineering & Design. This requirement for EG 101 can be waived by the student's advisor if the student demonstrates exposure to the material covered and most likely is not going to benefit from this course. An appropriate math, science or engineering course must be substituted if the student does not take EG 101.

Students must have the prerequisites for the courses in which they enroll; students who enroll without prerequisites are subject to administrative withdrawal. Prerequisites are satisfied by courses taken either at the University of South Alabama or by acceptable transfer credit.

### General Education Requirements for Undergraduates

Engineering undergraduate students must comply with the University's general education requirements. In the area of Humanities and Fine Arts, engineering students are required to take a total of at least 9 semester hours with a minimum of 3 semester hours in literature and a minimum of 3 semester hours in the arts. In the area of History, Social, and Behavioral Sciences, engineering students are required to take at least 9 semester hours with a minimum of 3 semester hours in history and a minimum of 3 semester hours from among the other disciplines in the social and behavioral sciences. Individual degree programs specify additional requirements.

### Professional Component Standing for Undergraduate Students

It is important that students make adequate progress in departmental majors within the College of Engineering, so each program of study has established a set of courses that must be satisfactorily completed with a specified minimum grade before a student is allowed to proceed with more advanced courses. Professional Component Standing (PCS) within a program indicates that these courses have been satisfactorily completed. The requirements for PCS by all students in all engineering programs *include* the following six courses at minimum grade "C", in addition to the program-specific requirements:

Code	Title	Hours
EH 101	English Composition I <sup>1</sup>	3
EH 102	English Composition II	3
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
MA 125	Calculus I	4
MA 126	Calculus II	4
PH 201	Calculus-Based Physics I (+Lab)	4

<sup>1</sup> Students who have an English ACT score of 27, or a written SAT score of 610, can opt out of EH 101. Students not exempted from EH 101 are required to take it as a prerequisite for EH 102.

PCS is awarded by the appropriate department chair when the student completes the PCS requirements for **both** the College of Engineering **and** the study program. All undergraduate programs of study in the College of Engineering require Program PCS for enrollment in most 300- and 400-level courses; see the program requirements for additional details.

## Minors in Disciplines Other than Engineering

Students wishing to complete a minor in disciplines other than engineering must complete the published requirements for that discipline.

## Honors Program in Engineering

To receive a designation of "Departmental Honors" students must have a GPA of at least 3.5 at the time of graduation and complete an Honors Senior Project in their major. The Honors Senior Project requirement may be satisfied in either of two ways.

1. By completing an Honors Senior Project course that requires completion of a research project under the guidance of a faculty mentor.
2. By completing a special honors design project as part of the capstone engineering design requirement under the guidance of a faculty mentor.

It is required that there be both a written report and an oral presentation of the results of the Honors Senior Project.

Students participating in "Departmental Honors" may also elect to take the University Honors Seminar and participate in other University Honors Activities upon recommendation of their major advisor.

## Choice of Bulletin for Undergraduate Degree Requirements

After an absence of one calendar year or when transferring into an engineering program, students must use the Bulletin in effect at the time of readmission or transfer, or a later version. No student may use a Bulletin older than six years from the date of graduation.

## Requirements for a Bachelor's Degree

To become a candidate for a Bachelor of Science degree in one of the five major disciplines within the College of Engineering, the student must satisfy the general requirements of the University as set forth in "Academic Policies and Procedures", and must have satisfactorily completed the program of instruction specified by the major department. In addition to these requirements, the Engineering student must have at least a GPA of 2.00 or C-level competency in all subjects taken in the student's major department at the University of South Alabama.

Mechanical and Civil Engineering students are required to take and make a "good faith" effort to pass the Fundamentals of Engineering (FE) examination prior to their anticipated date of graduation. Students should be aware of the deadline established by the National Council of Examiners for Engineering and Surveying (NCEES) for submission of examination application materials. Failure to meet the deadline could result in delayed graduation.

A transfer student must complete at least 25% of the credit hours required for the degree from upper-division courses with at least 16 hours in the upper level of the student's major department at the University of South Alabama.

## Computer Ownership Policy

All students in the College of Engineering are required to own a personal laptop computer that conforms to the current college minimum standards at the time they enter engineering level courses. For more information, consult the Laptop Policy at <https://www.southalabama.edu/colleges/engineering/resources/laptoppolicy.pdf>.

## Accelerated Bachelor's to Master's Program

The College of Engineering allows well-qualified undergraduates in the program to follow an "Accelerated Bachelor's to Master's" (ABM) study plan. This plan permits up to six credit hours of graduate coursework to count towards both the Bachelor's (as Technical Electives) and the Master's degrees, so that the Master's degree is earned faster than usual. (The coursework concerned must individually satisfy the requirements of both degrees.) See a departmental advisor for specific details.

ABM students must meet all requirements for admission to the Graduate School and the respective graduate degree program that may exceed Graduate School minimums. A complete Graduate School application is required.

## General ABM Eligibility Requirements

- Cumulative undergraduate GPA at least 3.0
- Completed at least 90 credit hours
- Completed at least 30 credit hours at USA

A student who withdraws or is dismissed from the ABM program may not count graduate coursework towards both degrees. Graduate courses for which an undergraduate student did not earn an "A" or "B" grade may not be counted towards the graduate degree.

ABM students must be full-time students and must complete all degree requirements for the Master's degree within three semesters of the semester in which they were admitted to the Graduate School. An exception for a fourth semester may be granted where an additional semester is required for final revisions to and submission of a defended thesis. Exceptions to the ABM policy are at the discretion of the Dean of the Graduate School.

## Graduate study requirements

The requirements for each graduate program of study are stated in the Bulletin entry for that program.

# Chemical And Biomolecular Engineering

## Department Information

(251) 460-6160

Department of Chemical and Biomolecular Engineering website  
<https://www.southalabama.edu/colleges/engineering/chbe/index.html>  
[\(https://www.southalabama.edu/colleges/engineering/chbe/\)](https://www.southalabama.edu/colleges/engineering/chbe/)

## Department of Chemical and Biomolecular Engineering Faculty

Title	Name
Interim Chair	Silas Leavesley
Professors	Glover, Leavesley, Usher, West
Associate Professors	Rabideau, Wheeler
Assistant Professors	Dennis, Ebrahimzadeh

Chemical Engineering is a profession in which knowledge of mathematics, chemistry, biology and other natural sciences gained by study, experience, and practice is applied with judgment to develop economical ways of using material and energy for the benefit of mankind. The program required for the degree of Bachelor of Science in Chemical Engineering provides fundamental instruction in mathematics, chemistry,

biology, physics, and engineering. This education prepares the graduate to seek employment in petrochemical, pharmaceutical, healthcare, microelectronics, polymers, energy and environmental industries. In addition, the graduate is well-prepared to pursue graduate school.

All electives must be approved by the student's advisor. Degree requirements include a minimum of 18 semester hours of approved electives in the Humanities and Social Sciences.

Satisfactory completion of the 126 hour program outlined below leads to the degree of Bachelor of Science in Chemical Engineering. Students must also comply with the College of Engineering Requirements for a Degree, which are covered in the Bulletin under the College of Engineering.

### BSChE Program Educational Objectives

The educational objectives of the Department of Chemical & Biomolecular Engineering's undergraduate program are that, within a few years of program completion, graduates will have used the knowledge and skills gained through academic preparation and post-graduation experience so they have:

1. Advanced in the chemical engineering profession and applied engineering knowledge and problem-solving skills to multi-disciplinary projects.
2. Incorporated economic environmental, social, regulatory, constructability, safety, and sustainability considerations into the practice of chemical engineering.
3. Exhibited effective communication skills, teamwork, leadership, initiative, project management, and professional and ethical behavior.
4. Continued their technical and professional development, which may include graduate level education, continuing education, and participation in professional organizations.

### BSChE Student Outcomes

By the time of graduation from the BSChE program, a student will have demonstrated attainment of the following outcomes:

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. an ability to communicate effectively with a range of audiences
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgements, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgement to draw conclusions.
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

The BSChE curriculum is designed to ensure the attainment of the student outcomes.

The Bachelor of Science degree program in Chemical Engineering at the University of South Alabama is accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria and the Program Criteria for Chemical, Biochemical, Biomolecular and similarly named Engineering programs.

### BSChE Accelerated Bachelor's to Master's (ABM) Degree Option

The Department of Chemical & Biomolecular Engineering allows well-qualified undergraduates to follow an "Accelerated Bachelor's to Master's" (ABM) study plan. Under ABM, up to **six credit hours of graduate coursework** can count towards both the BSChE (as Technical Electives) and the MSChE degrees, so that the MSChE degree is earned faster than usual. This applies to both thesis and non-thesis degrees. (The ABM coursework must individually satisfy the requirements of both degrees.) ABM students typically complete the Master's degree within one academic year after completing the undergraduate degree. See a departmental advisor for specific details.

### BSChE Departmental Honors Designation

To receive a designation of "Departmental Honors," students must:

1. successfully complete 4 to 6 credit hours of Honors Senior Project in Chemical Engineering (CHE 499),
2. have at least a 3.50 GPA overall at the time of graduation, and
3. have both submitted a written report and made an oral presentation of the Honors Senior Project in keeping with the expectations of the Honors College (<https://www.southalabama.edu/colleges/honors/seniorproject.html>).

Students should see a departmental advisor for specific details.

## Degrees, Programs, or Concentrations

- Chemical Engineering (BS) (p. 577)
- Chemical Engineering (MS) (p. 580)

## Courses

### CHE 190 Special Topics - 1-5 cr

Topics of current Chemical Engineering interest. Requires permission of department chair.

### CHE 201 CHE Fundamentals I 3 cr

Formulation of material balances and relations involving real gases, vapors, liquids, and solids. Prerequisites: CH 132. Corequisite: MA 126.

**Prerequisite:** (CH 116 Minimum Grade of D or CH 132 Minimum Grade of D) and (MA 126 (may be taken concurrently) Minimum Grade of D or MA 233 Minimum Grade of D)

### CHE 202 CHE Fundamentals II 3 cr

Formulation of energy balance and combined material and energy balances for steady-state processes. Prerequisites: CHE 201.

Corequisites: BLY 121. Fee

**Prerequisite:** CHE 201 Minimum Grade of D and (BLY 121 (may be taken concurrently) Minimum Grade of D or BLY 141 Minimum Grade of D)

**CHE 203 Material and Energy Balances 4 cr**

Application of multicomponent material and energy balances to chemical processes involving phase changes and chemical reactions. Minimum grade of 'C' is required and only 2 attempts are permitted. Fee

**Prerequisite:** CH 132 Minimum Grade of C and CH 132L Minimum Grade of C and MA 126 Minimum Grade of C and (EH 101 Minimum Grade of C or EH 105 Minimum Grade of C or A01 27 or S01 610 or S13 33 or USEH P)

**CHE 232 Chemical Engr Thermodynamics I 3 cr**

Applications of the First and Second Law. Estimation of fluid properties and heat effects. Thermodynamic analysis of meters, throttles, nozzles, and compressors.

**Prerequisite:** (PH 201 Minimum Grade of D or PH 216 Minimum Grade of D) and (MA 227 Minimum Grade of D or MA 234 Minimum Grade of D) and (CHE 201 Minimum Grade of D)

**CHE 290 Special Topics - 1-5 cr**

Topics of current chemical engineering interest. Requires consent of department chair.

**CHE 301 CHE Calculations III - C 3 cr**

Material and energy balance process calculations emphasizing applied statistics utilizing computer programming concepts, spreadsheets, and modern mathematical computer tools.

**Prerequisite:** CHE 202 Minimum Grade of D

**CHE 311 CHE Separations I 3 cr**

Applications of material balances and equilibrium relations to equilibrium stage design. Design of single stages and cascades for absorption, stripping, distillation, liquid-liquid extraction, and bioseparations.

**Prerequisite:** CHE 203 Minimum Grade of C

**Corequisite:** CHE 331

**CHE 321 Transport Phenomena I 3 cr**

Fundamentals of momentum transfer with applications in fluid flow through pipes and process equipment.

**Prerequisite:** MA 238 Minimum Grade of C and CHE 203 Minimum Grade of C and PH 201 Minimum Grade of C

**CHE 322 Transport Phenomena II 3 cr**

Fundamentals of conductive, convective, and radiative modes of heat transfer with applications in the design of heat exchangers.

**Prerequisite:** CHE 321 Minimum Grade of C

**CHE 331 CHE Thermodynamics I 3 cr**

This course introduces the fundamentals of thermophysical property estimation and modeling of non-ideal pure and multicomponent fluid systems, including an introduction to multicomponent vapor/liquid equilibria.

**Prerequisite:** CH 201 Minimum Grade of C and CHE 203 Minimum Grade of C and MA 238 Minimum Grade of C and CH 201L Minimum Grade of C and PH 201 Minimum Grade of C

**Corequisite:** CHE 351

**CHE 332 CHE Thermodynamics II 3 cr**

This class is an advanced thermodynamics course that uses a molecular level viewpoint to introduce students to applications of thermodynamics principles to complex chemical engineering problems including multicomponent, non-ideal fluid phase equilibria (VLE, VLLE, SLE), and chemical reaction equilibria. The concepts of chemical potential, fugacity, partial molar and excess properties as well as complex activity coefficient models are introduced to solve these problems.

**Prerequisite:** CHE 331 Minimum Grade of C

**Corequisite:** CHE 352

**CHE 342 Engineering Communication - W 3 cr**

Formal and informal reports, oral presentations, and visual aids.

**Prerequisite:** EH 102 Minimum Grade of C or EH 105 Minimum Grade of C

**Corequisite:** CHE 352

**CHE 351 Modeling Lab 1 cr**

Computational tools and numerical methods for solving chemical engineering problems.

**Corequisite:** CHE 311, CHE 331

**CHE 352 Measurement Lab 1 cr**

Laboratory practices for measurement of reaction and phase change parameters. Statistical tools for assessing experimental data.

**Prerequisite:** CHE 351 Minimum Grade of C

**Corequisite:** CHE 332, CHE 372

**CHE 363 Simulation of Chemical Process 3 cr**

In this course, students utilize modern software tools, such as Aspen Plus, to model steady rate chemical processes. Simulation topics include physical property selection, flowsheet generation, separations, and reactors.

**Prerequisite:** CHE 311 Minimum Grade of C

**Corequisite:** CHE 332, CHE 372

**CHE 372 Chemical Reactor Design 3 cr**

Fundamentals of systems involving chemical reactions, including batch and flow systems. Design of thermal and catalytic systems with single and multiple reactions. Analysis of kinetic data and mechanisms.

**Prerequisite:** CHE 331 Minimum Grade of C

**Corequisite:** CHE 322, CHE 332

**CHE 390 Special Topics - 1-5 cr**

Topics of current chemical engineering interest. Requires consent of department chair.

**CHE 421 CHE Separations II 3 cr**

Fundamentals of mass transfer. Mass, energy, and momentum transfer analogies. Design of mass transfer equipment.

**Prerequisite:** CHE 311 Minimum Grade of C and CHE 322 Minimum Grade of C

**CHE 441 Chem Engr Ops Lab I-W 2 cr**

Laboratory Studies of the unit operations of chemical engineering with emphasis on momentum and heat transfer.

**Prerequisite:** CHE 322 Minimum Grade of C and CHE 351 Minimum Grade of C and CHE 352 Minimum Grade of C and (CHE 342 Minimum Grade of C or CHE 363 Minimum Grade of C)

**CHE 442 Chem Engr Ops Lab II - W 2 cr**

Laboratory studies of the unit operations of chemical engineering with emphasis on stage-wise and differential contactors.

**Prerequisite:** CHE 441 (may be taken concurrently) Minimum Grade of C and CHE 311 Minimum Grade of C and CHE 421 Minimum Grade of C

**CHE 451 Process Models 3 cr**

Mathematical modeling, simulation, and dynamics of chemical process systems for design and analysis.

**Prerequisite:** CHE 322 Minimum Grade of C

**CHE 452 Process Dynamics and Control 3 cr**

Mathematical modeling, simulation and dynamics of chemical process systems. Feedback and Feed-forward control of chemical processes. Specification of control loops. Selection and tuning of controller modes.

**Prerequisite:** CHE 372 Minimum Grade of C

**CHE 461 Process Design I 3 cr**

Engineering economics and elements of process design, including energy and material balances, manufacturing and product cost. Unit operation equipment sizing, and cost. This course is considered a "Senior Capstone Design" course.

**Prerequisite:** EG 231 Minimum Grade of C and CHE 332 Minimum Grade of C and CHE 372 Minimum Grade of C and (CHE 342 Minimum Grade of C or CHE 363 Minimum Grade of C)

**CHE 462 Process Design II 3 cr**

Selection, design and specification of principal chemical processes. This course is considered a "Senior Capstone Design" course.

**Prerequisite:** CHE 461 Minimum Grade of C

**CHE 490 Special Topics 1-3 cr**

Topics of current chemical engineering interest. Requires consent of department chair or departmental approval.

**CHE 494 Directed Studies 1-3 cr**

Directed study, under the guidance of a faculty advisor, of a topic from the field of chemical engineering, not offered in a regularly scheduled course.

A written report is required. May be repeated for a maximum of 6 credit hours. Requires consent of the department chair and minimum GPA of 3.00 for admission or departmental approval.

**CHE 499 Honors Senior Project 1-6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project, relevant to the field of chemical engineering. The senior project will be judged and graded by three faculty chaired by the honors mentor. This course is required for Honors recognition. A minimum of 4 credit hours is required, but students may enroll for a maximum of 6 credit hours over two semesters. Requires completion of an approved project prospectus.

**Prerequisite:** CHE 322 Minimum Grade of C and CHE 332 Minimum Grade of C

**CHE 501 Chemical Engineering Seminar 1 cr**

A weekly research seminar for Chemical Engineering graduate students. Students will attend research presentations by faculty, invited speakers and other students rehearsing for their proposal presentations, thesis defenses or conference presentations. Topics will include research, research methods, safety and responsible conduct of research.

**CHE 510 Adv Chemical Thermodynamics 3 cr**

Advanced classical and molecular thermodynamics as applied to non-ideal multicomponent phase and reaction equilibria for chemical engineering applications. An introduction to statistical thermodynamics will also be given.

**CHE 520 Adv Transport Phenomena I 3 cr**

An advanced treatment of the principles and methods of transport phenomena. Detailed coverage of several key aspects of energy and momentum transfer including creeping flows, boundary layers and lubrication theory.

**CHE 521 Adv Transport Phenomena II 3 cr**

An advanced treatment of the principles and methods of mass transfer, diffusion and adsorption phenomena. Coverage of conservation equations, mass transfer at interfaces and boundary conditions. Includes coverage of adsorption and diffusion on surfaces, porous structures and membranes.

**CHE 525 Chemical Reactor Analysis 3 cr**

Design, modeling and analysis of non-ideal chemical reactor systems. Includes effects of mass transfer in heterogeneous catalytic reactors, non-steady-state heat transfer and residence time distributions.

**CHE 530 Synthetic Fuels 3 cr**

Fundamentals of gasification and liquefaction concepts applied to fossil fuels and biomass conversion.

**CHE 540 Distillation 3 cr**

Analysis and design of separation units for multicomponent nonideal systems.

**CHE 550 Chemical Process Control 3 cr**

Sampled-data algorithms, feedback, feedforward, deadtime compensation, advanced control schemes applied to chemical engineering processes.

**CHE 551 Adv Chem Engineering Modeling 3 cr**

Advanced mathematical modeling of chemical process systems for design and analysis.

**CHE 560 Mixing and Agitation 3 cr**

Analysis and design of single-phase and multiple-phase mixing units.

**CHE 563 Simulation of Chem Processes 3 cr**

In this course, students utilize modern software, tools, such as Aspen Plus, to model steady state chemical processes. Simulation topics include physical property selection, flowsheet generation, separations and reactors.

**Cross-Listed:** CHE 463

**CHE 570 Separation Processes 3 cr**

Analysis and design of separation processes. Topics include molecular diffusion and convective mass transfer with applications in the chemical, petroleum and pharmaceutical industries.

**CHE 575 Chem Proc Synth Optimization 3 cr**

Use of analysis, synthesis, and optimization in process development.

**CHE 580 Chem Process Safety and Design 3 cr**

Fundamental principles of chemical process safety, fires and explosions and design for the mitigation of associated hazards.

**CHE 590 Special Topics - 3 cr**

Topics of current chemical engineering interest. Requires consent of the department chair or departmental approval.

**CHE 592 Directed Independent Study 1-6 cr**

Directed study, under the guidance of a faculty advisor, of a topic from the field of chemical engineering, not offered in a regularly scheduled course. A written report is required. Requires consent of the department chair and overall minimum GPA of 2.5 for admission or departmental approval.

**CHE 594 Project in Chem Engineering 3 cr**

Approved investigation of original problems under direction of a faculty member. Requires approved prospectus.

**CHE 599 Thesis 1-6 cr**

May be taken more than once. Only 6 hours may be applied for credit toward a degree. Requires approved prospectus.

## Faculty

**Faculty Name**

DENNIS, GRAYSON P  
(gpdennis@southalabama.edu)

**Faculty Department**

Chemical-Biomolecular Eng

**Faculty Position**

Assistant Professor

**Degrees Held**

BS, University of Alabama  
MS, University of Alabama  
PHD, University of Alabama

GLOVER, THOMAS G. (glover@southalabama.edu)	Chemical-Biomolecular Eng	Professor	BS, Georgia Inst of Tech - Main PHD, Vanderbilt University
LEAVESLEY, SILAS J. (leavesley@southalabama.edu)	Chemical-Biomolecular Eng	Professor	BS, Florida State University PHD, Purdue University-Main Campus
RABIDEAU, BROOKS D. (brabideau@southalabama.edu)	Chemical-Biomolecular Eng	Associate Professor	BS, Northwestern University PHD, University of Texas- Austin
USHER, JOHN MARK (usher@southalabama.edu)	Chemical-Biomolecular Eng	Professor	BS, University of Florida MS, Louisiana State University MS, Louisiana State University PHD, Louisiana State University
WALKER, SEAN (seanwalker@southalabama.edu)	Chemical-Biomolecular Eng	Assistant Professor	MAS, Univ of Waterloo BAS, Univ of Waterloo PHD, Univ of Waterloo
WEST, CHRISTY WHEELER (cwwest@southalabama.edu)	Chemical-Biomolecular Eng	Associate Professor	BS, University of Alabama PHD, Georgia Inst of Tech - Main
WEST, KEVIN NEAL (kevinwest@southalabama.edu)	Chemical-Biomolecular Eng	Professor	BS, University of Virginia PHD, Georgia Inst of Tech - Main

## Chemical Engineering (BS)

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		<b>58</b>
<b>Major Requirements</b>		
<i>Chemical Engineering Requirements</i>		
Complete the following:		
EG 101	Intro to Engineering & Design (& Lab) (or EG 201 for LINK students)	2
EG 231	Intro to Ethics and Economics	3
CH 201 & 201L	Organic Chemistry I and Organic Chemistry I Lab	4
CH 202 & 202L	Organic Chemistry II and Organic Chemistry II Lab	4
CHE 203	Material and Energy Balances (Only two attempts are permitted to earn grade C or better. Failure to meet this requirement will result in dismissal from the program.)	4
CHE 311	CHE Separations I	3
CHE 321	Transport Phenomena I	3
CHE 322	Transport Phenomena II	3
CHE 331	CHE Thermodynamics I	3
CHE 332	CHE Thermodynamics II	3
CHE 351	Modeling Lab	1
CHE 352	Measurement Lab	1
CHE 363	Simulation of Chemical Process	3
CHE 372	Chemical Reactor Design	3
CHE 421	CHE Separations II	3
CHE 441	Chem Engr Ops Lab I-W	2
CHE 442	Chem Engr Ops Lab II - W	2
CHE 452	Process Dynamics and Control	3
CHE 461	Process Design I	3
CHE 462	Process Design II	3
<i>Chemistry Elective</i>		
Select one of the following:		3-4

CH 265 & 265L	Introductory Analysis and Introductory Analysis Lab	
CH 440	Biochemistry I (one of CH 440 or BMD 321 is required for Pre-Med track)	
	or BMD 321 Biochemistry I-Molecular Biol	
<i>Technical Elective</i>		
Select one of the following		3
BLY 122	General Biology II (required for Pre-Med track)	
Chemistry - Any course higher than CH 202		
CPE 260	Intro to C++ Programming	
MA 237	Linear Algebra I	
MA 332	Differential Equations II	
MA 354	Comp Assist Math Modeling - W	
ST 315	Applied Probability-Statistics	
ST 320	Applied Stat Analysis	
Any Engineering 200, 300, or 400 level elective (excluding EG 270)		
<i>Chemical Engineering Electives</i>		
Select two courses (six hours) from any 300 or 400 level ChE course that is outside of the core program requirements.		6
(Accelerated Bachelor's to Master's (ABM) students will take up to six hours of approved graduate coursework)		
<b>Minor Requirements</b>		
A minor is not required for this degree program.		0
<b>Total Hours</b>		<b>126-127</b>

#### Notes

- All undergraduates must complete two designated writing credit (W) courses, at least one of which must be in the student's major or minor.
- C-grade or higher required in all prerequisite courses.
- Appropriate software tools will be utilized in almost all CHE courses.

### General Education Requirements

Code	Title	Hours
<b>Area I – Written Composition</b>		
Complete the following:		

EH 101 English Composition I (Students who earn an English ACT score of 27, or a written SAT score of 610, can opt out of EH 101.) 3

EH 102 English Composition II 3  
or EH 105 Honors Composition - H

### Area II – Humanities & Fine Arts

A. Select one of the following: 3

EH 215 Brit Lit before 1785

EH 216 Brit Lit after 1785

EH 225 Am Lit before 1865

EH 226 Am Lit after 1865

EH 235 World Lit before 1650

EH 236 World Lit after 1650

B. Select one of the following: 3

ARH 100 Survey of Art

ARH 103 Art History I

ARH 123 Art History II

ARS 101 Art Appreciation

DRA 110 Introduction to Theatre

MUL 101 Introduction to Music

C. Complete the following: 3

CA 110 Public Speaking 3

### Area III – Natural Sciences & Mathematics

Complete the following:

MA 125 Calculus I 4

CH 131 General Chemistry I 4  
& 131L and General Chemistry I Lab

CH 132 General Chemistry II 4  
& 132L and General Chemistry II Lab

### Area IV – History, Social & Behavioral Sciences

A. Select 3 hours from the following: 3

HY 101 HY of Western Civilization I

HY 102 HY of Western Civilization II

HY 135 US History to 1877

HY 136 US History since 1877

B. Select 3 hours from the following: 3

AN 100 Intro to Cultural Anthropology

AN 101 Intro Archaeology-Bio Anthro

CA 100 Intro to Communication

CA 211 Interpersonal Comm

ECO 215 Prin of Microeconomics

ECO 216 Prin of Macroeconomics

GEO 114 People, Places, Environment

GEO 115 World Regional Geography

GS 101 Intro to Gender Studies

IS 100 Global Issues

IST 201 Seasons of Life

PSC 130 Intro to US Government

PSY 120 Introduction to Psychology

PSY 250 Life Span Development

SY 109 Introductory Sociology

SY 112 Social Problems

C. Select a further 3 hours from either List A or B above in Area IV 3

### Area V

Complete the following:

MA 126 Calculus II 4

MA 227 Calculus III 4

MA 238 Differential Equations I 3

BLY 121 General Biology I 3

PH 201 Calculus-Based Physics I 4  
& 201L and Calculus-Based Physics I Lab

PH 202 Calculus-Based Physics II 4  
& 202L and Calculus-Based Physics II Lab

**Total Hours 58**

### Additional Information

It is important that students make adequate progress in the Chemical Engineering program. Satisfactory completion of a set of fundamental courses is required before a student is allowed to take advanced courses. Professional Component Standing (PCS) is awarded by the Chair of the Department when the student completes the College of Engineering PCS requirements and the ChBE Departmental PCS requirements.

### College of Engineering PCS Courses

Minimum Grade C required in all these courses

Code	Title	Hours
EH 101	English Composition I	3
EH 102	English Composition II	3
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
MA 125	Calculus I	4
MA 126	Calculus II	4
PH 201	Calculus-Based Physics I (+Lab)	4

### Chemical and Biomolecular Engineering PCS Courses

Minimum Grade C required in all these courses

Code	Title	Hours
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
CH 201 & 201L	Organic Chemistry I and Organic Chemistry I Lab	4
MA 227	Calculus III	4
MA 238	Differential Equations I	3
BLY 121	General Biology I	3
CHE 203	Material and Energy Balances	4

## Graduation Plan

(126 Total Hours)

The Sample 4-year plan is designed as a guide for students preparing for their course selections. This information provides only a suggested schedule. Actual course selections should be made in consultation with an advisor. Courses listed as Milestones are required to obtain Professional Component Standing (PCS). Two designated writing (W) courses are required with at least one course chosen from offerings in the student's major or minor. Courses carrying this required credit are identified in the University Bulletin by a W after the course title.

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
MA 125	Calculus I <sup>1</sup>	4
CH 131 & 131L	General Chemistry I and General Chemistry I Lab <sup>1</sup>	4
EH 101	English Composition I <sup>1</sup>	3
BLY 121	General Biology I <sup>1</sup>	3
EG 101	Intro to Engineering & Design (and EG 101 Lab)	2
<b>Milestone Notes</b>		
Must complete at least 12 hours with a 2.0 or higher GPA		
C-grade or higher required in all prerequisite courses		
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
MA 126	Calculus II <sup>1</sup>	4
CH 132 & 132L	General Chemistry II and General Chemistry II Lab <sup>1</sup>	4
EH 102	English Composition II (or EH 105) <sup>1</sup>	3
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab <sup>1</sup>	4
<b>Milestone Notes</b>		
MA 125	Calculus I	
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	
BLY 121	General Biology I	
EH 101	English Composition I (if not exempt)	
C-grade or higher required in all prerequisite courses		
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
MA 227	Calculus III <sup>1</sup>	4
CH 201 & 201L	Organic Chemistry I and Organic Chemistry I Lab <sup>1</sup>	4
CHE 203	Material and Energy Balances <sup>1</sup>	4
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	4
<b>Milestone Notes</b>		
MA 126	Calculus II	
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	
EH 102 or EH 105	English Composition II or Honors Composition - H	
C-grade or higher required in all prerequisite courses		
CHE 203: only two attempts permitted to obtain grade C or better		
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
MA 238	Differential Equations I <sup>1</sup>	3
CH 202 & 202L	Organic Chemistry II and Organic Chemistry II Lab	4
EG 231	Intro to Ethics and Economics	3
Tech Elective	Technical Electives <sup>2</sup>	3
General Education	Area II or IV <sup>2</sup>	3
<b>Milestone Notes</b>		
CHE 203 Summer not guaranteed		
MA 238	Differential Equations I	
CH 201 & 201L	Organic Chemistry I and Organic Chemistry I Lab	
MA 227	Calculus III	
C-grade or higher required in all prerequisite courses		
<b>Hours</b>		<b>16</b>

<b>Third Year</b>		
<b>Fall</b>		
CHE 311	CHE Separations I	3
CHE 321	Transport Phenomena I	3
CHE 331	CHE Thermodynamics I	3
CHE 351	Modeling Lab	1
General Education	Area II or IV <sup>2</sup>	3
Chemistry Elective	Chemistry Electives <sup>2</sup>	3-4
<b>Milestone Notes</b>		
C-grade or higher required in all prerequisite courses		
CHE courses only available in Fall semester		
<b>Hours</b>		<b>16-17</b>
<b>Spring</b>		
CHE 322	Transport Phenomena II	3
CHE 332	CHE Thermodynamics II	3
CHE 363	Simulation of Chemical Process (Simulation of Chemical Process)	3
CHE 352	Measurement Lab	1
CHE 372	Chemical Reactor Design	3
General Education	Area II or IV <sup>2</sup>	3
<b>Milestone Notes</b>		
C-grade or higher required in all prerequisite courses		
CHE courses only available in Spring semester		
<b>Hours</b>		<b>16</b>
<b>Fourth Year</b>		
<b>Fall</b>		
CHE 421	CHE Separations II	3
CHE 441	Chem Engr Ops Lab I-W	2
CHE 452	Process Dynamics and Control	3
CHE 461	Process Design I	3
CHE Elective I	Chemical Engineering Electives <sup>2</sup>	3
General Education	Area II or IV <sup>2</sup>	3
<b>Milestone Notes</b>		
Apply for graduation		
C-grade or higher required in all prerequisite courses		
CHE courses only available in Fall semester		
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
CHE 442	Chem Engr Ops Lab II - W	2
CHE 462	Process Design II	3
CHE Elective II	Chemical Engineering Electives <sup>2</sup>	3
General Education	Area II or IV <sup>2</sup>	3
General Education	Area II or IV <sup>2</sup>	3
<b>Milestone Notes</b>		
C-grade or higher required in all prerequisite courses		
CHE courses only available in Spring semester		
<b>Hours</b>		<b>14</b>
<b>Total Hours</b>		<b>126-127</b>

<sup>1</sup> Required for Professional Component Standing (PCS).

<sup>2</sup> See Degree Requirements.

## Notes

- CHE 300- and 400-level courses are offered only in the semesters indicated above.
- Students not Term 1-Calculus I ready will exceed the 126 hours required for this degree. Students with ACT Math scores 21 and below will not complete the degree in 4 years. Students beginning in MA 112 must utilize the summer before Term 3 to take MA 125 and CH 132/CH 132L and utilize the summer before Term 5 to complete

the degree in 4 years. Students with ACT Math scores 23 and below should begin math courses in the summer before Fall-Year 1.

## Chemical Engineering (MS)

### Overview

With the ever-increasing pace of technological development in society, new opportunities are becoming available that require chemical engineering graduates with increased levels of specialization. The Department offers a Master of Science degree in Chemical Engineering that blends scholarship and research with advanced coursework to provide excellent training for students to pursue careers in the chemical industry. Graduate students have opportunities to undertake cutting-edge research with faculty for both thesis and project work. In addition, a coursework-only program is also offered by the department for those who wish to further their professional development by pursuing a graduate degree.

### Admission to the MSChE Program

The following Admission Requirement criteria supplement the Graduate School admission criteria (see Categories of Admissions (<https://www.southalabama.edu/bulletin/current/colleges-schools/graduate-school/>)):

1. A Bachelor's degree in chemical engineering or a related field such as chemistry, physics, mathematics, or engineering.
2. A grade-point average of 3.0 or greater (A=4.0) on all undergraduate work.
3. Applicants whose native language is not English must provide one of the following official language test results:
  - Written TOEFL minimum score of 550
  - Internet-Based TOEFL minimum score of 79
  - IELTS minimum band score of 6.5
  - Pearson PTE Academic minimum overall score of 58
  - Duolingo English test minimum score of 100

**Note that we do not require nor consider GRE scores in our review of applications.** Each applicant will be reviewed by the Admissions Committee, which carries out a holistic review of all applications and welcomes personal discussions with each applicant to discuss specific circumstances. This committee reserves the right to evaluate additional credentials such as, but not limited to, coursework taken and letters of recommendation. Students with a Bachelor's degree in a major other than chemical engineering can qualify for admission by taking a prescribed series of additional undergraduate preparatory courses depending on their background. These undergraduate preparatory courses will not count toward the Master's degree.

The minimum credit hour requirements for the different options of the MSChE degree are:

- Thesis Option 30 credit hours
- Project Option 30 credit hours
- Course Option 33 credit hours

### Graduation Plan

(30-33 Total Hours)

The Graduation Plan for each Option is an example of a suggested course schedule; individual student plans may vary. Students should consult an academic advisor to create a personalized plan.

### Thesis Option

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CHE 520	Adv Transport Phenomena I	3
CHE 501	Chemical Engineering Seminar	1
Select one of the following Thesis/Project Option Electives:		3
CHE 590	Special Topics -	
SE 601	Systems Eng Fundamentals	
MA 507	Adv Ordinary Differential Eqns	
MA 508	Adv Partial Differential Eqns	
ST 540	Stat in Research I	
ST 545	Stat in Research II	
<b>Hours</b>		<b>7</b>
<b>Spring</b>		
CHE 521	Adv Transport Phenomena II	3
CHE 551	Adv Chem Engineering Modeling	3
CHE 501	Chemical Engineering Seminar	1
<b>Hours</b>		<b>7</b>
<b>Summer</b>		
CHE 592	Directed Independent Study	3
Thesis Option students are required to take Responsible Conduct of Research (RCR) training from CITI Program prior to graduation.		0
<b>Hours</b>		<b>3</b>
<b>Second Year</b>		
<b>Fall</b>		
CHE 510	Adv Chemical Thermodynamics	3
CHE 599	Thesis	3
CHE 501	Chemical Engineering Seminar	1
<b>Hours</b>		<b>7</b>
<b>Spring</b>		
CHE 525	Chemical Reactor Analysis	3
CHE 599	Thesis	3
CHE 501	Chemical Engineering Seminar <sup>1</sup>	0
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>30</b>

### Project Option

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CHE 520	Adv Transport Phenomena I	3
CHE 501	Chemical Engineering Seminar	1
Select one of the following Thesis/Project Option Electives:		3
CHE 590	Special Topics -	
SE 601	Systems Eng Fundamentals	
MA 507	Adv Ordinary Differential Eqns	
MA 508	Adv Partial Differential Eqns	
ST 540	Stat in Research I	
ST 545	Stat in Research II	
<b>Hours</b>		<b>7</b>
<b>Spring</b>		
CHE 521	Adv Transport Phenomena II	3
CHE 551	Adv Chem Engineering Modeling	3
CHE 501	Chemical Engineering Seminar	1
<b>Hours</b>		<b>7</b>

<b>Summer</b>		
CHE 592	Directed Independent Study	3
Project Option students are required to take Responsible Conduct of Research (RCR) training from CITI Program prior to graduation.		
<b>Hours</b>		<b>3</b>
<b>Second Year</b>		
<b>Fall</b>		
CHE 510	Adv Chemical Thermodynamics	3
CHE 594	Project in Chem Engineering	3
CHE 501	Chemical Engineering Seminar	1
<b>Hours</b>		<b>7</b>
<b>Spring</b>		
CHE 525	Chemical Reactor Analysis	3
CHE 594	Project in Chem Engineering	3
CHE 501	Chemical Engineering Seminar <sup>1</sup>	0
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>30</b>

## Course Option

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CHE 520	Adv Transport Phenomena I	3
Graduate Elective I	Course Option Electives <sup>2</sup>	3
MA 507	Adv Ordinary Differential Eqns	3
<b>Hours</b>		<b>9</b>
<b>Spring</b>		
CHE 521	Adv Transport Phenomena II	3
CHE 551	Adv Chem Engineering Modeling	3
Graduate Elective II	Course Option Electives <sup>2</sup>	3
<b>Hours</b>		<b>9</b>
<b>Second Year</b>		
<b>Fall</b>		
CHE 510	Adv Chemical Thermodynamics	3
MA 508	Adv Partial Differential Eqns	3
SE 601	Systems Eng Fundamentals	3
<b>Hours</b>		<b>9</b>
<b>Spring</b>		
CHE 525	Chemical Reactor Analysis	3
Graduate Electives III	Course Option Electives <sup>2</sup>	3
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>33</b>

<sup>1</sup> In Thesis and Project Options, CHE 501 must be taken four times but gives 0 credit hours the final time.

<sup>2</sup> Course Option Electives must be approved by the Department Graduate Coordinator.

# Civil, Coastal, And Environmental Engineering

## Department Information

(251) 460-6174

Department of Civil, Coastal, and Environmental Engineering website:  
<https://www.southalabama.edu/colleges/engineering/ce/index.html>  
<https://www.southalabama.edu/colleges/engineering/ce/>

## Department of Civil, Coastal, and Environmental Engineering Faculty

Title	Name
Chair	John Cleary
Professors	Kang, Webb
Associate Professors	Cleary, Islam, Patch, Steward, Wu
Assistant Professors	Do, Macdonald, Temple, Venkiteshwaran

Civil Engineering involves the design and construction of systems necessary for our modern society to function. It encompasses many technical specialties whose focus is the design of large, normally one-of-a-kind, facilities such as bridges, buildings, tunnels, highways, dams, waterways, airports, flood control systems, coastal protection systems, water supply networks, and waste treatment plants. As our society expands, challenging opportunities will continue to be available for Civil Engineers practicing in their own private firms, in large companies, or in governmental agencies.

## BSCE Program Educational Objectives

The educational objectives of the Civil Engineering undergraduate program are that, within a few years of program completion, graduates will have used the knowledge and skills gain through academic preparation and post-graduation experience so they have:

1. Advanced in the civil engineering profession, obtained professional licensure, and applied engineering knowledge and problem-solving skills to multi-disciplinary projects.
2. Incorporated economic, environmental, social, regulatory, constructability, and sustainability considerations into the practice of civil engineering.
3. Exhibited effective communication, teamwork, leadership, initiative, project management, and professional and ethical behavior as complements to technical competence.
4. Continued their technical and professional development, which may include graduate level education, continuing education, and participation in professional organizations.

## BSCE Student Outcomes

By the time of graduation from the BSCE Program, students should attain the following outcomes:

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. an ability to communicate effectively with a range of audiences
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives

6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies

The Bachelor of Science degree program in Civil Engineering at the University of South Alabama is accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria and the Program Criteria for Civil and similarly named Engineering programs.

The curriculum builds on a strong base in mathematics, physical sciences, engineering sciences, and humanities developed primarily during the freshman and sophomore years. During the junior year, students develop an understanding of the fundamentals of each area of Civil Engineering. The specialty areas include:

- Environmental Engineering
- Geotechnical Engineering
- Structural Engineering
- Transportation Engineering
- Water Resources/Coastal Engineering

The senior year focuses on design, construction practices, and the integration of more advanced knowledge in civil engineering. A comprehensive project with students participating in a design team prepares them to enter professional practice.

Satisfactory completion of the program outlined in this Bulletin leads to a degree of Bachelor of Science in Civil Engineering. Students must also comply with the College of Engineering Requirements for a Degree which are covered in this Bulletin under College of Engineering.

## BSCE Accelerated Bachelor's to Master's (ABM) Degree Option

The Department of Civil, Coastal, & Environmental Engineering allows well-qualified undergraduates to follow an "Accelerated Bachelor's to Master's" (ABM) study plan. Under ABM, up to **six credit hours of graduate coursework** can count towards both the BSCE (as Technical Electives) and the MSCE degrees, so that the MSCE degree is earned faster than usual. This applies to both thesis and non-thesis degrees. (The ABM coursework must individually satisfy the requirements of **both** degrees.) ABM students typically complete the Master's degree within one academic year after completing the undergraduate degree. See a departmental advisor for specific details.

## Degrees, Programs, or Concentrations

- Civil Engineering (BS) (p. 587)
- Civil Engineering (MS) (p. 589)
- Civil Engineering - Coastal Engineering Certificate (p. 590)
- Civil Engineering - Structural Engineering Certificate (p. 591)
- Civil Engineering - Water/Wastewater Engineering Certificate (p. 591)

## Courses

### CE 102 Intro to Civil Engineering 2 cr

Introduction to Civil Engineering as a profession and the issues facing today's Civil Engineers. This course also includes a brief introduction of civil engineering sub-disciplines, freehand sketching techniques, Computer Aided Design (CAD) drawings, and spreadsheet application to civil engineering problems.

**Prerequisite:** MA 113 Minimum Grade of D or MA 125 Minimum Grade of D

### CE 204 Surveying Fundamentals 2 cr

Applications of fundamental surveying techniques. Students will be introduced to the applications of Global Positioning Systems (GPS) and Geographical Information Systems (GIS) in Civil Engineering.

**Prerequisite:** MA 113 Minimum Grade of C or MA 115 Minimum Grade of C or MA 125 (may be taken concurrently) Minimum Grade of C and CE 102 Minimum Grade of C

**Corequisite:** CE 205

### CE 205 Surveying Fundamentals Lab 1 cr

Students will collect field data and using state-of-the-art surveying and GPS equipment. Collected data will be used in Geographical Information Systems (GIS) software.

**Prerequisite:** MA 113 Minimum Grade of C or MA 115 Minimum Grade of C or MA 125 (may be taken concurrently) Minimum Grade of C and CE 102 Minimum Grade of C

**Corequisite:** CE 204

### CE 314 CE Materials 3 cr

Study of Engineering Properties of Materials used in civil engineering including steel, concrete, asphalt, and timber.

**Prerequisite:** EG 315 Minimum Grade of D

**Corequisite:** CE 315

### CE 315 CE Materials Lab-W 1 cr

Study of experimental techniques used to evaluate engineering properties of materials. These techniques will be used to test materials used in civil engineering according to ASTM standards.

**Prerequisite:** EH 102 Minimum Grade of C or EH 105 Minimum Grade of C and EG 315 Minimum Grade of D

**Corequisite:** CE 314

### CE 340 Soil Mechanics 3 cr

An introduction to Soil Mechanics. Soil identification and engineering properties of soils. Analysis of elementary geo-hydraulics and geo-mechanics problems.

**Prerequisite:** EG 315 Minimum Grade of D and (EG 360 Minimum Grade of D or CE 365 Minimum Grade of D or ME 324 Minimum Grade of D)

**Corequisite:** CE 341

### CE 341 Geotechnical Laboratory-W 1 cr

Soil identification and classification: experimental measurement of soil properties and technical reporting.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and CE 340 (may be taken concurrently) Minimum Grade of D

**Corequisite:** CE 340

### CE 352 Intro to Transportation 3 cr

Principles of transportation engineering with emphasis on highways and traffic.

**Prerequisite:** CE 204 Minimum Grade of C and CE 205 Minimum Grade of C and ST 315 Minimum Grade of C

**CE 353 Transp-Geometric Design 3 cr**

Basic principles and techniques of highway design, including route layout, alignment, intersection design, and materials/earthwork estimation. Use of computer tools to generate and analyze highway designs.

**Prerequisite:** CE 352 Minimum Grade of D

**CE 360 Water Resources Engineering I 2 cr**

The application of fluid mechanics and other science and engineering disciplines in the development of structures, projects, and systems involving water resources. Introductions to open-channel flow, closed-conduit flow, hydraulic structures, hydraulic machinery, and groundwater flow.

**Prerequisite:** EG 360 Minimum Grade of D

**Corequisite:** CE 367

**CE 367 Hydraulics Laboratory - W 1 cr**

Laboratory and field measurement of fluid and flow properties; hydraulic laboratory practice and model stimulation techniques.

**Prerequisite:** EG 360 Minimum Grade of D or CE 365 Minimum Grade of D

**Corequisite:** CE 360

**CE 370 Intro to Enviro Eng 3 cr**

Introduction to the fundamentals of water quality characterization, water pollution hazardous waste management, water and wastewater treatment, solid waste management, waste minimization and control.

**Prerequisite:** CH 132 Minimum Grade of C and MA 238 Minimum Grade of D

**Corequisite:** CE 374

**CE 374 Intro to Environmental Eng Lab 1 cr**

Introduction to specific physical, chemical, and microbiological methods of analysis common to environmental engineering; including laboratory and field measurement of water quality characteristics and interpretation of results.

**Prerequisite:** CH 132 Minimum Grade of C and MA 238 Minimum Grade of D

**Corequisite:** CE 370

**CE 384 Structural Analysis 3 cr**

Analysis of statically determinate structures such as trusses, beams, and frames including the calculation of deflections. Introduction to analysis of indeterminate structures.

**Prerequisite:** EG 315 Minimum Grade of D

**Corequisite:** CE 385

**CE 385 Structural Analysis Lab 1 cr**

Modeling and analysis of determinate and indeterminate structures. Use of state-of-the-art structural analysis software.

**Prerequisite:** EG 315 Minimum Grade of D

**Corequisite:** CE 384

**CE 410 Construction Engineering 3 cr**

An introduction to the construction industry and the role of civil engineering in construction. Construction engineering methods including preparation of cost estimates, critical path scheduling and resource allocation. Instructor permission.

**CE 412 Mgmt & Sustainability of C.I. 3 cr**

Management and sustainability of Civil infrastructure is designed to present an overview of infrastructure engineering and management systems and to use project management, decision support tools, and life cycle costing tools in connection with infrastructure planning and assessment. Students will be presented with the understanding that achieving sustainability requires the consideration to meeting present and future human needs and respecting "triple bottom line: economic, social, and environmental goals. The course also provides a review of several important design and management tools to support sustainable development and communities.

**CE 431 Civil Engineering Design I 2 cr**

Introduction to the practice of civil engineering and the engineering design process. In depth consideration of ethical issues in engineering practice. Participation in engineering design teams for project planning, proposal development, and completion of a feasibility study. Written and oral presentations of results. Senior Capstone Course.

**Prerequisite:** CE 353 Minimum Grade of D

**Corequisite:** CE 440, CE 460, CE 470, CE 480

**CE 432 Civil Engineering Design II 4 cr**

A multidisciplinary development of a project involving analysis and design in Civil Engineering. Implementation of design concepts and methodologies from conception to final design. Completion of a comprehensive design project including cost estimates, oral and written presentation of results. A senior capstone course.

**Prerequisite:** CE 431 Minimum Grade of D

**CE 440 Intro to Geotech Eng 3 cr**

An Introduction to Geotechnical Engineering designed to provide tools to analyze geomechanical and geohydraulic problems associated with the design of foundations, retaining structures, slopes and other geotechnically related designs.

**Prerequisite:** CE 340 (may be taken concurrently) Minimum Grade of D and CE 341 Minimum Grade of D

**CE 442 Foundation Engineering 3 cr**

Principles of foundation analysis, design and construction in engineering practice.

**Prerequisite:** CE 440 Minimum Grade of D

**CE 452 Transportation Geometric Design 3 cr**

This course will provide students with an understanding of the basic principles and techniques of highway design. This will include laying out potential routes, design of the alignment and intersections, and evaluation of earthwork requirements. The student should be able to understand and apply these principles to highway design problems. The student should also be able to use existing computer tools to generate and analyze designs. Upon completion, students should be prepared to work in the field of highway design.

**Prerequisite:** CE 352 Minimum Grade of D

**CE 460 Water Resources Engineering II 3 cr**

The application of hydrologic and hydraulic principles for hydrologic analysis, frequency analysis, flood routing, hydrologic simulation, urban hydrology, floodplain hydraulics, and coastal engineering.

**Prerequisite:** CE 360 Minimum Grade of D and CE 367 Minimum Grade of D

**CE 466 Coastal and Harbor Eng 3 cr**

An introduction to the principles of coastal hydraulic and sedimentary processes and the design of coastal and harbor works such as ship channels, marinas, jetties, breakwaters, groins, seawalls and beach nourishment projects.

**Prerequisite:** CE 460 (may be taken concurrently) Minimum Grade of D

**CE 470 Water-Wastewater Trtmt Design 3 cr**

Development of the principles of design for components of water supply and wastewater treatment facilities, including drinking water distribution and wastewater collection systems.

**Prerequisite:** CE 360 Minimum Grade of D and CE 370 Minimum Grade of D and CE 374 Minimum Grade of D

**Corequisite:** CE 471

**CE 471 Water-Wastewater Design Lab 1 cr**

Application of design principles and criteria to analyze, design, and evaluate water and wastewater treatment facility components, including water distribution and wastewater collection systems.

**Prerequisite:** CE 360 Minimum Grade of D and CE 370 Minimum Grade of D and CE 374 Minimum Grade of D

**Corequisite:** CE 470

**CE 474 Industrial Waste Treatment 3 cr**

Topics in Industrial Waste Treatment unit processes and their design, including those addressing wastewater treatment, air pollution control, solid waste, and hazardous management.

**Prerequisite:** CE 470 Minimum Grade of D

**CE 480 Design of Steel Structures 3 cr**

Design of Steel Trusses, Girders, Building Frames, and other Steel Structures.

**Prerequisite:** CE 384 Minimum Grade of D and CE 314 Minimum Grade of D and CE 315 Minimum Grade of D

**Corequisite:** CE 481

**CE 481 Steel Design Lab 1 cr**

Application of structural steel design methods to specific cases.

**Prerequisite:** CE 384 Minimum Grade of D and CE 314 Minimum Grade of D and CE 315 Minimum Grade of D

**Corequisite:** CE 480

**CE 482 Timber Design 3 cr**

This course will cover the design of timber structures. Design loads, structural behavior, properties and grades of wood will be covered. Design of beams, columns, diaphragms, shear walls, structural glued laminated timber, and structural connections. Instructor Approval Required

**Prerequisite:** CE 384 Minimum Grade of D and CE 385 Minimum Grade of D

**CE 485 Reinforced Concrete Design 3 cr**

Fundamentals of reinforced concrete analysis and design. Design of beams, one-way slabs, short columns, and single footings. Calculations of cracking and deflection of beams.

**Prerequisite:** CE 384 Minimum Grade of D and CE 314 Minimum Grade of D and CE 315 Minimum Grade of D

**Corequisite:** CE 486

**CE 486 Reinforced Concrete Design Lab 1 cr**

Integrated reinforced concrete design problems similar to those found in practice will be presented. Students will solve similar problems in class during the lab period.

**Prerequisite:** CE 384 Minimum Grade of D and CE 314 Minimum Grade of D and CE 315 Minimum Grade of D

**Corequisite:** CE 485

**CE 490 Special Topics 1-4 cr**

Topics of current civil engineering interest.

**CE 494 Directed Studies 1-4 cr**

Directed study, under the guidance of a faculty advisor, of a topic from the field of civil engineering not offered in a regularly scheduled course. Requires department chair permission.

**CE 499 Honors Senior Project 1-6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project, relevant to the field of Civil Engineering study, that will lead to a formal presentation at the Annual Honors Student Colloquium. The senior project will be judged and graded by three faculty, chaired by the honors mentor. This course is required for Honors recognition. A minimum of 4 credit hours is required, but a student may enroll for a maximum of 6 credit hours over two semesters. Prerequisites: Completion of the most advanced required course in the subdiscipline of the project (CE 440, CE 366, CE 470, or CE 384) and completion of an approved project prospectus.

**Prerequisite:** CE 352 Minimum Grade of C or CE 366 Minimum Grade of D or CE 384 Minimum Grade of C or CE 443 Minimum Grade of C or CE 470 Minimum Grade of C

**CE 503 Intro to Coastal Engineering 3 cr**

This graduate course provides students with an introduction to the coastal design environment. The goal of this course is to orient civil engineers, or students from related degree programs, to fundamental coastal engineering concepts. These concepts are important as they make the practice of civil engineering unique due to the complex tide, wave, and sediment characteristics found along the coast. These coastal systems are dynamic, ecologically sensitive, critical to the nation's economy, and are highly vulnerable to storms and the impacts of climate change.

**CE 510 Construction Engineering 3 cr**

An introduction to the construction industry and the role of civil engineering in construction. Construction engineering methods including preparation of cost estimates, critical path scheduling and resource allocation. Instructor permission required.

**CE 512 Mgmt & Sustainability of Infr 3 cr**

This course is designed to present an overview of infrastructure systems and how to manage and maintain these systems. Project management, decision support tools, and life cycle costing tools will be presented, in connection with infrastructure planning and assessment. Infrastructure sustainability will also be addressed, particularly considering the "triple bottom line" of economic, social, and environmental goals. The course also provides a review of several important design and management tools to support sustainable development and communities. A course project is required.

**CE 540 Advanced Soil Mechanics 3 cr**

Shearing strength and deformation behavior of soils with applications to retaining structures, slopes and bearing capacity. Behavior of cohesionless soils and cohesive soils under drained and undrained conditions. Permeability, steady state flow and effective stress in soils. Consolidation theory.

**Prerequisite:** CE 440 Minimum Grade of C

**CE 542 Foundation Engineering 3 cr**

This course is to provide advanced knowledge of selected geotechnical principals for analysis, design and construction of a variety of foundations systems. This course is dually listed with an equivalent 400 level course(CE 442).

**Prerequisite:** CE 440 Minimum Grade of C

**CE 547 Groundwater 3 cr**

Principals of fluid flow through porous media, well hydraulics. Ground water contamination, including principals that govern fate, transport, and remediation.

**Prerequisite:** CE 340 Minimum Grade of C and CE 470 Minimum Grade of C

**CE 551 Traffic Engineering 3 cr**

This course will focus on traffic flow parameters and their influence on roadway traffic conditions, with emphasis on traffic data collection, traffic safety analysis, roadway markings, traffic signs, traffic signal timing and signal capacity analysis, and traffic management systems.

**Prerequisite:** CE 352 Minimum Grade of C

**CE 552 Trans. Geometric Design 3 cr**

This course will provide students with an understanding of the basic principles and techniques of highway design. This will include laying out potential routes, design of the alignment and intersections, and evaluation of earthwork requirements. The student should be able to understand and apply these principles to highway design problems. The student should also be able to use existing computer tools to generate and analyze designs. Upon completion, students should be prepared to work in the field of highway design.

**Prerequisite:** CE 352 Minimum Grade of C

**CE 553 Transportation Systems Eval 3 cr**

This course will focus on concepts and principles of transportation economic analysis, transportation costs and benefits, user and nonuser consequences, methods of evaluation of plans and projects, environmental impact assessments, and transportation programming and management. Requires Instructor Permission.

**CE 560 Coastal Hydrodynamics 3 cr**

Theory and analysis of advanced coastal and estuarine hydrodynamics. Potential topics to be covered include: wave mechanics; tidal dynamics; coastal and estuarine circulation; and transport and mixing in coastal waters.

**Prerequisite:** CE 501 Minimum Grade of C

**CE 563 Hydrodynamic Modeling 3 cr**

Theory and application of numerical models to coastal hydrodynamics. Potential topics to be covered include: overview of numerical simulation techniques; wave transformation processes; engineering wave models; principles of circulation; and advanced circulation models.

**Prerequisite:** CE 501 Minimum Grade of C

**CE 566 Coastal and Harbor Engineering 3 cr**

Advanced principles of coastal hydraulic and sedimentary processes and the design of coastal and harbor works such as ship channels, marina, jetties, breakwaters, groins, seawalls, and beach nourishment projects. This course is dually listed with an equivalent 400 level course (CE 466).

**Prerequisite:** CE 460 Minimum Grade of C and CE 501 Minimum Grade of C

**CE 571 Biological Wastewater Treatment 3 cr**

Theory, analysis and design criteria of biological treatment systems for municipal and industrial wastewaters, including suspended and attached growth processes in both the aerobic and anaerobic environments.

**Prerequisite:** CE 470 Minimum Grade of C

**CE 572 Physical Wastewater Treatment 3 cr**

Advanced theory and applications in physical and chemical wastewater treatment. Topics covered include mass balance; reactor design, modeling, and analysis; filtration; mixing and flocculation; flotation; dissolved oxygen transfer optimization; chemical treatment of nutrient loads; disinfection; and residuals management.

**Prerequisite:** CE 470 Minimum Grade of C

**CE 574 Industrial Waste Treatment 3 cr**

Topics in Industrial Waste Treatment unit processes and their design, including those addressing waste water treatment, air pollution, solid waste, and hazardous waste management. This course is dually listed with an equivalent 400 level course (CE 474). Credit for both CE 474 and CE 574 is not permitted.

**Prerequisite:** CE 470 Minimum Grade of C

**CE 579 Fundamentals Environmental Eng 3 cr**

Fundamentals of water quality characterization, water pollution, hazardous waste management, water and wastewater treatment, solid waste management, and waste minimization and control. This course includes a comprehensive project in addition to the lecture class. Note: This course is a core course for MS degree students in the Environmental Toxicology Program and not intended for Engineering Majors. Instructor Permission. (This course is dual listed with CE 370.)

**Prerequisite:** (CH 116 Minimum Grade of C or CH 132 Minimum Grade of C)

**CE 580 Steel Design 3 cr**

Design of steel trusses, girders, building frames, and other steel structures. This course is dually listed with an equivalent 400 level course (CE 480).

**Prerequisite:** CE 384 Minimum Grade of C or CE 385 Minimum Grade of C

**Corequisite:** CE 581

**CE 581 Steel Design Lab 1 cr**

Application of structural steel design methods to specific cases. This course is dually listed with an equivalent 400 level course (CE 481).

**Prerequisite:** CE 384 Minimum Grade of C and CE 385 Minimum Grade of C

**Corequisite:** CE 580

**CE 582 Timber Design 3 cr**

This course will cover the design of timber structures. Design loads, structural behavior, properties and grades of wood will be covered. Design of beams, columns, diaphragms, shearwalls, structural glued laminated timber, and structural connections. This course is dually listed with an equivalent 400 level course (CE 482). Instructor Approval Required.

**CE 583 Advanced Steel Design 3 cr**

This course covers the design of built-up members, composite beams, columns and floors. Design of advanced bolted and welded connections will also be covered. Students will use state-of-the-art software to model and design complex steel structures.

**Prerequisite:** CE 480 Minimum Grade of C or CE 481 Minimum Grade of C

**CE 584 Advanced Structural Analysis 3 cr**

Students will be introduced to the analysis of indeterminate structures using classical and matrix methods. Students will also be introduced to advanced structural modeling techniques using state-of-the-art software.

**Prerequisite:** CE 384 Minimum Grade of C and CE 385 Minimum Grade of C

**CE 585 Concrete Design 3 cr**

Fundamentals of reinforced concrete analysis and design. Design of beams, one-way slabs, short columns, and single footings. Calculations of cracking and deflection of beams. This course is dually listed with an equivalent 400 level course (CE 485).

**Prerequisite:** CE 384 Minimum Grade of C or CE 385 Minimum Grade of C

**Corequisite:** CE 586

**CE 586 Concrete Design Lab 1 cr**

Integrated reinforced concrete design problems similar to those found in practice will be presented. Students will solve similar problems in class during the lab period. This course is dually listed with an equivalent 400 level course (CE 486).

**Prerequisite:** CE 384 Minimum Grade of C and CE 385 Minimum Grade of C

**Corequisite:** CE 585

**CE 587 Advanced Concrete Design 3 cr**

Students will be introduced to the analysis and design of reinforced concrete footings, retaining walls, two-way floor systems, long columns, beams subjected to torsion and deep beams.

**Prerequisite:** CE 485 Minimum Grade of C and CE 486 Minimum Grade of C

**CE 588 Prestressed Concrete Design 3 cr**

Students will be introduced to the concepts of prestressing, loss of prestress, design of prestressed beams, columns and slabs.

**Prerequisite:** CE 485 Minimum Grade of C and CE 486 Minimum Grade of C

**CE 590 Special Topics - 1-4 cr**

Topics of current civil engineering interest.

**CE 592 Directed Independent Study - 1-3 cr**

Directed study, under the guidance of a faculty advisor, of a topic from the field of Civil Engineering not offered in a regularly scheduled course. Requires Instructor Permission.

**CE 594 Projects in Civil Engineering 1-3 cr**

May be repeated for credit. Requires approved proposal and consent of director of engineering graduate studies.

**CE 599 Thesis 1-6 cr**

Thesis research. May be taken more than once. Requires approved prospectus.

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
CLEARY, JOHN C. (cleary@southalabama.edu)	Civil Engineering	Associate Professor	BCE, Cleveland State University MS, Cleveland State University PHD, Case Western Reserve U
DO, TRUNG Q. (trungdo@southalabama.edu)	Civil Engineering	Assistant Professor	MS, National University PHD, Colorado State University
ISLAM, SAMANTHA (sislam@southalabama.edu)	Civil Engineering	Associate Professor	BS, Bangladesh Univ of Engineer MS, Purdue University-Main Campus  PHD, Purdue University-Main Campus
KANG, MIN WOOK (mwkang@southalabama.edu)	Civil Engineering	Professor	BS, Hanyang University MS, Hanyang University MS, University of Maryland-Cllg Pk PHD, University of Maryland-Cllg Pk
MACDONALD, REBECCA NORWOOD (rmacdonald@southalabama.edu)	Civil Engineering	Assistant Professor	BS, Georgia Inst of Tech - Main MA, Virginia Commonwealth U MS, University of Alabama PHD, University of Alabama
PATCH, STEPHANIE MARIE (spatch@southalabama.edu)	Civil Engineering	Associate Professor	BSCE, Georgia Inst of Tech - Main MSCE, Georgia Inst of Tech - Main PHD, Virginia Polytechnic Inst and
STEWART, ERIC JOHN (estewart@southalabama.edu)	Civil Engineering	Associate Professor	BS, University of CO- Colorado Sp MS, Louisiana Tech University PHD, Louisiana Tech University
TEMPLE, NIGEL AUSTIN (natemple@southalabama.edu)	Civil Engineering	Assistant Professor	BS, Virginia Polytechnic Inst and MS, University of Alabama PHD, Mississippi State University
VENKITESHWARAN, KAUSHIK (kvenkiteshwaran@southalabama.edu)	Civil Engineering	Assistant Professor	MS, Clarkson University PHD, Marquette University
WEBB, BRET M. (bwebb@southalabama.edu)	Civil Engineering	Professor	BS, University of Florida MS, University of Florida PHD, University of Florida
WU, SHENGHUA (shenghuawu@southalabama.edu)	Civil Engineering	Associate Professor	BS, Central South University MS, Hunan Normal University BS, Miscellaneous Institution 01 PHD, Washington State University

# Civil Engineering (BS)

## Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		<b>51</b>
<b>Major Requirements</b>		
<i>Civil Engineering Requirements</i>		
Complete the following:		
EG 101	Intro to Engineering & Design (& Lab) or EG 201 for LINK students)	2
ST 315	Applied Probability-Statistics	3
EG 231	Intro to Ethics and Economics	3
EG 283	Statics	3
EG 284	Dynamics	3
EG 315	Mechanics of Materials	3
EG 360	Fluid Mechanics	3
CE 102	Intro to Civil Engineering	2
CE 204	Surveying Fundamentals	2
CE 205	Surveying Fundamentals Lab	1
CE 314	CE Materials	3
CE 315	CE Materials Lab-W	1
CE 340	Soil Mechanics	3
CE 341	Geotechnical Laboratory-W	1
CE 352	Intro to Transportation	3
CE 353	Transp-Geometric Design <sup>1</sup>	3
CE 360	Water Resources Engineering I	2
CE 367	Hydraulics Laboratory - W	1
CE 370	Intro to Enviro Eng	3
CE 374	Intro to Environmental Eng Lab	1
CE 384	Structural Analysis	3
CE 385	Structural Analysis Lab	1
CE 431	Civil Engineering Design I	2
CE 432	Civil Engineering Design II	4
CE 440	Intro to Geotech Eng <sup>1</sup>	3
CE 460	Water Resources Engineering II <sup>1</sup>	3
CE 470	Water-Wastewater Trtmtnt Design <sup>1</sup>	3
CE 471	Water-Wastewater Design Lab	1
<i>Science Elective</i>		
Select one of the following:		4
BLY 101 & 101L	Life Science I and Life Science I Laboratory	
BLY 121 & 121L	General Biology I and General Biology I Lab	
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab	
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab	
GY 111 & 111L	Physical Geology and Physical Geology Lab	
MAS 134 & 134L	Ocean Science and Ocean Science Lab	
<i>Civil Engineering Structural Design</i>		
Select one of the following:		4

CE 480 & CE 481	Design of Steel Structures and Steel Design Lab <sup>1</sup>	
CE 485 & CE 486	Reinforced Concrete Design and Reinforced Concrete Design Lab <sup>1</sup>	
<i>Civil Engineering Technical Electives <sup>2</sup></i>		
A. Select one or two of the following:		3 or 6
CE 442	Foundation Engineering	
CE 466	Coastal and Harbor Eng	
CE 474	Industrial Waste Treatment	
CE 480 & CE 481	Design of Steel Structures and Steel Design Lab	
CE 482	Timber Design	
CE 485 & CE 486	Reinforced Concrete Design and Reinforced Concrete Design Lab	
CE 490	Special Topics	
B. Select up to one of the following:		4 or 3 or 0
CE 410	Construction Engineering	
CE 412	Mgmt & Sustainability of C.I.	
EG 450	Intro to Systems Engineering	
GIT 460	Intro to GIT	
<b>Minor Requirements</b>		
A minor is not required for this degree program		0
<b>Total Hours</b>		<b>132-131</b>

## Footnote

<sup>1</sup> Students must complete all five terminal subdiscipline courses (CE 353, CE 440, CE 460, CE 470 and structural design course) with a "C" grade or better.

<sup>2</sup> Two technical electives are required, at least one of which must be a "design-oriented" course. Students can take two courses from List A (design oriented) or one course from List A and one course from List B (non-design oriented).

## General Education Requirements

Code	Title	Hours
<b>Area I – Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I (Students who earn an English ACT score of 27, or a written SAT score of 610, can opt out of EH 101.)	3
EH 102 or EH 105	English Composition II or Honors Composition - H	3
<b>Area II – Humanities &amp; Fine Arts</b>		
A. Select one of the following:		3
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	

EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
B. Select one of the following:		3
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	

C. Complete the following:		
CA 110	Public Speaking	3

**Area III – Natural Sciences & Mathematics**

Complete the following:		
MA 125	Calculus I	4
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	4

**Area IV – History, Social & Behavioral Sciences**

A. Select 3 hours from the following:		3
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	

B. Select 3 hours from the following:		3
AN 100	Intro to Cultural Anthropology	
AN 101	Intro Archaeology-Bio Anthro	
CA 100	Intro to Communication	
CA 211	Interpersonal Comm	
ECO 215	Prin of Microeconomics	
ECO 216	Prin of Macroeconomics	
GEO 114	People, Places, Environment	
GEO 115	World Regional Geography	
GS 101	Intro to Gender Studies	
IS 100	Global Issues	
IST 201	Seasons of Life	
PSC 130	Intro to US Government	
PSY 120	Introduction to Psychology	
PSY 250	Life Span Development	
SY 109	Introductory Sociology	
SY 112	Social Problems	

C. Select a further 3 hours from either List A or B above in Area IV		3
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**Area V**

Complete the following:		
MA 126	Calculus II	4
MA 227	Calculus III	4
MA 238	Differential Equations I	3

**Total Hours** **51**

**Additional Information**

It is important that students make adequate progress in the Civil Engineering program. Satisfactory completion of a set of fundamental courses is required before a student is allowed to take advanced courses. Professional Component Standing (PCS) is awarded by the Chair of the Department when the student completes the College of Engineering PCS requirements and the CCEE Departmental PCS requirements.

**College of Engineering PCS Courses**

Minimum Grade C

Code	Title	Hours
EH 101	English Composition I	3
EH 102	English Composition II	3
CH 131	General Chemistry I (+Lab CH 131L)	4
MA 125	Calculus I	4
MA 126	Calculus II	4
PH 201	Calculus-Based Physics I (+Lab PH 201L)	4

**Civil, Coastal, and Environmental Engineering PCS Courses**

Minimum Grade C

Code	Title	Hours
CH 132	General Chemistry II (+Lab CH 132L)	4
MA 227	Calculus III	4
CE 102	Intro to Civil Engineering	2

Students who fail to maintain at least a 2.00 GPA overall at the University of South Alabama may be required to take or repeat appropriate courses as specified by the department chair to correct their deficiencies and may not be permitted to continue in 300- and 400-level engineering courses.

**Graduation Plan**

(131 Total Hours)

The Sample 4-year plan is designed as a guide for students preparing for their course selections. This information provides only a suggested schedule. Actual course selections should be made in consultation with an advisor. Courses listed as Milestones are required to obtain the Professional Component Standing (PCS). Two designated writing (W) courses are required with at least one course chosen from offerings in the student's major or minor. Courses carrying this required credit are identified in the University Bulletin by a W after the course title.

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
MA 125	Calculus I <sup>1</sup>	4
CH 131 & 131L	General Chemistry I and General Chemistry I Lab <sup>1</sup>	4
EG 101	Intro to Engineering & Design (and EG 101 Lab)	2
EH 101	English Composition I <sup>1</sup>	3
General Education	Area II, Or IV <sup>2</sup>	3
<b>Milestone Notes</b>		
Must complete at least 12 hours with a 2.0 or higher GPA		
		<b>Hours</b>
		<b>16</b>
<b>Spring</b>		
MA 126	Calculus II <sup>1</sup>	4
CH 132 & 132L	General Chemistry II and General Chemistry II Lab <sup>1</sup>	4
EH 102	English Composition II <sup>1</sup>	3

CE 102	Intro to Civil Engineering <sup>1</sup>	2
PH 201	Calculus-Based Physics I <sup>1</sup>	4
<b>Milestone Notes</b>		
MA 125	Calculus I	
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	
EH 101 or EH 105	English Composition I or Honors Composition - H	
<b>Hours</b>		<b>17</b>
<b>Second Year</b>		
<b>Fall</b>		
MA 227	Calculus III <sup>1</sup>	4
Select one of the following:		4
BLY 101	Life Science I (and Lab)	
BLY 121	General Biology I (and Lab)	
GY 111	Physical Geology (and Lab)	
GEO 101	Environmental Geography (and Lab)	
GEO 102	Earth and the Environment (and Lab)	
MAS 134	Ocean Science (and Lab)	
CE 204	Surveying Fundamentals	2
CE 205	Surveying Fundamentals Lab	1
EG 283	Statics	3
General Education	Area II or IV <sup>2</sup>	3
<b>Milestone Notes</b>		
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	
MA 126	Calculus II	
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
MA 238	Differential Equations I	3
ST 315	Applied Probability-Statistics	3
EG 284	Dynamics	3
EG 315	Mechanics of Materials	3
General Education	Area II or IV <sup>2</sup>	3
General Education	Area II or IV <sup>2</sup>	3
<b>Milestone Notes</b>		
MA 227	Calculus III (Science Elective)	
EG 283	Statics (Science Elective)	
EH 102	English Composition II (Science Elective)	
Science Elective		
CE 204	Surveying Fundamentals	
CE 205	Surveying Fundamentals Lab	
<b>Hours</b>		<b>18</b>
<b>Third Year</b>		
<b>Fall</b>		
CE 314	CE Materials	3
CE 315	CE Materials Lab-W	1
CE 352	Intro to Transportation	3
CE 384	Structural Analysis	3
CE 385	Structural Analysis Lab	1
EG 231	Intro to Ethics and Economics	3
EG 360	Fluid Mechanics	3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
CE 340	Soil Mechanics	3
CE 341	Geotechnical Laboratory-W	1
CE 353	Transp-Geometric Design	3
CE 360	Water Resources Engineering I	2
CE 367	Hydraulics Laboratory - W	1
CE 370	Intro to Enviro Eng	3

CE 374	Intro to Environmental Eng Lab	1
General Education	Area II or IV <sup>2</sup>	3
<b>Milestone Notes</b>		
Apply for graduation		
<b>Hours</b>		<b>17</b>
<b>Fourth Year</b>		
<b>Fall</b>		
CE 431	Civil Engineering Design I	2
CE 440	Intro to Geotech Eng	3
CE 470	Water-Wastewater Trtmt Design	3
CE 471	Water-Wastewater Design Lab	1
CE 480 or CE 485	Design of Steel Structures or Reinforced Concrete Design	3
CE 481 or CE 486	Steel Design Lab or Reinforced Concrete Design Lab	1
CE 460	Water Resources Engineering II	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
CE 432	Civil Engineering Design II	4
Technical Elective	Civil Engineering Electives <sup>2</sup>	3
Technical Elective	Civil Engineering Electives <sup>2</sup>	3
General Education	Area II or IV <sup>2</sup>	3
<b>Hours</b>		<b>13</b>
<b>Total Hours</b>		<b>131</b>

<sup>1</sup> Courses required for Professional Component Standing (PCS) with a "C" grade or better.

<sup>2</sup> See Degree Requirements

## Notes

- Students must have a GPA of at least 2.0 in Civil Engineering major courses to graduate.
- Students must complete all five terminal subdiscipline courses (CE 353, CE 440, CE 460, CE 470, and Structural Design) with a "C" grade or better.
- Students who earn an English ACT score of 27, or a written SAT score of 610, can opt out of EH 101
- **Students not Term 1 - Calculus I ready will exceed the 131 hours required for this degree. If math is not started prior to Fall-Year 1, the four-year graduation timetable is likely to be extended. Students with ACT Math scores 21 and below should begin math courses in the summer before Fall-Year 1.**

# Civil Engineering (MS)

## Degree Requirements

The program leading to the Master of Science in Civil Engineering focuses on civil engineering in the coastal environment and allows for specialization in several possible civil engineering sub-disciplines: Environmental Engineering, Geotechnical Engineering, Structural Engineering, Transportation Engineering, or Water Resources/Coastal Engineering. Program admission and MS Degree requirements, as well as plan of study options (thesis or coursework options), are described under the College of Engineering section of this Bulletin. Many graduate courses in Civil Engineering are offered in late afternoon, early evening, or online to accommodate practicing engineers – see the detailed degree requirements.

## Admission to The MSCE Program

1. Regular Admission requirements:
  - a. A Bachelor's degree in Engineering in a relevant field.
  - b. A grade-point average of 3.0 or greater (A=4.0) on all undergraduate work.
  - c. Verification of registration by examination as a Professional Engineer (P.E.) can be substituted for the GPA requirement.
  - d. For international students whose native language is not English, at least one of the following minimum scores:
    - Internet-based TOEFL score 71 or higher, or
    - IELTS band 6.5 or higher, or
    - Duolingo minimum score 100, or
    - ITEP minimum score 3.7, or
    - Pearson Academic minimum score 48.
2. Provisional Admission requirements
  - a. A Bachelor's degree in Engineering or in a field acceptable to the department is required. Depending on the student's background, additional undergraduate preparatory courses may be required. These courses will not count toward the Master's degree.
  - b. A minimum grade-point average of 2.5 (A=4.0) on all undergraduate work.
  - c. For international students whose native language is not English, at least one of the following minimum scores:
    - Internet-based TOEFL score 71 or higher, or
    - IELTS band 6.5 or higher, or
    - Duolingo minimum score 100, or
    - ITEP minimum score 3.7, or
    - Pearson Academic minimum score 48.

**Although official scores on the Graduate Record Exam (GRE) are not required, students are often required to present GRE scores to be eligible for assistantships or fellowships.**

Admission may be granted in special cases where a holistic evaluation of the applicant's credentials is appropriate.

The minimum credit hour requirements for the different options for the MSCE degree are:

- Thesis Option: 30 credit hours
- Course Option: 30 credit hours

## Graduation Plan

(30 Total Hours)

### Thesis Option

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CE 503	Intro to Coastal Engineering	3
CE Sub-Discipline Course		3
SE 601	Systems Eng Fundamentals	3
<b>Hours</b>		<b>9</b>
<b>Spring</b>		
CE Sub-Discipline Course		3
Supporting Course		3
<b>Hours</b>		<b>6</b>

<b>Summer</b>		
CE Sub-Discipline Course		3
<b>Hours</b>		<b>3</b>
<b>Second Year</b>		
<b>Fall</b>		
CE Sub-Discipline Course		3
Supporting Course		3
<b>Hours</b>		<b>6</b>
<b>Spring</b>		
CE 599	Thesis	3
CE 599	Thesis	3
Thesis Option students are required to take Responsible Conduct of Research (RCR) training from CITI Program prior to graduation.		0
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>30</b>

### Course Option

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CE 503	Intro to Coastal Engineering	3
CE Sub-Discipline Course		3
SE 601	Systems Eng Fundamentals	3
<b>Hours</b>		<b>9</b>
<b>Spring</b>		
CE Sub-Discipline Course		3
Supporting Course		3
<b>Hours</b>		<b>6</b>
<b>Summer</b>		
CE Sub-Discipline Course		3
<b>Hours</b>		<b>3</b>
<b>Second Year</b>		
<b>Fall</b>		
CE Sub-Discipline Course		3
Supporting Course		3
<b>Hours</b>		<b>6</b>
<b>Spring</b>		
CE Sub-Discipline Course		3
Supporting Course		3
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>30</b>

## Civil Engineering - Coastal Engineering Certificate

### Certificate Details

The Department offers Graduate Certificates in three focus areas: Coastal Engineering, Structural Engineering, and Water/ Wastewater Engineering. Each Certificate requires the completion of 12 credit hours (four classes) in one of the three focus areas. Upon completion, a Graduate Certificate is awarded; however, all earned credits are full graduate credits and can either be applied toward a MSCE degree at USA or transferred to other institutions. For acceptance, graduate certificate applicants should have a civil engineering Bachelor's degree (or closely related equivalent) and appropriate course prerequisites. The program requires satisfactory completion of 12 credit hours with a minimum GPA of 3.0 to be awarded the Certificate.

### Admission to the Certificate Program

Regular Admission requirements:

1. A Bachelor's degree in Civil Engineering or a closely related field.
2. A grade-point average of 3.0 or greater (A=4.0) on all undergraduate work.
3. Verification of registration by examination as a Professional Engineer (P.E.) can be substituted for the GPA requirement.
4. International students whose native language is not English must submit official scores showing a score of 71 or higher on the internet-based TOEFL, or an IELTS band score of 6.5 or higher, or a Duolingo minimum score of 100, or an iTEP minimum score of 3.7, or a Pearson Academic minimum score of 48.

Admission may be granted in special cases where a holistic evaluation of the applicant's credentials is appropriate.

### Certificate Program Requirements

Code	Title	Hours
CE 503	Intro to Coastal Engineering	3
CE 566	Coastal and Harbor Engineering	3
Select at least 6 credits from the following:		6
CE 560	Coastal Hydrodynamics	3
CE 563	Hydrodynamic Modeling	3
CE 590	Special Topics - (Coastal Hazards or Nature-Based Solutions)	1-4

## Civil Engineering - Structural Engineering Certificate

### Certificate Details

The Department offers Graduate Certificates in three focus areas: Coastal Engineering, Structural Engineering, and Water/ Wastewater Engineering. Each Certificate requires the completion of 12 credit hours (four classes) in one of the three focus areas. Upon completion, a Graduate Certificate is awarded; however, all earned credits are full graduate credits and can either be applied toward a MSCE degree at USA, or transferred to other institutions. For acceptance, graduate certificate applicants should have a civil engineering Bachelor's degree (or closely related equivalent) and appropriate course prerequisites. The program requires satisfactory completion of 12 credit hours with a minimum GPA of 3.0 to be awarded the Certificate.

#### Admission to the Certificate Program

Regular Admission requirements:

1. A Bachelor's degree in Civil Engineering or a closely related field.
2. A grade-point average of 3.0 or greater (A=4.0) on all undergraduate work.
3. Verification of registration by examination as a Professional Engineer (P.E.) can be substituted for the GPA requirement.
4. International students whose native language is not English must submit official scores showing a score of 71 or higher on the internet-based TOEFL, or an IELTS band score of 6.5 or higher, or a Duolingo minimum score of 100, or an iTEP minimum score of 3.7, or a Pearson Academic minimum score of 48.

Admission may be granted in special cases where a holistic evaluation of the applicant's credentials is appropriate.

## Structural Engineering Certificate Program Requirements

Code	Title	Hours
Select four of the following:		
CE 582	Timber Design	12
CE 583	Advanced Steel Design	
CE 584	Advanced Structural Analysis	
CE 587	Advanced Concrete Design	
CE 588	Prestressed Concrete Design	
CE 590	Special Topics -	

**Total Hours** 12

## Civil Engineering - Water/Wastewater Engineering Certificate

### Certificate Details

The Department offers Graduate Certificates in three focus areas: Coastal Engineering, Structural Engineering, and Water/ Wastewater Engineering. Each Certificate requires the completion of 12 credit hours (four classes) in one of the three focus areas. Upon completion, a Graduate Certificate is awarded; however, all earned credits are full graduate credits and can either be applied toward a MSCE degree at USA, or transferred to other institutions. For acceptance, graduate certificate applicants should have a civil engineering Bachelor's degree (or closely related equivalent) and appropriate course prerequisites. The program requires satisfactory completion of 12 credit hours with a minimum GPA of 3.0 to be awarded the Certificate.

#### Admission to the Certificate Program

Regular Admission requirements:

1. A Bachelor's degree in Civil Engineering or a closely related field.
2. A grade-point average of 3.0 or greater (A=4.0) on all undergraduate work.
3. Verification of registration by examination as a Professional Engineer (P.E.) can be substituted for the GPA requirement.
4. International students whose native language is not English must submit official scores showing a score of 71 or higher on the internet-based TOEFL, or an IELTS band score of 6.5 or higher, or a Duolingo minimum score of 100, or an iTEP minimum score of 3.7, or a Pearson Academic minimum score of 48.

Admission may be granted in special cases where a holistic evaluation of the applicant's credentials is appropriate.

## Water/Wastewater Engineering Certificate Program Requirements

Code	Title	Hours
CE 571	Biological Wastewater Treatment (required)	3
CE 572	Physical Wastewater Treatment (required)	3
Select at least 6 credits from the following:		
CE 574	Industrial Waste Treatment	3
CE 590	Special Topics - (Decentralized Wastewater Systems or Natural Treatment Systems)	1-4
CH 514	Environmental Chemistry	3

# Electrical and Computer Engineering

## Department Information

(251) 460-6117

Department of Electrical and Computer Engineering website  
<https://www.southalabama.edu/colleges/engineering/ece/index.html>  
 (<https://www.southalabama.edu/colleges/engineering/ece/>)

## Department of Electrical and Computer Engineering Faculty

Title	Name
Interim Chair	Mohamed El-Sharkh
Professors	Gong, Kirkici, Wang, Woods
Associate Professors	Khan, Latif, Russ, Spencer
Assistant Professors	Shaban, Touma

The Department of Electrical and Computer Engineering offers the degrees of Bachelor of Science in Electrical Engineering (BSEE) and Bachelor of Science in Computer Engineering (BSCpE), both granted by the College of Engineering. The BSCpE program is administered by the ECE Department in collaboration with the School of Computing. The ECE Department also offers the degree of Master of Science in Electrical Engineering.

## BSEE Program Educational Objectives

The program educational objectives (PEOs) of the Electrical Engineering B.S. degree program are to produce graduates who, during their first few years after graduation, will:

1. Achieve professional advancement with increasing responsibility, leadership, and mentorship.
2. Function effectively on multidisciplinary teams, and individually, to develop and apply electrical engineering solutions within a global, societal, and environmental context.
3. Communicate effectively and manage resources skillfully as members and leaders of their profession.
4. Advance professional competence through continuous learning such as studying for advanced degrees, professional registration, and leadership through ethical standards and professionalism.

## BSEE Student Outcomes

By the time of graduation from the Electrical Engineering B.S. program, students should attain the following outcomes:

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. an ability to communicate effectively with a range of audiences
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts

5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

The BSEE curriculum is designed to ensure the attainment of the student outcomes.

The Bachelor of Science degree program in Electrical Engineering at the University of South Alabama is accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>, (<http://www.abet.org>) under the General Criteria and the Program Criteria for Electrical, Computer, Communications, Telecommunication(s) and similarly named Engineering programs.

Electrical Engineering is among the fastest evolving disciplines in our technological society. Engineering developments in electrical technology have provided, in a substantial way, improvement in the standard of living of humanity. The domain of the electrical engineer reaches from massive electrical energy systems to microscopic integrated circuits; from life studies in bioengineering to satellite communications systems; and from the control of electromagnetic radiation to the control of information flow in this field.

The highly diverse and rapidly evolving characteristics of these fields require a thorough understanding of fundamentals as well as flexibility in the design of individualized programs of study.

Therefore, emphasis is placed on mathematics, physics, humanities, social sciences, basic sciences and engineering sciences during the first two years. Sufficient flexibility is provided at the senior level to allow a student, in consultation with an advisor, to prepare a specialized course of study in one of the following concentration areas from the broad field of electrical engineering: Control Systems, Communications and Electromagnetics, Digital Systems, or Power Systems. In addition, a student may pursue a design topic outside of, but related to, formal course work using the facilities of the Electrical and Computer Engineering Design Laboratory.

Students are required to take general education (GenEd) elective courses in four broad areas: I, Written Composition; II, Humanities & Fine Arts; III, Natural Sciences & Mathematics; and IV, History, Social, & Behavioral Sciences. These courses provide breadth to the educational experience of Electrical Engineering students. They must be planned, in consultation with an academic advisor, to reflect a rationale appropriate to the educational objectives of the Departmental Programs, while conforming strictly to the requirements of the Articulation and General Studies Committee of the State of Alabama.

All students are required to successfully complete EH 101 English Composition I and EH 102 English Composition II from area I (or acceptable alternatives), plus a minimum of 18 semester hours of general education courses from areas II and IV. In area II, CA 110 Public Speaking is required by all Electrical Engineering students. Of the two remaining courses, one course must be in literature and one course must be in the fine arts. In area IV, at least one course must be in history and at least one course must be from the social and behavioral sciences.

Students in Electrical Engineering are required to become Student Members of either the Institute of Electrical and Electronics Engineers

(IEEE) or the Association for Computing Machinery (ACM) by the time they enroll in EE 401 Intro Elec and CpE Design - W and EE 404 Electrical and Computer Engineering Design. Through participation in the activities of such technical organizations students become aware of the activities of electrical and computer engineers in society. An excellent opportunity is provided to students for contact with practicing professionals as well as fellow students.

Any Electrical Engineering student interested in pursuing a career in medicine or bioengineering should consult with an advisor for an appropriate sequence of courses which will meet the minimum requirements for entry into a medical school or the necessary life sciences background to enter a graduate program in bioengineering.

The award of the BSEE degree will allow the graduate to enter the professions of electrical engineering directly, or to continue his/her education at graduate level.

### **BScpE Program Educational Objectives**

The program educational objectives (PEOs) of the Computer Engineering B.S. degree program are to produce graduates who, during their first few years after graduation, will:

1. Achieve professional advancement with increasing responsibility, leadership and mentorship.
2. Function effectively on multidisciplinary teams, and individually, to develop and apply computer engineering solutions within a global, societal, and environmental context.
3. Communicate effectively and manage resources skillfully as members and leaders of their profession.
4. Advance professional competence through continuous learning such studying for advanced degrees, professional registration, and leadership through ethical standards and professionalism.

### **BScpE Student Outcomes**

By the time of graduation from the Computer Engineering B.S. program, students will have demonstrated attainment of the following outcomes:

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. an ability to communicate effectively with a range of audiences
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies

The BScpE curriculum is designed to ensure the attainment of the student outcomes.

The Bachelor of Science degree program in Computer Engineering at the University of South Alabama is accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>, (<http://www.abet.org>) under the General Criteria and the Program Criteria for Electrical, Computer, Communications, Telecommunication(s) and similarly named Engineering programs.

The Computer Engineering program is geared towards students who are interested in the design of digital computing systems, integrating both hardware and software design components.

In the Computer Engineering degree program, sequences of courses are chosen from Electrical and Computer Engineering and from Computer Science that produce an in-depth treatment of digital logic and systems theory. In addition, a student may pursue a design topic outside of, but related to, formal course work using the facilities of the Electrical and Computer Engineering Design Laboratory.

Students are required to take general education (GenEd) elective courses in four broad areas: I, Written Composition; II, Humanities & Fine Arts; III, Natural Sciences & Mathematics; and IV, History, Social, & Behavioral Sciences. These courses provide breadth to the educational experience of Computer Engineering students. They must be planned, in consultation with an academic advisor, to reflect a rationale appropriate to the educational objectives of the Departmental Programs, while conforming strictly to the requirements of the Articulation and General Studies Committee of the State of Alabama.

All students are required to successfully complete EH 101 English Composition I and EH 102 English Composition II from area I (or acceptable alternatives), plus a minimum of 18 semester hours of general education courses from areas II and IV. In area II, CA 110 Public Speaking is required by all Computer Engineering students. Of the two remaining courses, one course must be in literature and one course must be in the fine arts. In area IV, at least one course must be in history and at least one course must be from the social and behavioral sciences.

Students in Computer Engineering are required to become Student Members of either the Institute of Electrical and Electronics Engineers (IEEE) or the Association for Computing Machinery (ACM) by the time they enroll in EE 401 Intro Elec and CpE Design - W and EE 404 Electrical and Computer Engineering Design. Through participation in the activities of such technical organizations students become aware of the activities of electrical and computer engineers in society. An excellent opportunity is provided to students for contact with practicing professionals as well as fellow students.

Any Computer Engineering student interested in pursuing a career in medicine or bioengineering should consult with an advisor for an appropriate sequence of courses which will meet the minimum requirements for entry into a medical school or the necessary life sciences background to enter a graduate program in bioengineering.

The award of the BScpE degree will allow the graduate to enter the professions of electrical engineering or computer engineering directly, or to continue his/her education at the graduate level.

### **BSEE and BScpE Accelerated Bachelor's to Master's (ABM) Degree Option**

The Department of Electrical & Computer Engineering allows well-qualified Electrical Engineering and Computer Engineering undergraduates to follow an "Accelerated Bachelor's to Master's" (ABM) study plan. This plan permits up to six credit hours of graduate

coursework to count towards both the Bachelor's (as Technical Electives) and the Master's degrees, so that the Master's degree is earned faster than usual. ABM students typically complete the Master's degree within one academic year after completing the undergraduate degree. See a departmental advisor for specific details.

## Degrees, Programs, or Concentrations

- Computer Engineering (BS) (p. 602)
- Electrical Engineering (BS) - General Track (p. 605)
- Electrical Engineering (BS) - Premed Track (p. 607)
- Electrical Engineering (MS) (p. 610)

## Courses

### EE 220 Circuit Analysis I 3 cr

Resistive networks with independent and dependent sources: Ohm's law; Kirchhoff's law; nodal and loop analysis; network theorems; energy storage elements (capacitors and inductors); operational amplifiers; steady state AC analysis; and introduction to PSpice.

**Prerequisite:** MA 125 Minimum Grade of C and PH 201 Minimum Grade of C

### EE 223 Network Analysis 3 cr

Transient analysis of RLC circuits; Three-phase systems; power-factor correction in three-phase power systems; magnetically coupled networks; Operational amplifiers; network frequency response functions and resonance; Fourier series.

**Prerequisite:** EE 220 Minimum Grade of C and PH 202 Minimum Grade of C and MA 227 (may be taken concurrently) Minimum Grade of C and MA 238 (may be taken concurrently) Minimum Grade of C

### EE 227 Circuits and Devices Lab 1 cr

Introduction to electrical laboratory equipment and instrumentation; analog and digital meters, oscilloscopes, bridges, power supplies, function generators. Measurement of voltage, current and power in DC networks and in single-phase and three-phase AC networks. Verification of Kirchhoff's laws. Measurement of resistance, capacitance, and inductance. Corequisite: EE 223 and credit for or concurrent registration in EH102.

**Prerequisite:** EE 223 (may be taken concurrently) Minimum Grade of D and (EH 102 (may be taken concurrently) Minimum Grade of D or EH 105 Minimum Grade of D)

### EE 263 Digital Logic Design 3 cr

Number systems, introduction to basic logic circuits, analysis and design of combinational and sequential logic circuits, k-map methods, finite state machines, multiplexers, decoders, encoders, adders, latches, flip-flops, registers, and counters.

**Prerequisite:** CPE 260 Minimum Grade of C or CIS 210 Minimum Grade of C

### EE 264 Microprocessor Sys-Interfacing 3 cr

Small computer organization, assembly and machine level programming, microprocessor architectures and instruction sets, microprocessor and microcontroller system design, and microprocessor based peripheral interfacing.

**Prerequisite:** EE 263 Minimum Grade of C or CSC 228 Minimum Grade of C

### EE 268 Digital Logic Design Lab 1 cr

A series of digital logic circuit experiments and simulations using TTL/CMOS integrated circuits designed to reinforce the material presented in EE 263. Design projects include standard SSI and MSI digital circuit based simulation and experiments.

**Prerequisite:** EE 263 Minimum Grade of C or CSC 228 Minimum Grade of C

### EE 302 Computer Methods in EE - CpE 1 cr

Introduction to the use of computer softwares such as MATHCAD/MATLAB and PSPICE/ ELECTRONIC WORKBENCH for the analysis of engineering related problems and the solution of electric/ electronic circuits.

**Prerequisite:** EE 223 Minimum Grade of C and EE 263 Minimum Grade of C

### EE 321 Signals, Systems & Transforms 3 cr

Modeling of analog and discrete-time signals and systems, time domain analysis, Fourier series, continuous and discrete time Fourier transforms and applications, sampling, z-transform, state variables, analysis of signals and systems and basic filter design, filter implementation using MatLab.

**Prerequisite:** EE 223 Minimum Grade of D and MA 238 Minimum Grade of C

### EE 322 Prob, Rand Sigs & Stat Anlys 3 cr

Discrete and continuous probability distributions; random variables; Bernoulli trials; hypothesis testing; confidence intervals; Anova multiple comparisons; Bayes' theorem; estimation; sampling; random processes and random signals in linear systems. Probability applications in computer and electrical engineering.

**Prerequisite:** MA 238 Minimum Grade of C and EE 321 (may be taken concurrently) Minimum Grade of D

### EE 328 Feedback Control Systems 3 cr

Review of the Laplace Transform. Transfer functions; block diagrams; signal-flow graphs and Mason's Gain Formula. Stability of feedback control systems; Routh-Hurwitz criterion; root-locus technique and the Nyquist criterion. Bode plots; gain and phase margins. PI, PD and PID controller design. Introduction to the use of Matlab for analysis and design.

**Prerequisite:** EE 321 Minimum Grade of D

### EE 331 Physical Electronics 3 cr

Introduction to quantum concepts; particles in one dimensional potential well; tunneling. Silicon band structure, electrons and holes. Drift and diffusion current density; band bending; Einstein diffusion coefficient; recombination/generation. The pn junction; step and linear junctions; depletion layer. I-V characteristics of a pn junction and steady-state carrier concentrations at junctions. Bipolar junction transistor fundamentals; pnp and npn types; common emitter configuration, biasing and gain.

**Prerequisite:** MA 238 Minimum Grade of C and PH 202 Minimum Grade of C and CH 131 Minimum Grade of C

### EE 334 Digital Electronics 3 cr

Review of semiconductor diodes and diode circuits; Introduction to digital electronics; Review of BJTs, operating characteristics and DC analysis, TTL logic gates; Field effect devices, operating characteristics and DC analysis; NMOS, PMOS, CMOS devices and logic circuits, transmission gates; Design considerations.

**Prerequisite:** (EE 331 Minimum Grade of D and EE 223 Minimum Grade of D)

**EE 354 Electromagnetics I 3 cr**

Basic concepts of electrostatics, electric potential theory, electric fields and currents, fields of moving charge, Poisson's and Laplace's equations, magnetostatics, metallic conductors and dielectric materials, electric-scalar and magnetic-vector potentials and boundary conditions, general time varying fields and Maxwell's equations.

**Prerequisite:** (MA 237 Minimum Grade of C and MA 238 Minimum Grade of C and PH 202 Minimum Grade of C)

**EE 355 Electromagnetics II 3 cr**

Lumped versus distributed circuit components, capacitance, inductance and mutual inductance, uniform plane waves, power flow and skin effect, reflection, transmission and propagation of uniform plane waves through different media, wave polarization, transmission lines, waveguides, optical fiber, electromagnetic radiation and antennas, the Radar equation.

**Prerequisite:** EE 354 Minimum Grade of D

**EE 356 Electromagnetics Laboratory 1 cr**

Computer-aided and experimental field mapping; shielding techniques; field measurement of elementary radiating structures and waveguide circuits; terminal characteristics of klystrons and space wave propagation losses.

**Prerequisite:** EE 355 (may be taken concurrently) Minimum Grade of C

**EE 368 Microprocessor Sys Interf Lab 1 cr**

This Laboratory is designed to reinforce the material covered in EE 264 and to provide practical hands-on experience with microprocessor software, hardware and interfacing. Topics include integration of microprocessor software, hardware and peripheral devices; assembly level programming and hardware interfaces for control and instrumentation.

**Prerequisite:** EE 268 Minimum Grade of D and EE 264 (may be taken concurrently) Minimum Grade of D

**EE 372 Introduction to Communications 3 cr**

Introduction to communication systems; analog, digital, deterministic and stochastic messages; modulation; redundancy coding. Signal energy and power; correlation; orthogonal signal set and Fourier series. Fourier transforms; signal transmission through linear systems; ideal and practical filters; signal distortion; Parseval's theorem; essential bandwidth and energy and power spectral density. Amplitude modulation: DSB, SSB, AM, QAM and VSB; phase and frequency modulation and the basic design of a FM transmitter. Sampling theorem; pulse code modulation and differential pulse code modulation.

**Prerequisite:** EE 322 (may be taken concurrently) Minimum Grade of D and EE 321 Minimum Grade of D

**EE 381 Electromech Energy Conversion 3 cr**

Introduction to the principles of electromechanical energy conversion. Energy balance, force, and torque of electromagnetic systems; magnetic circuits and ferromagnetic losses; transformers and their connections; three-phase induction motors; synchronous generators and motors; non-salient machines. Parallel operation of synchronous generators. Dynamics of electric machines.

**Prerequisite:** EE 223 Minimum Grade of D

**EE 385 Energy Conversion Lab 1 cr**

Laboratory experiments based on: Faraday's Law and magnetic coupling; magnetic circuits; transformers (single and three phase) and their connections and tests. Three phase induction motors - tests and performance characteristics; synchronous generators and motors. Machine data acquisition methods and processing using a computer.

**Prerequisite:** (EE 381 Minimum Grade of D and EE 227 Minimum Grade of D)

**EE 401 Intro Elec and CpE Design - W 1 cr**

Specification of design criteria. Written and oral presentations of design proposals. Coverage of professional and contemporary issues and students are required to become members of the IEEE or ACM and attend two technical meetings of IEEE/ACM.

**Prerequisite:** CA 110 Minimum Grade of D and EE 321 Minimum Grade of D and EE 334 (may be taken concurrently) Minimum Grade of D and EE 368 (may be taken concurrently) Minimum Grade of D

**EE 404 Electrical and Computer Engineering Design 3 cr**

Implementation of design project from the field of Electrical or Computer Engineering in the broadest sense and under the guidance of a project director from the electrical and computer engineering faculty. Written and oral presentations of project proposals, interim and final reports. Students are required to be current members of the IEEE/ACM and attend two technical meetings.

**Prerequisite:** EE 328 Minimum Grade of D and EE 334 Minimum Grade of D and EE 368 Minimum Grade of D and EE 401 Minimum Grade of D

**EE 422 Adv Feedback Control Systems 3 cr**

Sensors, encoders and DC motors in control systems. The performance and design of feedback control systems. System bandwidth; Nichol's Chart and the stability of control systems with time delays. State variable analysis and design. This course is dually listed with an equivalent graduate level course (EE522) and requires a minimum GPA of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 328 Minimum Grade of D

**EE 423 Modern Control Theory 3 cr**

Simulation and modeling; introduction to linear systems theory; concepts of controllability and observability; specifications; structures and limitations; review of classical design methods; state feedback design methods; multivariable control; robust stability and sampled data implementation. Introduction to the use of MATLAB for design. This course is dually listed with an equivalent graduate-level course (EE 523) and requires a minimum G.P.A of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 328 Minimum Grade of D

**EE 424 Nonlinear Control Systems 3 cr**

State space description; methods of linearization; isoclines; stability of nonlinear systems; Lyapunov's direct method; harmonic linearization; describing functions; dual input describing functions; Popov's method; circle criterion and computer aided analysis. This graduate-level course is dually listed with an equivalent course (EE524) and requires a minimum GPA of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 328 Minimum Grade of D

**EE 427 Digital Control Systems 3 cr**

State space and transfer function description of discrete-time systems; solution of discrete state equation; discrete-time model of analog plants; frequency domain analysis; design of discrete state-feedback regulators; observers and tracking systems. This course is dually listed with an equivalent graduate-level course (EE 527) and requires a minimum G.P.A. of 2.75 or the instructors permission for admission.

**Prerequisite:** EE 328 Minimum Grade of D

**EE 430 Power Semiconductor Dev 3 cr**

Characteristics of power devices; physics of transport phenomena; breakdown voltage; power rectifiers; bipolar transistors; power MOSFET; insulated-gate bipolar transistor and MOS-gated thyristors.

**Prerequisite:** EE 331 Minimum Grade of D

**EE 431 Analog Electronics 3 cr**

Small signal model of diodes, applications, advanced op-amp applications, principle of operation of FETs, small signal model of FET and basic FET amplifiers, small signal model of BJT and basic BJT amplifiers, differential and multistage amplifiers, Miller's Theorem, Nyquist stability criterion and frequency response, internal circuit of typical op-amp.

**Prerequisite:** (EE 334 Minimum Grade of D and EE 227 Minimum Grade of D)

**EE 432 Microelectronic Devices 3 cr**

Introduction to semiconductor material properties; semiconductor diodes; structure and operation; diode circuit applications; bipolar transistor; structure and operation; junction field effect transistors (JFETs); metal oxide field effect transistors (MOSFETs) fabrication technology and construction of semiconductor devices; biasing and stability of amplifiers. This course is dually listed with an equivalent graduate-level course (EE 532) and requires a minimum GPA of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 334 Minimum Grade of D

**EE 437 Electronics Lab 1 cr**

Computer analysis and measurement of the characteristics and parameters of power supplies; operational amplifiers; voltage and power amplifiers; oscillators and active filters.

**Prerequisite:** (EE 334 Minimum Grade of D and EE 431 (may be taken concurrently) Minimum Grade of D)

**EE 438 Virtual Instrumentation 3 cr**

Transducers; measurement techniques; measurement errors; digital signal processing; noise sources and reduction; introduction to LabVIEW software, data acquisition and processing using computer-controlled data acquisition hardware.

**Prerequisite:** EE 334 Minimum Grade of D

**EE 439 VSLI Technology-Fabrication 3 cr**

Introduction to semiconductor devices; crystal growth and wafer preparation; chemical and physical vapor deposition; oxidation; diffusion; ion implantation; lithography; etching metallization, process integration of CMOS and bipolar technologies; diagnostic techniques and measurements; packaging; yield and reliability. This course is dually listed with an equivalent graduate-level course (EE 539) and requires a minimum G.P.A. of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 331 Minimum Grade of D

**EE 440 HDL Logic Synthesis 3 cr**

Introduction to the syntax and elements of the basic VHDL language such as entities and architectures; creating combinational, synchronous logic and state machines using both structural and behavioral VHDL; using hierarchy in large designs; synthesizing and implementing designs. This course is dually listed with an equivalent graduate-level course (EE 540) and requires a minimum GPA of 2.75 or the instructor's permission for admission. Credit for both EE 440 and EE 443 not allowed toward a degree.

**Prerequisite:** EE 264 Minimum Grade of D and EE 268 Minimum Grade of D

**EE 441 Computer Networks 3 cr**

Introduction to design and analysis of computer networks. Polling networks and ring networks. This course is dually listed with an equivalent graduate-level course (EE 541) and requires a minimum GPA of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 264 Minimum Grade of D and EE 268 Minimum Grade of D

**EE 443 HDL Logic Simulation 3 cr**

Introduction to the syntax and elements of the basic Verilog language such as modules and ports; hierarchical modeling; gate-level modeling; dataflow modeling; switch-level modeling; tasks and functions; timing and delays; user-defined primitives; synthesizing and implementing designs. Emphasis is on the simulation and test-bench aspects. This course is dually listed with an equivalent graduate-level course (EE 543) and requires a minimum GPA of 2.75 or the instructor's permission for admission. Credit for both EE 440 and EE 443 not allowed toward a degree.

**Prerequisite:** EE 264 Minimum Grade of D and EE 268 Minimum Grade of D

**EE 444 Wireless Networks 3 cr**

Introduction to modern wireless networks/systems, the cellular concept, frequency reuse, interference and system capacity improvement, trunking and grade of service, multiple access techniques, wireless/wireline interworking, and advanced networks (i.e. ad hoc networks). This course is dually listed with an equivalent graduate-level course (EE 544) and requires a minimum GPA of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 441 Minimum Grade of D

**EE 445 Smart Grid 3 cr**

Introduction to smart grid concepts, phasor measurement units, applications of PMUs in protection and fault recovery, communication over power lines, smart metering, smart grid standards, and cyber security.

**Prerequisite:** EE 264 Minimum Grade of D and EE 381 Minimum Grade of D

**Corequisite:** EE 483

**EE 446 Embedded System Design Lab 1 cr**

Design projects utilizing 16-bit and 32-bit microprocessor hardware and software; interfaces to memory and peripheral devices.

**Prerequisite:** EE 457 (may be taken concurrently) Minimum Grade of D

**EE 447 Field-Programmable Gate Array Lab 1 cr**

The FPGA (Field-Programmable Gate Array) Lab concentrates on the simulations, synthesis, testing and experimentation with FPGA technology. Students design digital circuits and then implement these designs physically using CAD tools and FPGA boards.

**Prerequisite:** EE 264 Minimum Grade of D and EE 268 Minimum Grade of D

**EE 449 Controls Lab 1 cr**

Computer-aided modeling, design and performance analysis in time and frequency domain of process control systems, and design of PID controllers.

**Prerequisite:** EE 328 Minimum Grade of D

**EE 450 Fundamentals of Fourier Optics 3 cr**

Two-dimensional Fourier analysis; linear systems; sampling theory; scalar diffraction theory. Fourier transform imaging properties of lenses; frequency analyses of diffraction-limited coherent and incoherent imaging systems; aberrations and resolution analysis; Vander Lugt filters and frequency domain analysis and synthesis; SAR and pattern recognition applications.

**Prerequisite:** EE 331 Minimum Grade of D and EE 355 Minimum Grade of D

**EE 452 Microwave Engineering 3 cr**

Generation and transmission of high frequency electromagnetic energy; magnetrons, klystrons, masers, parametric amplifiers, traveling wave tubes and solid-state devices; waveguides and resonators. This course is dually listed with an equivalent graduate level course (EE 552) and requires a minimum GPA of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 355 Minimum Grade of D

**EE 453 Antenna Theory and Design 3 cr**

Radiation fundamentals; linear antennas; loop antennas; aperture antennas; reflector antennas; antenna impedance and measurements; computer-aided design of antenna systems. This course is dually listed with an equivalent graduate-level course (EE 553).

**Prerequisite:** EE 355 Minimum Grade of D

**EE 454 Digital Computer Architecture 3 cr**

Computer organization; instruction set design; ALU design; control unit design; I/O and interrupt designs; memory organization; DMA; microprogramming; introduction to multi-processors; performance analysis. This course is dually listed with an equivalent graduate level course (EE 554) and requires a minimum GPA of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 264 Minimum Grade of D and EE 268 Minimum Grade of D

**EE 455 Optoelectronics 3 cr**

Wave propagation in free-space and in wave guides; optical resonators; interaction of radiation and atomic systems; laser oscillation; solid-state lasers. He-Ne and Argon lasers, integrated optics including integration of emitters and detectors; optical interconnects; spatial light modulators; optoelectronic materials and devices; and applications of optoelectronics. This course is dually listed with an equivalent graduate-level course (EE 555) and requires a minimum GPA of 2.75 or the instructor's permission of admission.

**Prerequisite:** EE 355 Minimum Grade of D

**EE 456 Fiber Optic Communication Sys 3 cr**

Review of optical principles, dielectric waveguides, signal propagation, degradations and attenuation of fibers. Fiber interconnection devices, active and passive components, optical transmitters and receivers, power budget, fiber optic communication systems. This course is dually listed with an equivalent graduate-level course (EE 556).

**Prerequisite:** EE 355 Minimum Grade of D

**EE 457 Embedded System Design 3 cr**

Architecture and software of 16-bit and 32-bit microprocessor hardware and software; interface design to memory and peripheral devices; multiprocessing. This course is dually listed with an equivalent graduate level course (EE 557) and requires a minimum GPA of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 264 Minimum Grade of D and EE 368 Minimum Grade of D

**EE 458 Radar Systems 3 cr**

Introduction to radar signal processing. Continuous wave and pulsed radars. Clutter and radio wave propagation. Moving target indicator, target surveillance and tracking radar systems. Side-looking, synthetic aperture, interferometric and other airborne radars. This course is dually listed with an equivalent graduate level course (EE 558) and requires a minimum GPA of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 355 Minimum Grade of D

**EE 465 Digital Signal Processing 3 cr**

Review of discrete Fourier and Z-transforms; review of analog filter design; design of IIR and FIR digital filters. Fast Fourier transform (FFT) and applications; Hardware implementation and quantization effects. Advanced digital filter structures and design. DSP algorithm design and implementation. Analysis of finite word length effects of DSP applications. Extensive use of MatLab for analysis and design.

**Prerequisite:** (EE 321 Minimum Grade of C and EE 322 (may be taken concurrently) Minimum Grade of D)

**EE 468 Programmable Logic Controllers 3 cr**

Hardware and software principles of PLC devices, ladder logic, hardware components of PLC systems and controller configuration, basic PLC operation, program construction and manipulation, advanced operation and networking.

**Prerequisite:** EE 264 Minimum Grade of D and EE 268 Minimum Grade of D

**EE 469 Signal Integrity 3 cr**

Design techniques for high-speed digital interfaces and circuit boards; signal integrity including crosstalk and ground bounce; electromagnetic aspects of high-speed digital design; frequency-domain analysis of power-system integrity; state-of-the-art buses and standards. This course is dually listed with an equivalent graduate-level course (EE 569) and requires a minimum GPA of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 264 Minimum Grade of D and EE 268 Minimum Grade of D and EE 334 Minimum Grade of D

**EE 470 Synth Active-Passive Networks 3 cr**

Reliability of network functions (high-pass, band-pass, low-pass, band reject and equalizing filters); approximation techniques; sensitivity analysis; passive and active synthesis; positive and negative feedback and biquads. Computer techniques for the realization of standard filter forms (Butterworth, Chebyshev, Bessel, Sallen and Key, and other forms).

**Prerequisite:** EE 321 Minimum Grade of D

**EE 471 Wireless Communication 3 cr**

Introduction to wireless communications propagation in mobile radio channels, large, small scale fading and multipath; diversity and diversity combining techniques and modulation techniques. This course is dually listed with an equivalent graduate level course (EE 571) and requires a minimum GPA of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 372 Minimum Grade of D

**EE 473 Advanced Communication Systems 3 cr**

Digital line coding; pulse shaping; partial response signaling; scrambling; M-ary communication; digital carrier systems and digital multiplexing. Probability; random variables; quantization error in PCM; random processes; white noise and the behavior of analog systems in the presence of noise. Information theory; compact codes and error correcting codes. This course is dually listed with an equivalent graduate level course (EE 573) and requires a minimum GPA of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 372 Minimum Grade of D

**EE 481 Electrical Machines 3 cr**

DC machines-motors and generators. Single-phase motors; unbalanced two-phase motors; servo-motors; commutator motors; stepper motors; synchros; shaded pole motors; reluctance and hysteresis motors and brushless DC motors. Dynamic circuit analysis of rotating machines.

**Prerequisite:** EE 381 Minimum Grade of D

**EE 482 Switch Mode Power Conversion 3 cr**

Design and analysis of switch mode power converters; design of magnetic components; stability considerations; input filter interactions; performance measurements and evaluations. This course is dually listed with an equivalent graduate-level course (EE 582) and requires a minimum GPA of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 334 Minimum Grade of D and EE 381 Minimum Grade of D

**EE 483 Power Systems I 3 cr**

Principles of power system analysis. Synchronous machines, transformers and loads; transmission line parameters and analysis. Impedance/admittance matrix representation of power systems. Power flow analysis. Symmetrical fault studies and protective devices.

**Prerequisite:** EE 381 Minimum Grade of D and EE 385 (may be taken concurrently) Minimum Grade of D

**EE 484 Power Systems II 3 cr**

Symmetrical components and sequence networks; computer studies of transmission lines; fault studies using a computer; state estimation of power system and power system stability, Economic analysis.

**Prerequisite:** EE 483 Minimum Grade of D

**EE 485 Power Distrib and Utilization 3 cr**

Principles and characteristics of generating stations; transformers; conversion equipment; primary and secondary distribution systems; short-circuit calculations; selection of protective devices; system grounding and over current protection; voltage control; power factor control and correction; load and cost estimating.

**Prerequisite:** EE 483 Minimum Grade of D

**EE 486 Power Electronics 3 cr**

Power semiconductor diodes and thyristors; commutation techniques; rectification circuits - uncontrolled and controlled; AC voltage controllers; DC chopper; pulse-width modulated inverters and resonant pulse inverters. This course is dually listed with an equivalent graduate level course (EE 586) and requires a minimum GPA of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 334 Minimum Grade of D and EE 381 Minimum Grade of D

**EE 487 Switch Mode Power Conversion 3 cr**

Design and analysis of switch mode power converters; design of magnetic components; stability considerations; input filter interactions; performance measurements and evaluation. This course is dually listed with an equivalent graduate level course and requires a minimum GPA of 2.75 for admission.

**Prerequisite:** EE 334 Minimum Grade of D and EE 381 Minimum Grade of D

**EE 488 Illumination Engineering 3 cr**

Photometric units and definitions; light sources and luminaires; interior lighting and artificial illumination design techniques; daylight lighting design; exterior lighting design and the theory of color. Optics and control of lighting. Prerequisite: Instructor's permission.

**EE 489 Renewable Energy 3 cr**

Introduction to renewable energy sources. Fuel cells: classification, configuration and operation. Hydrogen: production, purification and storage. Photovoltaic cells: solar cells and operational characteristics. Wind turbines: operational characteristics. Energy from water sources: hydroelectric, wave and tidal energy. This course is dually listed with an equivalent graduate course and requires a minimum GPA 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 381 Minimum Grade of D

**EE 490 Special Topics 1-3 cr**

Topics of current electrical and computer engineering interest.

**EE 494 Directed Studies 1-3 cr**

Directed study under the guidance of a faculty advisor, of a topic from the field of electrical and/or computer engineering, not offered in a regularly scheduled course. This course requires permission of the Department Chair and a minimum GPA of 2.75 for admission. Pre-requisite: PCS.

**EE 499 Honors Senior Project - H 1-6 cr**

Under the advice and guidance of a faculty mentor, honors student will identify and carry out a research project, relevant to the field of Electrical and Computer Engineering which will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty chaired by the honors mentor. Students are required to become members of IEEE/ACM and attend two technical meetings. This course is required for Honors recognition. A minimum of 4 credit hours is required, but students may enroll for a maximum of 6 credit hours over two semesters. Prerequisites: an approved project prospectus.

**Prerequisite:** (EE 401 Minimum Grade of C or HON 301 Minimum Grade of C)

**EE 522 Adv Feedback Control Systems 3 cr**

Sensors; encoders and D.C. motors in control systems. The performance and design of feedback control systems. System bandwidth; Nichol's Chart and the stability of control systems with time delays. State variable analysis and design. Use of MatLab for analysis and design. This course is dually listed with an equivalent 400-level Electrical/Computer Engineering course.

**EE 523 Modern Control Theory 3 cr**

Simulation and modeling; introduction to linear system theory; concepts of controllability and observability; specifications, structures and limitations; review of classical design methods; state feedback design methods; multivariable control; robust stability and sampled data implementation. Introduction to the use of MATLAB for design. This course is dually listed with an equivalent 400-level course (EE 423).

**EE 524 Nonlinear Control Systems 3 cr**

State space description; methods of linearization; isoclines; stability of nonlinear systems; Lyapunov's direct method; harmonic linearization; describing functions; dual input describing functions; Popov's method; circle criterion, computer aided analysis. This course is dually listed with an equivalent 400-level course (EE 424).

**Prerequisite:** EE 523

**EE 525 Optimal Control Systems 3 cr**

Static optimization; method of Lagrange multipliers; adaptive controllers; dynamic optimization; calculus of variations; the principle of optimality and dynamic programming; Pontryagin's maximum principle; quadratic optimal control.

**Prerequisite:** EE 523

**EE 526 Introduction to Robotics 3 cr**

Basic mathematics of robotic systems; coordinate transformations: forward and inverse kinematics; velocity kinematics; path planning and trajectory generation; numerical methods; mobile robots. Fee

**EE 527 Digital Control Systems 3 cr**

State space and transfer function description of discrete time systems; solution of the discrete state equation; discrete-time model of analog plants; frequency domain analysis; designing of discrete state-feedback regulators; observers and tracking systems. This course is dually listed with an equivalent 400-level course (EE 427).

**EE 528 Advanced System Theory 3 cr**

Review of linear spaces and operators; state variable description of time varying and time invariant linear systems. Controllability and observability of linear dynamical systems; state feedback and state estimators; stability of linear systems; arbitrary pole assignment for multivariable case. Prerequisite: Instructor's permission.

**EE 530 Nanotechnology 3 cr**

Nanotechnology fundamentals and principles; quantum wires and dots; single electron effects and coulomb blockade; nanomagnets and spintronics; spin based electronics (magnetic memories, magnetic field sensors); nanofabrication; nanoelectronics (QCQ); organic electronics (carbon fullerenes and nanotubes, polymers); advanced characterization techniques; applications especially those related to nanotechnology; MEMS and microsystems (sensors); QWIP technology and its associative nanoscience; photonic crystal; advances in nanostructured materials. Requires instructor's permission.

**EE 531 Advanced Electronic Devices 3 cr**

Semiconductor electronics; semiconductor diode circuit analysis; bipolar and field effect transistors; analog-to-digital and digital-to-analog circuits and active filters. This course is dually listed with an equivalent 400-level course (EE 431). Prerequisite: Instructor's permission

**EE 532 Microelectronic Devices 3 cr**

Introduction to semiconductor material properties; semiconductor diodes: structure and operation; diode circuit applications; semiconductor heterojunctions; metal-semiconductor junctions; bipolar transistor: structure and operation; junction field effect transistors (JFETs); metal oxide field effect transistors (MOSFETs); metal semiconductor field effect transistors (MESFETs); fabrication technology and construction of semiconductor devices; photodetectors; light-emitting diodes; laser diodes; solar cells; image sensors; spice based microelectronic circuit design. This course is dually listed with equivalent 400-level course (EE 432).

**EE 534 VLSI Design Systems 3 cr**

Review of fabrication of microelectronic devices; introduction to MOS technology; basic physical and electrical properties of field effect transistors; CMOS fabrication; layout of CMOS integrated circuits; MOSFETs; concepts of VLSI chip design; physical design of CMOS integrated circuit.

**EE 535 Electronic Materials Prop-Appl 3 cr**

Schrodinger's equation, potential wells and barriers; crystallographic geometry; Kronig-Penney model; energy bands in crystalline solids; density of states - Fermi statistics; intrinsic and extrinsic semiconductors; conductivity and Hall effects; interfaces; magnetic materials; superconducting materials; optical materials. Prerequisite: Instructor's permission.

**EE 536 Intro to Superconductivity 3 cr**

Microscopic theory of superconductivity; BCS theory; superconduction tunneling phenomena; superconducting device; superconducting materials; High-Tc superconductors. Prerequisite: Instructor's permission.

**EE 537 Adv Plasma Process Elect Mat 3 cr**

Analysis, design and application of DC, RF and microwave plasma in microelectronic material processing; sputtering; etching; deposition; surface modification; diagnostic and characterization techniques. Prerequisite: Instructor's permission.

**EE 538 Magnetic Recording Media 3 cr**

Magnetostatic fields; magnetization processes; demagnetizing factors; magnetic circuits; hard disk / tape media; inductive and MR heads; magnetic data storage systems. Prerequisite: Instructor's permission.

**EE 539 VLSI Technology - Fabrication 3 cr**

Introduction to semiconductor devices; crystal growth and wafer preparation; chemical and physical vapor deposition; oxidation; diffusion; ion implantation; lithography; etching; metallization; process integration of CMOS and bipolar technologies; diagnostic techniques and measurements; packaging; yield and reliability. This course is dually listed with an equivalent 400-level course (EE 439).

**EE 540 HDL Logic Synthesis 3 cr**

Introduction to the syntax and elements of the basic VHDL language such as entities and architectures; creating combinational, synchronous logic and state machines using both structural and behavioral VHDL; using hierarchy in large designs; synthesizing and implementing designs. This course is dually listed with an equivalent undergraduate-level course (EE 440) and requires a minimum GPA of 2.75 or the instructor's permission for admission. Credit for both EE 540 and EE 543 not allowed toward a degree.

**EE 541 Computer Networks 3 cr**

Introduction to design and analysis of computer networks. Polling networks and ring networks. Networking applications. This course is dually listed with an equivalent 400-level EE course.

**EE 542 Adv Top Digital Design - HDLs 3 cr**

Current topics of interest in digital design. State-of-the-art software tools used in digital design. Advanced topics in HDLs.

**EE 543 HDL Logic Simulation 3 cr**

Introduction to the syntax and elements of the basic Verilog language such as modules and ports; hierarchical modeling; gate-level modeling; dataflow modeling; behavioral modeling; switch-level modeling; tasks and functions; timing and delays; user-defined primitives; synthesizing and implementing designs. Emphasis is on the simulation and test-bench aspects. This course is dually listed with an equivalent undergraduate-level course (EE 443) and requires a minimum GPA of 2.75 or the instructor's permission. Credit for both EE 540 and EE 543 not allowed toward a degree.

**EE 544 Wireless Networks 3 cr**

Introduction to modern wireless networks/systems, the cellular concept, frequency reuse, interference and system capacity improvement, trunking and grade of service, multiple access techniques, wireless/wireline interworking, and ad hoc networks). This course is dually listed with an equivalent 400-level course (EE 444) and requires a minimum GPA of 2.75.

**Prerequisite:** EE 541

**EE 545 Optical Network 3 cr**

Digital transmission using fiber optics as point-to-point link. Wavelength-division-multiplexing concepts and components, LAN, WAN, and MAN, SONET/SDH, FDDI Networks, Broadcast-and-select WDM Networks, Wavelength-routed Networks, and Performance of WDM and EDFA systems. Prerequisite: Instructor's permission.

**Prerequisite:** EE 456 Minimum Grade of D

**EE 546 Neural Networks 3 cr**

Introduction to neural networks and their application to electrical engineering. Concept learning and the general-to-specific ordering, decision tree learning, linear perceptrons, back propagation networks, recursive networks, radial basis networks, neural network-based control systems, unsupervised learned networks.

**EE 548 Computer-Network Security 3 cr**

Cryptography; Symmetric and asymmetric encryption; authentication and identification schemes; MACs and Digital Signatures; applications of security.

**EE 552 Microwave Engineering 3 cr**

Generation and transmission of high frequency electromagnetic energy- magnetrons, klystrons, maser, parametric amplifiers, traveling wave tubes and solid-state devices. This course is dually listed with an equivalent 400-level course (EE 452). Prerequisite: Instructor's permission.

**EE 553 Antenna Theory and Design 3 cr**

Radiation fundamentals; linear antennas; loop antennas; aperture antennas; reflector antennas; antenna impedance and measurements; computer-aided design of antenna systems. This course is dually listed with an undergraduate level course (EE 453).

**EE 554 Digital Computer Architecture 3 cr**

Computer organization; instruction set design; ALU design; control unit design; I/O and interrupt designs; memory organization; DMA; microprogramming; introduction to multi-processors; performance analysis. This course is dually listed with an undergraduate level course (EE 454).

**EE 555 Optoelectronics 3 cr**

Wave propagation in free-space and in wave guides; optical resonators, interaction of radiation and atomic systems; laser oscillation; solid-state lasers. He-Ne and Argon ion lasers, integrated optics including integration of emitters and detectors; optical interconnects; spatial light modulators; optoelectronic materials and devices; and applications of optoelectronics. This course is dually listed with a 400-level course (EE 455).

**EE 556 Fiber Optic Communication Sys 3 cr**

Review of optical principles, dielectric waveguides, signal propagation, degradations and attenuation of fibers. Fiber interconnection devices, active and passive components, optical transmitters and receivers, power budget, fiber optic communication systems. This course is dually listed with an equivalent undergraduate-level course (EE 456).

**EE 557 Adv. Embedded System Design 3 cr**

Architecture and software of 16-bit and 32-bit microprocessor hardware and software; interface design to memory and peripheral devices; multiprocessing. This course is dually listed with an undergraduate level course (EE 457).

**EE 558 Radar Analysis 3 cr**

Introduction to radar signal processing. Continuous wave and pulsed radars. Clutter and radio wave propagation. Moving target indicator, target surveillance and tracking radar systems. Side-looking, synthetic aperture, interferometric and other airborne radars. This course is dually listed with an equivalent 400-level (EE458).

**EE 559 Optical Info Process-Holograph 3 cr**

Parallel optical information processing in Fourier transform systems; nonlinear optical image processing in a linear optical processing; optical image equidensity and pseudo-color using techniques; wave-front reconstruction; on-axis and off-axis holography, effects of film MTF and nonlinearities; holographic memory, display and non-destructive testing; and optical computing. Prerequisite: Instructor's permission.

**EE 560 Adv Computer Architecture 3 cr**

Overview of software/hardware architectures of selected RISC/CISC microprocessors, advanced pipelining and instruction level parallelism, superscalar techniques, memory hierarchy design, cache coherency, introduction to multiprocessor systems and interconnection networks.

**Prerequisite:** EE 554 Minimum Grade of C

**EE 565 Adv Digital Signal Processing 3 cr**

Review of discrete Fourier and z-transforms; review of analog filter design; canonical digital filter forms; design of IIR and FIR digital filters. Fast Fourier Transforms (FET) and their applications; hardware implementation and quantization effects. Advanced digital filter structures and design. DSP algorithm design and implementation. Analysis of finite word length effects of DSP applications. Extensive use of MatLab for analysis and design. This course is dually listed with an equivalent 400-level EE course (EE465).

**EE 566 Digital Image Processing 3 cr**

Review of digital image fundamentals; different image transforms; image enhancement techniques; image restoration methods; detection of discontinuities and thresholding.

**EE 567 Biomedical Imaging 3 cr**

Introduction to biomedical imaging, projection radiography, computer aided tomography, single photon emission computed tomography (SPECT), positron emission tomography (PET), magnetic resonance imaging (MRI and fMRI), ultrasound imaging, optical imaging techniques including confocal microscopy and optical coherence tomography (OCT). **Prerequisite:** EE 566 Minimum Grade of D

**EE 568 Pattern Recognition 3 cr**

Introduction to pattern recognition, statistical, syntactic and neural pattern recognition; Decision procedures; Parameter estimation and supervised learning; Non-parametric techniques; Feature extraction and nonlinear mapping; Fuzzy systems in pattern recognition; Methods of testing

**EE 569 Signal Integrity 3 cr**

Design techniques for high-speed digital interfaces and circuit boards; signal integrity including crosstalk and ground bounce; electromagnetic aspects of high-speed digital design; frequency-domain analysis of power-system integrity; state-of-the-art buses and standards. This course is dually listed with an equivalent undergraduate-level course (EE 469).

**EE 571 Wireless Communications 3 cr**

The cellular concept and system design fundamentals, propagation in mobile radio channels, large scale fading; small-scale fading and multi-path statistical distributions, distributions, diversity and diversity combining techniques. This course is dually listed with an equivalent undergraduate level course (EE 471) and requires instructor's permission for admission.

**Prerequisite:** EE 322 Minimum Grade of D and EE 372 Minimum Grade of D

**EE 573 Advanced Communication Systems 3 cr**

Digital line coding; pulse shaping; partial response signaling; scrambling; M-ary communication; digital carrier systems and digital multiplexing. Probability; random processes; white noise and the behavior of analog systems in the presence of noise. Information theory; compact codes and error correcting codes. This course is dually listed with an equivalent 400-level course (EE 473).

**EE 574 Digital Communications 3 cr**

Analysis and design of digital communication systems based on probability theory; signal space representation and optimum detection principles; Digital modulation techniques and their performance in additive white Gaussian noise.

**Prerequisite:** EE 573

**EE 575 Stochastic Processes 3 cr**

Introduction to estimation theory. Markov chains - finite, countable, continuous time, optimal stopping; Martingales; renewal processes, reversible Markov chains, Brownian motion and stochastic integration.

**EE 576 Optical Communications 3 cr**

Light sources, detectors, fiber components and optical systems for fiber communication; free-space inter-satellite optical networks for high-speed global communication; coding problems in optical fiber data transmission; three-dimensional optical data storage for database processing; propagation losses and fiber amplifiers; and optical free-space interconnections in future computers. Prerequisite: Instructor's permission.

**EE 577 Information Theory 3 cr**

Self-information; entropy; mutual information and channel capacity; encoding; error detecting and correcting codes. Sampling theorem. Discrete and continuous channels. Band-limited channels.

**EE 578 Error Correction Codes 3 cr**

This course is designed to introduce the students to error correcting codes, their construction and properties, encoding and decoding.

**EE 579 Wireless Sensor Networks 3 cr**

Introduction to Wireless Sensor Networks; Network deployment; Network Topologies; Localization; Tracking; Time synchronization techniques; Wireless characteristics; Energy considerations; MAC layer protocol and sleep scheduling; Routing; Sleep-based topology control; Latest development in the field.

**Prerequisite:** EE 544 Minimum Grade of D

**EE 582 Switch-Mode Power Conversion 3 cr**

Design and analysis of switch mode power converters-design of magnetic components; stability considerations; input filter interactions; performance, measurements and evaluation. This course is dually listed with an equivalent 400-level course (EE 482). Prerequisite: Instructor's permission.

**EE 585 Advanced Power Systems 3 cr**

Special topics that are not covered in traditional power systems courses, such as: Optimization techniques, computer methods, unified fault (short circuit) analysis, protection and control of power systems. Prerequisite: Instructor's permission.

**EE 586 Power Electronics 3 cr**

Power semiconductor diodes and thyristors; commutation techniques; rectification circuits - uncontrolled and controlled; AC voltage controllers; DC chopper; pulse-width modulated inverters and resonant pulse inverters. This course is dually listed with an equivalent undergraduate level course (EE 486).

**Cross-Listed:** EE 486

**EE 588 Power Semiconductor Drives 3 cr**

Rectifier control of DC motors; chopper control of DC drives; closed-loop control of DC drives; induction motor speed control and multi-quadrant control; control of induction motors by AC controllers and frequency-controlled drives; slip power control of induction motors; synchronous motor drives - brushless DC and AC motor drives. Prerequisites: Instructor's permission.

**EE 589 Renewable Energy 3 cr**

Introduction to renewable energy sources. Fuel cells: classification, configuration and operation. Hydrogen: production, purification and storage. Photovoltaic cells: solar cells and operational characteristics. Wind turbines: operational characteristics. Energy from water sources: hydroelectric, wave and tidal energy.

**EE 590 Special Topics - 1-3 cr**

Topics of current electrical engineering interest.

**EE 592 Directed Independent Study 1-3 cr**

Directed study, under the guidance of a faculty advisor, of a topic from the field of Electrical and Computer Engineering not offered in a regularly scheduled course. Prerequisite: Instructor's permission.

**EE 594 Project in Electrical Engr 1-3 cr**

An investigation of an original problem in electrical engineering under the guidance of the student's major professor. Prerequisites: Approval of the project prospectus by the student's advisory committee, and consent of the Director of Engineering Graduate Studies.

**EE 599 Thesis 1-6 cr**

An investigation of an original problem in electrical and/or computer engineering under the guidance of the student's major professor. Prerequisite: Approval of the thesis prospectus by the student's Advisory Committee and the Graduate School and consent of the Director of Engineering Graduate Studies.

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
EL-SHARKH, MOHAMED YOUSEF MOHAMED (yel-shark@southalabama.edu)	Electrical-Computer Eng	Associate Professor	BS, Ain Shams Univ MS, Ain Shams Univ PHD, University of Alabama
GONG, NA (nagong@southalabama.edu)	Electrical-Computer Eng	Professor	PHD, SUNY at Buffalo
KHAN, AURANGZEB (akhan@southalabama.edu)	Electrical-Computer Eng	Associate Professor	BS, University of Karachi MS, University of Karachi MPHIL, Quaid-i-Azam University PHD, Tottori University
KIRKICI, HULYA (hkirkici@southalabama.edu)	Electrical-Computer Eng	Professor	PHD, Polytechnic University
LATIF, SAEED IFTAKHAR (slatif@southalabama.edu)	Electrical-Computer Eng	Associate Professor	BS, Bangladesh Univ of Engineer MS, Univ of Manitoba PHD, Univ of Manitoba
RUSS, SAMUEL H. (sruss@southalabama.edu)	Electrical-Computer Eng	Associate Professor	BSEE, Georgia Inst of Tech - Main PHD, Georgia Inst of Tech - Main

SHABAN, MOHAMED E (mshaban@southalabama.edu)	Electrical-Computer Eng	Assistant Professor	BS, Mansoura University MS, Mansoura University MS, University of LA at Lafayette PHD, University of LA at Lafayette
SPENCER, EDMUND A. (espencer@southalabama.edu)	Electrical-Computer Eng	Associate Professor	BE, University of Leicester MS, University of Texas- Austin PHD, University of Texas- Austin
WANG, JINHUI (jwang@southalabama.edu)	Electrical-Computer Eng	Associate Professor	BS, Hebei University MS, Beijing University of Tech PHD, Beijing University of Tech
WOLTER FERREIRA TOUMA, DANIELA (dtouma@southalabama.edu)	Electrical-Computer Eng	Assistant Professor	BS, Uni de Sao Paulo MS, Uni de Sao Paulo DSC, Uni de Sao Paulo
WOODS, ROGER CLIVE (clivewoods@southalabama.edu)	Electrical-Computer Eng	Professor	DPHIL, University of Oxford England MA, University of Oxford England

## Computer Engineering (BS)

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		<b>54</b>
<b>Major Requirements</b>		
<i>Computer Engineering Major Core</i>		
EG 101	Intro to Engineering & Design (& Lab) (or EG 201 for LINK students)	2
EG 231	Intro to Ethics and Economics	3
CPE 260	Intro to C++ Programming	3
CSC 231	Intro Data Structures Algs	4
CSC 311	Networking and Communications	3
CSC 322	Operating Systems	3
EE 220	Circuit Analysis I	3
EE 223	Network Analysis	3
EE 227	Circuits and Devices Lab	1
EE 263	Digital Logic Design	3
EE 264	Microprocessor Sys-Interfacing	3
EE 268	Digital Logic Design Lab	1
EE 321	Signals, Systems & Transforms	3
EE 322	Prob, Rand Sigs & Stat Anlys	3
EE 328	Feedback Control Systems	3
EE 331	Physical Electronics	3
EE 334	Digital Electronics	3
EE 368	Microprocessor Sys Interf Lab	1
EE 401	Intro Elec and CpE Design - W	1
EE 404	Electrical and Computer Engineering Design	3
EE 431	Analog Electronics	3
EE 446	Embedded System Design Lab	1
EE 454	Digital Computer Architecture	3
EE 457	Embedded System Design	3
<b>Tracks</b>		
Select one of the following Tracks:		12
<i>Hardware Track: Technical Electives</i>		
A. Select two of the following:		
EE 438	Virtual Instrumentation	
EE 439	VSLI Technology-Fabrication	

EE 440	HDL Logic Synthesis <sup>1</sup>
EE 441	Computer Networks
EE 443	HDL Logic Simulation <sup>1</sup>
EE 444	Wireless Networks
EE 465	Digital Signal Processing
EE 468	Programmable Logic Controllers
EE 469	Signal Integrity
EE 470	Synth Active-Passive Networks
EE 471	Wireless Communication
EE 473	Advanced Communication Systems
B. Select two of the following:	
EE 438	Virtual Instrumentation
EE 439	VSLI Technology-Fabrication
EE 440	HDL Logic Synthesis <sup>1</sup>
EE 441	Computer Networks
EE 443	HDL Logic Simulation <sup>1</sup>
EE 444	Wireless Networks
EE 465	Digital Signal Processing
EE 468	Programmable Logic Controllers
EE 469	Signal Integrity
EE 470	Synth Active-Passive Networks
EE 471	Wireless Communication
EE 473	Advanced Communication Systems
CSC 410	Compiler Design-Construction
CSC 411	Comm - Network Analysis
CSC 412	Real-Time Software Systems
CSC 413	Computer Graphics
CSC 414	Modeling and Simulation
CSC 415	Numerical Analysis
CSC 416	AI Theory and Programming
CSC 417	Computer Game Development
CSC 418	Adv Game & Simulation Dev
CSC 434	Form Lang - Automata Theory
CSC 440	Secure Software Engineering
<i>Software Track: Technical Electives</i>	
A. Complete the following:	
CSC 331	Software Engineering Prin - W
CSC 332	Adv Data Structures and Algs

CSC 333	Prog Language Theory	
B. Select one of the following:		
EE 438	Virtual Instrumentation	
EE 439	VSLI Technology-Fabrication	
EE 440	HDL Logic Synthesis <sup>1</sup>	
EE 441	Computer Networks	
EE 443	HDL Logic Simulation <sup>1</sup>	
EE 444	Wireless Networks	
EE 465	Digital Signal Processing	
EE 468	Programmable Logic Controllers	
EE 469	Signal Integrity	
EE 470	Synth Active-Passive Networks	
EE 471	Wireless Communication	
EE 473	Advanced Communication Systems	
CSC 410	Compiler Design-Construction	
CSC 411	Comm - Network Analysis	
CSC 412	Real-Time Software Systems	
CSC 413	Computer Graphics	
CSC 414	Modeling and Simulation	
CSC 415	Numerical Analysis	
CSC 416	AI Theory and Programming	
CSC 417	Computer Game Development	
CSC 418	Adv Game & Simulation Dev	
CSC 434	Form Lang - Automata Theory	
CSC 440	Secure Software Engineering	
<i>Computer Senior Lab</i>		
Select one of the following: 1		
EE 437	Electronics Lab	
EE 447	Field-Programmable Gate Array Lab	
EE 449	Controls Lab	
<b>Minor Requirements</b>		
A minor is not required for this degree program 0		
<b>Total Hours</b>		<b>129</b>

**Note:** All undergraduates must complete two designated writing credit (W) courses, at least one of which must be in the student's major or minor. Courses carrying this required credit are identified in the University Bulletin by W after the course title. Appropriate software tools will be utilized in almost all CpE/EE courses.

<sup>1</sup> Credit for both EE 440 & EE 443 is not allowed.

## General Education requirements

Code	Title	Hours
<b>Area I – Written Composition</b>		
Complete the following:		
EH 101	English Composition I (Students who earn an English ACT score of 27, or a written SAT score of 610, can opt out of EH 101)	3
EH 102 or EH 105	English Composition II Honors Composition - H	3
<b>Area II – Humanities &amp; Fine Arts</b>		
A. Select one of the following: 3		

EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
B. Select one of the following:		3
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	
C. Complete the following:		
CA 110	Public Speaking	3
<b>Area III – Natural Sciences &amp; Mathematics</b>		
Complete the following:		
MA 125	Calculus I	4
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	4
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	4
<b>Area IV – History, Social &amp; Behavioral Sciences</b>		
A. Select one of the following:		3
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
B. Select one of the following:		3
AN 100	Intro to Cultural Anthropology	
AN 101	Intro Archaeology-Bio Anthro	
CA 100	Intro to Communication	
CA 211	Interpersonal Comm	
ECO 215	Prin of Microeconomics	
ECO 216	Prin of Macroeconomics	
GEO 114	People, Places, Environment	
GEO 115	World Regional Geography	
GS 101	Intro to Gender Studies	
IS 100	Global Issues	
IST 201	Seasons of Life	
PSC 130	Intro to US Government	
PSY 120	Introduction to Psychology	
PSY 250	Life Span Development	
SY 109	Introductory Sociology	
SY 112	Social Problems	
C. Select one additional course from either List A or List B above in Area IV		3
<b>Area V – Pre-Professional, Major, Elective Courses</b>		
Complete the following:		
MA 126	Calculus II	4
MA 227	Calculus III	4

MA 238	Differential Equations I	3
MA 267	Discrete Math Structures	3
<b>Total Hours</b>		<b>54</b>

## Professional Component Standing (PCS)

PCS is required to be eligible to take EE 300-level and EE 400-level courses. PCS is awarded when the student meets the following requirements:

- Grade "C" or higher in each of the following courses: MA 125, MA 126, CH 131, CH 131L, PH 201, CPE 260, EE 220, EE 263, EH 101, EH 102 or EH 105
- Minimum Grade Point Average 2.00 in all courses taken at USA

Students who fail to maintain a GPA of at least 2.00 overall at the University of South Alabama will lose PCS status. As a result, they may be required to take or repeat appropriate courses as specified by the Department Chair to correct their deficiencies and may not be permitted to continue in 300- and 400-level engineering courses.

## Graduation Plan

(129 Total Hours)

The Sample 4-year plan is designed as a guide for students preparing for their course selections. This information provides only a suggested schedule. Actual course selections should be made in consultation with an advisor. Courses listed as Milestones are required to obtain Professional Component Standing (PCS).

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
MA 125	Calculus I <sup>1</sup>	4
CH 131 & 131L	General Chemistry I and General Chemistry I Lab <sup>1</sup>	4
EH 101	English Composition I <sup>1</sup>	3
EG 101	Intro to Engineering & Design (and EG 101 Lab)	2
General Education	Area II or IV	3
<b>Milestone Notes</b>		
Must complete at least 12 hours with a 2.0 or higher GPA		
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
MA 126	Calculus II <sup>1</sup>	4
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab <sup>1</sup>	4
EH 102	English Composition II (or EH 105) <sup>1</sup>	3
CPE 260	Intro to C++ Programming <sup>1</sup>	3
CA 110	Public Speaking	3
<b>Milestone Notes</b>		
MA 125	Calculus I	
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	
EH 101	English Composition I (if not exempt)	
<b>Hours</b>		<b>17</b>
<b>Second Year</b>		
<b>Fall</b>		
MA 227	Calculus III	4
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	4
EE 220	Circuit Analysis I <sup>1</sup>	3
EE 263	Digital Logic Design <sup>1</sup>	3
MA 267	Discrete Math Structures	3

<b>Milestone Notes</b>	
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab
MA 126	Calculus II
CPE 260	Intro to C++ Programming
EH 102 or EH 105	English Composition II or Honors Composition - H

**Hours** 17

<b>Spring</b>		
MA 238	Differential Equations I	3
EE 223	Network Analysis	3
General Education	Area II or IV	3
EE 268	Digital Logic Design Lab	1
EE 264	Microprocessor Sys-Interfacing	3
CSC 231	Intro Data Structures Algs	4

<b>Milestone Notes</b>	
EE 220	Circuit Analysis I
EE 263 or CSC 228	Digital Logic Design or Digital Logic Computer Arch
Obtain PCS	

**Hours** 17

<b>Third Year</b>		
<b>Fall</b>		
EE 331	Physical Electronics	3
EE 321	Signals, Systems & Transforms	3
EE 227	Circuits and Devices Lab	1
EE 368	Microprocessor Sys Interf Lab	1
EG 231	Intro to Ethics and Economics	3
CSC 311	Networking and Communications	3
General Education	Area II or IV	3

**Hours** 17

<b>Spring</b>		
EE 334	Digital Electronics	3
EE 328	Feedback Control Systems	3
EE 322	Prob, Rand Sigs & Stat Anlys	3
EE 457	Embedded System Design	3
EE 446	Embedded System Design Lab <sup>2</sup>	1
CSC 322	Operating Systems	3

**Hours** 16

<b>Fourth Year</b>		
<b>Fall</b>		
EE 431	Analog Electronics	3
EE 401	Intro Elec and CpE Design - W <sup>3</sup>	1
EE/CSC 4xx***	Technical Elective <sup>4</sup>	3
EE 454	Digital Computer Architecture <sup>3</sup>	3
EE/CSC 4xx***	Technical Elective <sup>4</sup>	3
General Education	Area II or IV	3

<b>Milestone Notes</b>	
Apply for Graduation	

**Hours** 16

<b>Spring</b>		
EE 4xx	Senior Lab Elective	1
EE 404	Electrical and Computer Engineering Design <sup>2</sup>	3
EE/CSC 4xx	Technical Elective <sup>4</sup>	3
EE/CSC 4xx	Technical Elective <sup>4</sup>	3
General Education	Area II or IV	3

**Hours** 13

**Total Hours** 129

<sup>1</sup> Grade C or better in these courses is required to obtain Professional Component Standing (PCS) in the Computer Engineering Program. No 300-level courses can be taken without PCS.

<sup>2</sup> EE course only taught in the Spring semester.

<sup>3</sup> EE course only taught in the Fall semester.

<sup>4</sup> CpE technical electives must be selected from CSC and/or EE courses at 400-level according to the selected track with permission of the student's advisor.

**Note:** Students not Term 1-Calculus I ready will exceed the 129 hours required for this degree. If math is not started prior to Fall of Year 1, it is likely that the four-year graduation timetable will be extended. Students with ACT Math scores of 21 and below should begin math courses in the summer before Fall of Year 1.

## Electrical Engineering (BS) - General Track

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		<b>54</b>
<b>Major Requirements</b>		
<i>Electrical Engineering Major Core</i>		
EG 101	Intro to Engineering & Design (& Lab) (or EG 201 for LINK students)	2
CPE 260	Intro to C++ Programming	3
EG 231	Intro to Ethics and Economics	3
EG 270	Engineering Thermodynamics	3
EE 220	Circuit Analysis I	3
EE 223	Network Analysis	3
EE 227	Circuits and Devices Lab	1
EE 263	Digital Logic Design	3
EE 264	Microprocessor Sys-Interfacing	3
EE 268	Digital Logic Design Lab	1
EE 321	Signals, Systems & Transforms	3
EE 322	Prob, Rand Sigs & Stat Anlys	3
EE 328	Feedback Control Systems	3
EE 331	Physical Electronics	3
EE 334	Digital Electronics	3
EE 354	Electromagnetics I	3
EE 355	Electromagnetics II	3
EE 368	Microprocessor Sys Interf Lab	1
EE 372	Introduction to Communications	3
EE 381	Electromech Energy Conversion	3
EE 385	Energy Conversion Lab	1
EE 401	Intro Elec and CpE Design - W	1
EE 404	Electrical and Computer Engineering Design	3
EE 431	Analog Electronics	3
EE 437	Electronics Lab	1
EE 465	Digital Signal Processing	3
<i>Technical Electives</i>		
I. Select one of the following concentrations (A-D) with permission of student's advisor: 6		
A. Control Systems: choose any two of the following courses:		
EE 438	Virtual Instrumentation	
EE 468	Programmable Logic Controllers	

B. Communications and Electromagnetics: choose any two of the following courses:

EE 441	Computer Networks
EE 453	Antenna Theory and Design
EE 455	Optoelectronics
EE 456	Fiber Optic Communication Sys

C. Digital Systems: choose any two of the following courses:

EE 438	Virtual Instrumentation
EE 440	HDL Logic Synthesis <sup>1</sup>
EE 441	Computer Networks
EE 443	HDL Logic Simulation <sup>1</sup>
EE 454	Digital Computer Architecture
EE 457	Embedded System Design
EE 468	Programmable Logic Controllers
EE 469	Signal Integrity

D. Power Systems: choose any two of the following courses:

EE 481	Electrical Machines
EE 483	Power Systems I
EE 484	Power Systems II
EE 486	Power Electronics
EE 489	Renewable Energy

II. Select one additional course from any concentration (A-D) listed above 3

*Senior Lab Elective*

Select one of the following: 1

EE 446	Embedded System Design Lab
EE 447	Field-Programmable Gate Array Lab
EE 449	Controls Lab

**Minor Requirements**

A minor is not required for this degree program 0

**Total Hours** 129

**Note:** All undergraduates must complete two designated writing credit (W) courses, at least one of which must be in the student's major or minor. Courses carrying this required credit are identified in the University Bulletin by W after the course title. Appropriate software tools will be utilized in almost all EE courses.

<sup>1</sup> Credit for both EE 440 & EE 443 is not allowed.

### General Education Requirements

Code	Title	Hours
<b>Area I – Written Composition</b>		
Complete the following:		
EH 101	English Composition I (Students who earn an English ACT score of 27, or a written SAT score of 610, can opt out of EH 101.)	3
EH 102	English Composition II	3
or EH 105	Honors Composition - H	
<b>Area II – Humanities &amp; Fine Arts</b>		
A. Select one of the following: 3		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	

EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
B. Select one of the following:		3
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	

C. Complete the following:		
CA 110	Public Speaking	3

**Area III – Natural Sciences & Mathematics**

Complete the following:

MA 125	Calculus I	4
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	4
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	4

**Area IV – History, Social & Behavioral Sciences (3 Courses, 9 Hours)**

A. Select one of the following:		3
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	

B. Select one of the following:		3
AN 100	Intro to Cultural Anthropology	
AN 101	Intro Archaeology-Bio Anthro	
CA 100	Intro to Communication	
CA 211	Interpersonal Comm	
ECO 215	Prin of Microeconomics	
ECO 216	Prin of Macroeconomics	
GEO 114	People, Places, Environment	
GEO 115	World Regional Geography	
GS 101	Intro to Gender Studies	
IS 100	Global Issues	
IST 201	Seasons of Life	
PSC 130	Intro to US Government	
PSY 120	Introduction to Psychology	
PSY 250	Life Span Development	
SY 109	Introductory Sociology	
SY 112	Social Problems	

C. Select one additional course from either List A or List B above in area IV		3
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**Area V Pre-Professional, Major, Elective Courses**

Complete the following:

MA 126	Calculus II	4
MA 227	Calculus III	4
MA 237	Linear Algebra I	3

MA 238	Differential Equations I	3
<b>Total Hours</b>		<b>54</b>

**Professional Component Standing (PCS)**

PCS is required to be eligible to take EE 300-level and EE 400-level courses. PCS is awarded when the student meets the following requirements:

- Courses: MA 125, MA 126, CH 131, CH 131L, PH 201, CPE 260, EE 220, EE 263, EH 101, EH 102 or EH 105
- Grade C or higher is required in all PCS courses
- Minimum Grade Point Average: 2.00 USA GPA

Students who fail to maintain at least a 2.00 GPA overall at the University of South Alabama will lose PCS status and may be required to take or repeat appropriate courses as specified by the Department Chair to correct their deficiencies and may not be permitted to continue in 300- and 400-level engineering courses.

**Graduation Plan**

(129 Total Hours)

The Sample 4-year plan is designed as a guide for students preparing for their course selections. This information provides only a suggested schedule. Actual course selections should be made in consultation with an advisor. Courses listed as Milestones are required to obtain Professional Component Standing (PCS).

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
MA 125	Calculus I <sup>1</sup>	4
CH 131 & 131L	General Chemistry I and General Chemistry I Lab <sup>1</sup>	4
EH 101	English Composition I <sup>1</sup>	3
EG 101	Intro to Engineering & Design (and EG 101 Lab)	2
General Education	Area II or IV	3
<b>Milestone Notes</b>		
Must complete at least 12 hours with a 2.0 or higher GPA		
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
MA 126	Calculus II <sup>1</sup>	4
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab <sup>1</sup>	4
EH 102	English Composition II (or EH 105) <sup>1</sup>	3
CPE 260	Intro to C++ Programming <sup>1</sup>	3
CA 110	Public Speaking	3
<b>Milestone Notes</b>		
MA 125	Calculus I	
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	
EH 101	English Composition I (if not exempt)	
<b>Hours</b>		<b>17</b>
<b>Second Year</b>		
<b>Fall</b>		
MA 227	Calculus III	4
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	4
EE 220	Circuit Analysis I <sup>1</sup>	3
EE 263	Digital Logic Design <sup>1</sup>	3
General Education	Area II or IV	3
<b>Milestone Notes</b>		

PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	
MA 126	Calculus II	
CPE 260	Intro to C++ Programming	
EH 102 or EH 105	English Composition II or Honors Composition - H	
<b>Hours</b>		<b>17</b>

**Spring**

MA 238	Differential Equations I	3
EE 223	Network Analysis	3
MA 237	Linear Algebra I	3
EE 268	Digital Logic Design Lab	1
EE 264	Microprocessor Sys-Interfacing	3
EG 270	Engineering Thermodynamics	3

**Milestone Notes**

EE 220	Circuit Analysis I	
EE 263 or CSC 228	Digital Logic Design or Digital Logic Computer Arch	
Obtain PCS		
<b>Hours</b>		<b>16</b>

**Third Year**

<b>Fall</b>		
EE 331	Physical Electronics	3
EE 321	Signals, Systems & Transforms	3
EE 227	Circuits and Devices Lab	1
EE 368	Microprocessor Sys Interf Lab	1
EE 381	Electromech Energy Conversion	3
EE 354	Electromagnetics I	3
General Education	Area II or IV	3
<b>Hours</b>		<b>17</b>

**Spring**

EE 334	Digital Electronics	3
EE 328	Feedback Control Systems	3
EE 322	Prob, Rand Sigs & Stat Anlys	3
EE 372	Introduction to Communications	3
EE 385	Energy Conversion Lab	1
EE 355	Electromagnetics II <sup>2</sup>	3
<b>Hours</b>		<b>16</b>

**Fourth Year**

<b>Fall</b>		
EE 431	Analog Electronics	3
EE 401	Intro Elec and CpE Design - W <sup>3</sup>	1
EE 465	Digital Signal Processing	3
EE 4XX	Electrical Engineering Technical Elective <sup>4</sup>	3
EE 446 or EE 447 or EE 449	Senior Lab Elective (one only)	1
EG 231	Intro to Ethics and Economics	3
General Education	Area II or IV	3

**Milestone Notes**

Apply for Graduation		
<b>Hours</b>		<b>17</b>

**Spring**

EE 437	Electronics Lab	1
EE 404	Electrical and Computer Engineering Design <sup>2</sup>	3
EE 4XX	Electrical Engineering Technical Elective <sup>4</sup>	3
EE 4XX	Electrical Engineering Technical Elective <sup>4</sup>	3
General Education	Area II or IV	3
<b>Hours</b>		<b>13</b>

**Total Hours** 129

the Electrical Engineering Program. No 300-level courses can be taken without PCS.

<sup>2</sup> EE Course only taught in the Spring semester.

<sup>3</sup> EE Course only taught in the Fall semester.

<sup>4</sup> EE Technical electives must be selected from EE courses at 400-level and must include a two-course concentration from the approved list with permission of the student's advisor.

**Note:** Students not Term 1-Calculus I ready will exceed the 129 hours required for this degree. If math is not started prior to Fall of Year 1, it is likely that the four-year graduation timetable will be extended. Students with ACT Math scores 21 and below should begin math courses in the summer before Fall of Year 1.

## Electrical Engineering (BS) - Premed Track

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		<b>74</b>

**Major Requirements***Electrical Engineering Major Core*

Complete the following:

EG 101	Intro to Engineering & Design (& Lab) (or EG 201 for LINK students)	2
BMD 321	Biochemistry I-Molecular Biol	3
BMD 322	Biochemistry II-Metabolism	3
BLY 350	Human Physiology (recommended, but not required for the PreMed track)	0-3
CPE 260	Intro to C++ Programming	3
EG 231	Intro to Ethics and Economics	3
EE 220	Circuit Analysis I	3
EE 223	Network Analysis	3
EE 227	Circuits and Devices Lab	1
EE 263	Digital Logic Design	3
EE 264	Microprocessor Sys-Interfacing	3
EE 268	Digital Logic Design Lab	1
EE 321	Signals, Systems & Transforms	3
EE 322	Prob, Rand Sigs & Stat Anlys	3
EE 328	Feedback Control Systems	3
EE 331	Physical Electronics	3
EE 334	Digital Electronics	3
EE 368	Microprocessor Sys Interf Lab	1
EE 372	Introduction to Communications	3
EE 401	Intro Elec and CpE Design - W	1
EE 404	Electrical and Computer Engineering Design	3
EE 431	Analog Electronics	3
EE 437	Electronics Lab	1
EE 465	Digital Signal Processing	3

*Technical Electives*

Select one of the following concentrations (A-D) with permission of student's advisor: 6

A. Control Systems: Choose any two of the following courses:

EE 438	Virtual Instrumentation
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<sup>1</sup> These courses are required for Professional Component Standing (PCS). Grade C or better in each course is required to obtain PCS in

EE 468	Programmable Logic Controllers	
<b>B. Communications and Networks: Choose any two of the following courses:</b>		
EE 441	Computer Networks	
EE 453	Antenna Theory and Design	
EE 455	Optoelectronics	
EE 456	Fiber Optic Communication Sys	
<b>C. Digital Systems: Choose any two of the following courses:</b>		
EE 438	Virtual Instrumentation	
EE 440	HDL Logic Synthesis <sup>1</sup>	
EE 441	Computer Networks	
EE 443	HDL Logic Simulation <sup>1</sup>	
EE 454	Digital Computer Architecture	
EE 457	Embedded System Design	
EE 468	Programmable Logic Controllers	
EE 469	Signal Integrity	
<b>D. Power Systems: Choose any two of the following courses:</b>		
EE 481	Electrical Machines	
EE 483	Power Systems I	
EE 484	Power Systems II	
EE 486	Power Electronics	
EE 489	Renewable Energy	
<b>Senior Lab Elective</b>		<b>1</b>
Select one of the following:		
EE 446	Embedded System Design Lab	
EE 447	Field-Programmable Gate Array Lab	
EE 449	Controls Lab	
<b>Minor Requirements</b>		
A minor is not required for this degree program		0
<b>Total Hours</b>		<b>139-142</b>

<sup>1</sup> Credit for both EE 440 & EE 443 is not allowed.

#### Notes:

- Grade C or higher is required in all prerequisite courses for admission to Medical School.
- All Electrical and Computer Engineering undergraduates must complete two designated writing credit (W) courses, at least one of which must be in the student's major. Courses carrying this credit are identified in the University Bulletin by W after the course title.
- Appropriate software tools will be utilized in almost all EE courses.

### General Education Requirements

Code	Title	Hours
<b>Area I – Written Composition</b>		
Complete the following:		
EH 101	English Composition I (Students who earn an English ACT score of 27, or a written SAT score of 610, can opt out of EH 101.)	3
EH 102 or EH 105	English Composition II Honors Composition - H	3
<b>Area II – Humanities &amp; Fine Arts</b>		
A. Select one of the following:		

EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
<b>B. Select one of the following:</b>		<b>3</b>
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	
<b>C. Complete the following:</b>		<b>3</b>
CA 110	Public Speaking	
<b>Area III – Natural Sciences &amp; Mathematics</b>		
Complete the following:		
MA 125	Calculus I	4
BLY 121 & 121L	General Biology I and General Biology I Lab	4
BLY 122 & 122L	General Biology II and General Biology II Laboratory	4
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	4
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	4
<b>Area IV – History, Social &amp; Behavioral Sciences (3 Courses, 9 Hours)</b>		
<b>A. Select one of the following:</b>		<b>3</b>
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
<b>B. Select one of the following:</b>		<b>3</b>
AN 100	Intro to Cultural Anthropology	
AN 101	Intro Archaeology-Bio Anthro	
CA 100	Intro to Communication	
CA 211	Interpersonal Comm	
ECO 215	Prin of Microeconomics	
ECO 216	Prin of Macroeconomics	
GEO 114	People, Places, Environment	
GEO 115	World Regional Geography	
GS 101	Intro to Gender Studies	
IS 100	Global Issues	
IST 201	Seasons of Life	
PSC 130	Intro to US Government	
PSY 120	Introduction to Psychology (recommended for MCAT) <sup>1</sup>	
PSY 250	Life Span Development	
SY 109	Introductory Sociology (recommended for MCAT) <sup>1</sup>	

SY 112	Social Problems	
C. Select one additional course from either List A or List B above in Area IV		3
<b>Area V - Pre-Professional, Major, Elective Courses</b>		
Complete the following:		
MA 126	Calculus II	4
MA 227	Calculus III	4
MA 237	Linear Algebra I	3
MA 238	Differential Equations I	3
CH 201 & 201L	Organic Chemistry I and Organic Chemistry I Lab	4
CH 202 & 202L	Organic Chemistry II and Organic Chemistry II Lab	4
<b>Total Hours</b>		<b>74</b>

<sup>1</sup> Courses PSY 120 and SY 109 (electives in Area IV.B of General Education Requirements) are not required for graduation, but are recommended to prepare for the Medical College Admission Test (MCAT) that is required for admission to most Medical Schools.

## Professional Component Standing (PCS)

PCS status is required to be eligible to take EE 300-level and EE 400-level courses. PCS status is awarded when the student meets the following requirements:

- Grade "C" or higher in all the following courses: MA 125, MA 126, CH 131, CH 131L, PH 201, CPE 260, EE 220, EE 263, EH 101, EH 102 or EH 105
- Minimum Grade Point Average 2.00 at USA

Students who fail to maintain at least a 2.00 GPA overall at the University of South Alabama will lose PCS status and may be required to take or repeat appropriate courses as specified by the Department Chair to correct their deficiencies. Students who lose PCS status may not be permitted to continue in 300- and 400-level engineering courses.

## Graduation Plan

(139 Total Hours)

The Sample 4-year plan is designed as a guide for students preparing for their course selections. This information provides only a suggested schedule. Actual course selections should be made in consultation with an advisor. Courses listed as Milestones are required to obtain Professional Component Standing (PCS).

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
MA 125	Calculus I <sup>1</sup>	4
CH 131 & 131L	General Chemistry I and General Chemistry I Lab <sup>1</sup>	4
EH 101	English Composition I <sup>1</sup>	3
EG 101	Intro to Engineering & Design (and EG 101 Lab)	2
CA 110	Public Speaking	3
Social & Behavioral Sciences Elective	PSY 120 recommended	3
<b>Milestones</b>		
Must complete at least 12 hours with a 2.0 or higher GPA		
<b>Hours</b>		<b>19</b>

<b>Spring</b>		
MA 126	Calculus II <sup>1</sup>	4
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab <sup>1</sup>	4
EH 102	English Composition II (or EH 105) <sup>1</sup>	3
CPE 260	Intro to C++ Programming <sup>1</sup>	3
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
<b>Milestones</b>		
MA 125	Calculus I	
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	
EH 101	English Composition I	
<b>Hours</b>		<b>18</b>

<b>Second Year</b>		
<b>Fall</b>		
MA 227	Calculus III	4
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	4
EE 220	Circuit Analysis I <sup>1</sup>	3
EE 263	Digital Logic Design <sup>1</sup>	3
CH 201 & 201L	Organic Chemistry I and Organic Chemistry I Lab	4
<b>Milestones</b>		
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	
MA 126	Calculus II	
CPE 260	Intro to C++ Programming	
EH 102 or EH 105	English Composition II or Honors Composition - H	
<b>Hours</b>		<b>18</b>

<b>Spring</b>		
MA 238	Differential Equations I	3
EE 223	Network Analysis	3
MA 237	Linear Algebra I	3
EE 268	Digital Logic Design Lab	1
CH 202 & 202L	Organic Chemistry II and Organic Chemistry II Lab	4
BLY 121 & 121L	General Biology I and General Biology I Lab	4
<b>Milestones</b>		
EE 220	Circuit Analysis I	
EE 263	Digital Logic Design	
Obtain PCS		
<b>Hours</b>		<b>18</b>

<b>Third Year</b>		
<b>Fall</b>		
EE 331	Physical Electronics	3
EE 321	Signals, Systems & Transforms	3
EE 227	Circuits and Devices Lab	1
EE 264	Microprocessor Sys-Interfacing	3
BMD 321	Biochemistry I-Molecular Biol	3
BLY 122 & 122L	General Biology II and General Biology II Laboratory	4
<b>Hours</b>		
		<b>17</b>
<b>Spring</b>		
EE 334	Digital Electronics	3
EE 328	Feedback Control Systems	3
EE 322	Prob, Rand Sigs & Stat Anlys	3
EE 368	Microprocessor Sys Interf Lab	1
BMD 322	Biochemistry II-Metabolism	3
History/Humanities & Fine Arts Elective	Area II or IV.A	3

Social & Behavioral Sciences Elective	SY 109 recommended	3
<b>Hours</b>		<b>19</b>
<b>Fourth Year</b>		
<b>Fall</b>		
EE 431	Analog Electronics	3
EE 401	Intro Elec and CpE Design - W <sup>2</sup>	1
EE 465	Digital Signal Processing	3
EE 372	Introduction to Communications	3
EE 446 or EE 447	Senior Lab Elective (choose one only)	1
BLY 350	Human Physiology (recommended but not required for the PreMed Track)	0-3
EG 231	Intro to Ethics and Economics	3
<b>Milestones</b>		
Apply for graduation		
<b>Hours</b>		<b>14-17</b>
<b>Spring</b>		
EE 437	Electronics Lab	1
EE 404	Electrical and Computer Engineering Design <sup>3</sup>	3
EE 4XX	Electrical Engineering Technical Elective <sup>4</sup>	3
EE 4XX	Electrical Engineering Technical Elective <sup>4</sup>	3
History/Humanities & Fine Arts Elective	Area II or IV	3
History/Humanities & Fine Arts Elective	Area II or IV	3
<b>Hours</b>		<b>16</b>
<b>Total Hours</b>		<b>139-142</b>

<sup>1</sup> Grade "C" or better in each of these courses is required to obtain Professional Component Standing (PCS) status in the Electrical Engineering (PreMed track) program. No 300-level courses can be taken without PCS status.

<sup>2</sup> EE Course only taught in the Fall semester.

<sup>3</sup> EE Course only taught in the Spring semester.

<sup>4</sup> EE Technical electives must be selected from EE courses at 400-level and must include a two-course concentration from the approved list with permission of the student's advisor.

**Note:** Students not Term 1-Calculus ready will exceed the number of hours required for this degree. If math is not started prior to Fall of Year 1, it is likely that the four-year graduation timetable will be extended. Students with ACT Math scores 21 and below should begin math courses in the summer before Fall of Year 1.

## Electrical Engineering (MS)

### MSEE Degree Overview

With the ever-increasing pace of technological development in society, new and challenging opportunities are becoming available that require engineering graduates with increased levels of specialization. To provide for this, the Electrical and Computer Engineering Department offers electrical engineering and computer engineering graduates a cutting-edge program in graduate studies leading to the Master of Science in Electrical Engineering (MSEE) degree.

The program offers advanced level courses and areas of specialization in computer engineering, digital controls, laser-assisted fabrication, microelectronics, networks, image processing, pattern recognition, wireless communications, optical information processing and power systems. Graduate students have wide opportunities to undertake front-line engineering research alongside faculty for both thesis and project

work. In addition, a coursework-only program is also offered by the department for those in industry who intend to further their professional development while pursuing a graduate degree.

### Admission to the MSEE Program

#### • Regular Admission

- A B.S. degree in electrical or computer engineering or closely related field is required.
- A grade-point average of 3.0 or greater (A=4.0) on all undergraduate work is required. This can be relaxed depending on the academic background and experience of the applicant.
- A minimum score of 151 in the quantitative section and a minimum score of 141 in the verbal section of the Graduate Record Examination (GRE) is required. These requirements may be relaxed slightly depending upon special individual circumstances evaluated holistically. GRE scores are not required for ECE students who have graduated from the University of South Alabama.
- For International students whose native language is not English, a minimum score of 550 on the written Test of English as a Foreign Language (TOEFL), or a minimum score of 79 on the Internet-based TOEFL exam, or a minimum score of Band 6.5 on the International English Language Testing System (IELTS) test, is required (or other English language test results may be considered).

#### • Provisional Admission

- A B.S. degree in electrical or computer engineering, or in a field acceptable to the departmental Graduate Admissions Committee, is required. Depending on the student's background, additional undergraduate preparatory courses may be required. These courses will not count toward the MS degree.
- A minimum grade-point average of 2.5 (A=4.0) on all undergraduate work, including a minimum grade-point average of 2.5 over the last 64 course hours of undergraduate work is required. Alternatively, a minimum grade-point average of 2.75 over the last 64 course hours of undergraduate work is required.
- A minimum GRE combined score greater than or equal to 283 (Verbal + Quantitative) is required. GRE scores are not required for ECE students who have graduated from the University of South Alabama.
- For International students whose native language is not English, a minimum score of 525 on the written Test of English as a Foreign Language (TOEFL), or a minimum score of 71 on the Internet-based TOEFL exam, or a minimum score of Band 6.0 on the International English Language Testing System (IELTS) test, is required (or other English language test results may be considered).

Admission may be granted in special cases where a holistic evaluation of the applicant's credentials is appropriate.

### MSEE Degree Requirements

The MSEE Program has three Tracks: Electrical Engineering, Computer Engineering, and Systems Engineering. Each Track has either a Thesis option or a Course option. Award of the MSEE degree in any Track, either option, requires completion of 30 credit hours at graduate level. This includes 9 credit hours required from three courses chosen from core courses specified for the chosen Track. The Thesis option requires successful completion of 6 credit hours (two semesters) of EE599 Thesis study; the Course option requires 6 credit hours (two courses) that can be selected from both dual-listed and non-dual-listed (i.e., pure

graduate, not listed with a 400-level number) graduate courses. The remaining 15 credit hours are made up from elective courses, of which at least 9 credit hours must be taken from non-dual-listed courses. Graduate level instruction in research integrity and professional ethics (<https://www.southalabama.edu/colleges/engineering/resources/rcrtraininginstructions.pdf>) is also required by all MSEE students. The detailed requirements of each MSEE Track and option are indicated on the Electrical and Computer Engineering Department Graduate program website at <https://www.southalabama.edu/colleges/engineering/ece/ecegrad.html#MSEE>.

## BSEE and BSCpE Accelerated Bachelor's to Master's (ABM) Degree Option

The Department of Electrical & Computer Engineering allows well-qualified EE and CpE undergraduates in this Department to follow an "Accelerated Bachelor's to Master's" (ABM) study plan. This plan permits up to **six credit hours of graduate coursework** to count towards **both** the Bachelor's (as Technical Electives) and the Master's degrees, so that the Master's degree is earned faster than usual. (The coursework concerned must individually satisfy the requirements of **both** degrees.)

Example: the MSEE degree requires 30 total credit hours (for thesis option, 24 credit hours of coursework plus six credit hours of thesis work). ABM students may take up to six of the MSEE coursework credit hours as Technical Electives for their BSEE or BSCpE degrees, leaving only 24 credit hours of coursework (for non-thesis option) or 18 credit hours of coursework plus six credit hours of thesis work (for thesis option) needed to earn the MSEE degree.

### Eligibility Requirements:

- Must have at least 3.0 **cumulative undergraduate GPA** (at USA), and
- Must have completed at least **90 credit hours** (i.e., senior status; within two semesters of BSEE or BSCpE graduation), and
- Must have completed at least **30 credit hours at USA**.

**A student who later withdraws or is dismissed from the ABM program may not count graduate coursework towards both degrees. Graduate courses will only be counted towards the MSEE degree if the undergraduate student earns Grade A or B.**

An ABM student **must be a full-time student** and must complete all degree requirements for the Master's degree within three semesters of the semester in which he or she was admitted to the Graduate School. An exception for a fourth semester may be granted where an additional semester is required for final revisions to and submission of a defended thesis. Thesis option students must form the thesis committee during the second semester of the program at the latest. Exceptions to the Electrical and Computer Engineering ABM program policy are at the discretion of the Department Chair and the Dean of the Graduate School.

### Procedure:

If you satisfy these eligibility requirements, and wish to be considered for the ABM program:

1. Discuss ABM with the Department Chair and/or your advisor, for course planning;
2. Complete an undergraduate Advising Form at <https://www.southalabama.edu/colleges/engineering/currentstudents/resources/engineeringadvisingform.pdf> incorporating the ABM courses you have chosen;
3. Complete and print **both** the ABM Declaration form at <https://www.southalabama.edu/departments/eforms/>

[graduateschool/abmdeclarationform.pdf](https://www.southalabama.edu/departments/eforms/registrat/graduate_level_course_for_undergraduate_degree.pdf) and the form requesting authorization to use graduate courses at [https://www.southalabama.edu/departments/eforms/registrat/graduate\\_level\\_course\\_for\\_undergraduate\\_degree.pdf](https://www.southalabama.edu/departments/eforms/registrat/graduate_level_course_for_undergraduate_degree.pdf) incorporating the ABM courses you have chosen;

4. Submit these printed forms to the Department Chair for formal approval and routing; and
5. Enroll in the **graduate section (500-level)** of your chosen ABM Technical Elective(s) (note that this will require course overrides).

**These 500-level Technical Electives will count towards the MSEE degree after you apply for graduate school admission (after completing the BS degree) and successfully complete nine additional credit hours of graduate courses.**

## MSEE Graduation Plan

(30 Total Hours)

The sample Graduation Plan is designed as a guide for students preparing for their course selections. This information provides only a suggested schedule. Actual course selections should be made in consultation with an academic advisor to create a personalized plan as individual student plans may vary.

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EE 5XX	Pure Graduate Class	3
EE 5XX	Graduate Elective Class <sup>1</sup>	3
EE 5XX	Graduate Elective Class <sup>1</sup>	3
		<b>Hours</b>
		<b>9</b>
<b>Spring</b>		
EE 5XX	Pure Graduate Class	3
EE 5XX	Graduate Elective Class <sup>1</sup>	3
EE 5XX	Graduate Elective Class <sup>1</sup>	3
Research integrity and professional ethics training (see <a href="https://www.southalabama.edu/colleges/engineering/resources/rcrtraininginstructions.pdf">https://www.southalabama.edu/colleges/engineering/resources/rcrtraininginstructions.pdf</a> )		
		<b>Hours</b>
		<b>9</b>
<b>Second Year</b>		
<b>Fall</b>		
EE 5XX	Pure Graduate Class	3
<b>Select one of the following:</b>		<b>3</b>
EE 599	Thesis (Thesis option only)	
EE 594	Project in Electrical Engr (Project option only)	
EE 5XX	Graduate Elective Class (Course option only) <sup>1</sup>	
		<b>Hours</b>
		<b>6</b>
<b>Spring</b>		
EE 5XX	Graduate Elective Class <sup>1</sup>	3
<b>Select one of the following:</b>		<b>3</b>
EE 599	Thesis (Thesis option only)	
EE 5XX	Graduate Elective Class (Project or Course options only) <sup>1</sup>	
		<b>Hours</b>
		<b>6</b>
		<b>Total Hours</b>
		<b>30</b>

<sup>1</sup> Graduate elective classes must be approved by the ECE Department Graduate Coordinator.

**Note:** Some classes from other disciplines are available for graduate students: these must be approved by the ECE Department Graduate Coordinator.

## Systems Engineering

### Systems Engineering Program Information

(251) 341-4735

Systems Engineering Program website

<https://www.southalabama.edu/colleges/engineering/phd-se> (<https://www.southalabama.edu/colleges/engineering/phd-se/>)

#### Systems Engineering Program Faculty

Title	Name
Program Coordinator	Sean Walker
Assistant Professor	Kari Lippert
Assistant Professor	Bhushan Lohar

### Master of Science in Systems Engineering (MS)

The program for the Master of Science in Systems Engineering (MSSE) focuses on holistic views of systems. As the complexity of everything increases, it is important for engineers to recognize that everything can be viewed as a system. The MSSE takes a total system lifecycle view – from cradle to grave. The program provides an ideal mix of theory and a practical experience-based approach to systems engineering. It is suitable for both working engineers looking for a broader view of engineering as well as for full-time students wishing to find out more about systems. Courses include the system lifecycle, project engineering, systems thinking and software systems engineering. At USA, we emphasize a model-based systems engineering approach (MBSE) in many of our courses. Graduates will have acquired the background needed to move into any industry that understands and values early concept development, the importance of solid systems requirements, systems integration, and verification and validation. Most graduate courses in Systems Engineering are offered in late afternoon or early evening, in a blended classroom/webcast format, to accommodate remote and practicing engineers.

#### Requirements for Admission to MSSE Program

The following requirements are additional to the requirements of the Graduate School. Final admission decisions are made based upon an evaluation of the applicant's complete file which consists of all official academic transcripts, undergraduate grade-point average, Graduate Record Exam (GRE) scores (when required), English language test score (for international applicants), work history, program enrollment, and funding availability if required by the applicant. Admission may be granted by the Systems Engineering Program Director in special cases where holistic evaluation shows that the applicant's credentials and work experience are appropriate. GRE scores are not required for regular admission, but students may be required to present GRE scores to be eligible for some assistantships or fellowships.

#### Regular Admission to MSSE Program

1. A minimum grade-point average of 3.0 or greater (on a scale of 4.0) on all undergraduate coursework leading to the award of a Bachelor's degree in a discipline related to engineering (e.g. civil, computer,

chemical, electrical, industrial, mechanical engineering; other related STEM majors may be considered on a case-by-case basis).

2. Grade B or higher for all graduate courses to be considered as transfer credits from previous institutions attended. Only graduate credits that have not been applied to another degree can be considered for transfer.
3. Official transcripts from all colleges and universities attended by the applicant.
4. For international students whose native language is not English, a minimum score of 79 on the Internet-based TOEFL, or a minimum score of 213 on the computer-based TOEFL, or a minimum score of band 6.5 on the IELTS test, or a minimum overall score of 58 on the Pearson PTE Academic Test, or a minimum Duolingo score of 100.

#### Provisional Admission to MSSE Program

1. A grade-point average of 2.5 or greater (on a scale of 4.0) on all undergraduate coursework leading to the award of a Bachelor's degree in a discipline related to engineering (e.g. civil, computer, chemical, electrical, industrial, mechanical engineering; other related STEM majors may be considered on a case-by-case basis).
2. Officially certified minimum score of 146 in the Verbal portion and a minimum score of 151 in the Quantitative portion of the Graduate Record Examination (GRE). This requirement is waived for students who received an engineering BS degree from the University of South Alabama (but those students may be required, however, to present GRE scores to be eligible for some assistantships or fellowships.) Applicants holding a current P.E. license, or holding a Bachelor's degree in an engineering discipline (e.g., civil, computer, chemical, electrical, industrial, or mechanical engineering), or having a minimum of five years of engineering work experience, may request that this GRE requirement be waived. Strong GRE scores may improve chances of acceptance for candidates who do not have a strong GPA or English language scores.
3. All other requirements for Regular Admission to the MSSE program (see above), except that the grade-point average required is reduced as above.

### Doctor of Philosophy in Systems Engineering (Ph.D.)

The Doctor of Philosophy (Ph.D.) in Systems Engineering offers students a holistic approach to the design and understanding of complex systems. NASA defines systems engineering as "a holistic, integrative discipline, wherein the contributions of structural engineers, electrical engineers, mechanism designers, power engineers, human factors engineers, and many more disciplines are evaluated and balanced, one against another, to produce a coherent whole that is not dominated by the perspective of a single discipline." At USA, we emphasize a model-based systems engineering approach (MBSE) in many of our courses. The main objectives of the Ph.D. program are to

1. provide our graduates with the ability to approach all systems (engineered, environmental, coastal, biological, social/organizational, etc.) with the ability to understand the entire system lifecycle in a manner that meets the needs of industry, and
2. prepare our graduates for leadership positions requiring applied research along with critical and creative thinking.

This program is appropriate for students who want to pursue research-based careers in industry, government, or academia. The program requires coursework across multiple engineering disciplines, and specific,

validated systems research resulting in a publicly defended doctoral thesis.

## Requirements for Admission to Systems Engineering Ph.D. Program

GRE scores are not required for regular admission. However, a strong GRE score may improve chances of acceptance for candidates who do not have a strong GPA or English language scores. Students may be required to present GRE scores to be eligible for some assistantships or fellowships.

Final admission decisions are made based upon an evaluation of the applicant's complete file which consists of all official academic transcripts, undergraduate grade-point average, GRE scores (when required), letters of recommendation, the applicant's statement of purpose, English language test score (for international applicants), work history, program enrollment, and funding availability if required by the applicant. Admission may be granted by the Systems Engineering Program Director in special cases where holistic evaluation shows that the applicant's credentials and work experience are appropriate. The Ph.D. Admission Committee reserves the right to review coursework at the Bachelor's degree level before making any admission decision.

## Requirements for Regular Admission (already holding Master's degree) to Ph.D. Program

In addition to meeting Graduate School requirements, the requirements for **Regular Admission** into the Systems Engineering Ph.D. program when already holding a Master's degree are as follows:

1. A written Statement of Purpose outlining the applicant's professional goals and commitment to completing the degree requirements.
2. Three letters of recommendation, from individuals familiar with the student's academic and technical abilities, describing the applicant's ability to succeed in the Ph.D. degree in Systems Engineering.
3. A Master's degree in a discipline related to engineering (e.g. civil, computer, chemical, electrical, industrial, mechanical engineering; other related STEM majors may be considered on a case-by-case basis).
4. All other requirements for Regular Admission to the Systems Engineering MS program (see above), except that the grade point average requirement of 3.0 or greater (on a scale of 4.0) applies instead to all graduate (not undergraduate) coursework, and other STEM Bachelor's degrees may be considered depending on relevant factors such as time spent working and gaining experience in an Engineering field or environment. GRE scores are not required.

## Requirements for Regular Admission (not already holding Master's Degree) to Ph.D. Program

As above for Regular Admission (already holding Master's degree), except that the requirement to hold a Master's degree does not apply, and the grade point average of 3.0 or greater (on a scale of 4.0) is required on all undergraduate (not graduate) coursework.

## Requirements for Provisional Admission to Ph.D. Program

1. A written Statement of Purpose and the letters of recommendation as specified above for Regular Admission (already holding a Master's degree).
2. All other requirements for Provisional Admission to the Systems Engineering MS program (see above).

## Academic Dismissal

The Dean of the Graduate School has authority to dismiss graduate students from the Graduate School for any of the following reasons:

1. Any term in which a graduate student drops below a 3.0 Program GPA, the student is placed on probationary status and has a period of two terms to attain a 3.0 Program GPA or be dismissed.
2. Having two unsuccessful attempts to pass the Qualifying Exam or Proposal Defense.
3. Receiving a course F grade that has not been improved by repeating the course.
4. Having an average GPA less than 3.0 (grade B average) after earning 10 or more credits.
5. Receiving three or more C grades.

A student who has been academically dismissed is eligible to reapply to the Graduate School subject to the approval of the Director of Graduate Studies of the specific new program and the Dean of the Graduate School. This is not intended to include the program from which the student has been dismissed. Once placed on dismissal status, a student must meet with his/her advisor and complete a Remediation Action Plan (RAP). This plan must be submitted to the Registrar before the student is allowed to take additional courses.

## Non-Academic Dismissal

A student dismissed from the Ph.D. program as the result of an academic misconduct penalty will be automatically dismissed from the Graduate School and the University of South Alabama and will not be eligible to apply for readmission.

## Degrees, Programs, or Concentrations

- Systems Engineering (MS) (p. 615)
- Systems Engineering (Ph.D.) (p. 615)
- Systems Engineering Certificate Program (p. 616)

## Courses

### Engineering (EG)

#### Systems Engineering (SE)

##### SE 500 Engr Probability & Statistics 3 cr

Probability and statistical concepts; discrete, continuous, and joint distributions; point and interval estimation; hypothesis testing; regression and correlation analysis; analysis of variance.

##### SE 501 Engineering Optimization 3 cr

Model construction, linear programming, network models, dynamic models, stochastic models, queuing theory, and decision theory.

**Prerequisite:** SE 500 (may be taken concurrently) Minimum Grade of B

##### SE 590 Special Topics in SE 3 cr

Topics of current interest in Systems Engineering. Fee

##### SE 592 Directed Study in SE 3 cr

Directed study, under the guidance of a faculty advisor, of a topic from the field of Systems Engineering not offered in a regularly scheduled course. Requires Instructor's permission.

##### SE 594 Projects in SE 3 cr

An investigation of an original problem in Systems Engineering, under the guidance of a faculty advisor. Approval of the project prospectus by the student's advisory committee and consent of the Director of Engineering Graduate Studies.

**SE 599 Thesis 1-6 cr**

An investigation of an original problem in Systems Engineering under the guidance of the student's major professor. Approval of the dissertation prospectus by the student's Advisory Committee, the Graduate School, and consent of the Director of Engineering Graduate Studies.

**SE 601 Systems Eng Fundamentals 3 cr**

Fundamentals of systems engineering, structure of complex systems, system development process, systems engineering management and documentation, needs analysis, requirements development, engineering design and development, integration and test, change management, process improvement.

**SE 602 Risk and Failure Analysis 3 cr**

Risk Analysis needs, risk analysis methods, performance requirement analysis, trade studies, failure analysis needs, failure analysis tracking, and failure analysis methods. Pre-requisites: Requires a background in calculus-based statistics and permission of instructor.

**SE 603 Integration, Test & Evaluation 3 cr**

Interface control documents, design reviews, requirements management, allocation of test methods to requirements, test plans, test procedures, test execution, and failure tracking and resolution.

**Prerequisite:** SE 601 Minimum Grade of C

**SE 604 Software Systems Engineering 3 cr**

Software development methodologies, software development tools, change management, software concept development, software requirements development and allocation, coding and unit test, program technical interfaces, software engineering management.

**Prerequisite:** SE 601 Minimum Grade of C

**SE 605 Project Engineering 3 cr**

Management of system design, development and risk, work breakdown, structure, systems engineering management plan, design reviews, budget and schedule analyses, negotiation and conflict resolution, contracts, customer interactions, team selection, failure resolution.

**SE 606 Systems Architecture 3 cr**

The systems architecture is that foundational structure of a system, capturing the core capability and structure of the system. This course will cover principles of systems architecting, system architecture drivers, relationship of systems architecture to system requirements, common tools and techniques to include design structure matrices, IDEF0, SysML, and simulation.

**Prerequisite:** SE 601 Minimum Grade of C

**SE 607 Systems Simulation 3 cr**

This course rigorously examines system modeling and simulation methodologies, emphasizing statistical analysis and discrete-event simulation via simulation software.

**SE 608 Reliability Engineering 3 cr**

This course rigorously examines reliability and maintainability methodologies, emphasizing mathematical constructs, design concepts, and data analysis employed to quantify reliability, availability, and maintainability measures for operational readiness, support system design, and system effectiveness.

**SE 609 Engineering Research Methods 3 cr**

This course is a fast tracked course examining quantitative and qualitative methods for conducting meaningful inquiry and research. Topics include research ethics, intent, design, methodologies, techniques, formatting, data management, analysis, publication, and presentation utilizing common statistical approaches.

**SE 610 Systems Thinking 3 cr**

The act of systems thinking is taking a step back from the details considered during engineering design, and looking at the whole picture. This class exposes the student to a conceptual framework to allow them to properly define complex systems and enterprises drawing from synthesizing techniques from systems science, soft systems methodologies, and systems engineering. The class demonstrates the ability to leverage the simultaneity of perspectives, the role of paradox, and the centrality of soft issues in resolving complexity.

**SE 611 Socio-Technical Systems 3 cr**

Socio-Technical systems are those systems which contain and/or are strongly influenced by human, social and institutional elements. Because of those influences, they quickly become dependent on community partnerships, infrastructure constraints, and government-aspects that are not traditionally part of the engineering equation. This course considers the systems engineering approach as it relates to the challenges of socio-technical systems.

**SE 612 Production System Engineering 3 cr**

This course rigorously examines principles, design, models and techniques for operational planning and analysis of production and distribution systems emphasizing quantitative methods.

**SE 613 Decision Analysis 3 cr**

This course will give the engineering student the analysis techniques used to assess single participant multiple criteria and multiple participant multiple criteria decisions. As decisions occur throughout the lifecycle of a system, the variety of engineering decision techniques introduced can be applied to a myriad of decisions.

**SE 614 Sys Lifecycle Cost Analysis 3 cr**

Systems engineering considers the entire lifecycle of a system. Therefore, it makes sense to consider the entire cost of the product or system form cradle to grave. This course presents methods, processes, and tools needed to conduct cost analysis, estimation, and management of complex systems.

**SE 615 Engineering Management 3 cr**

Engineering management is an integral part of any engineered system. Topics to be covered include team project vision, mission, goals, organization, tools, management and leadership, managing technical issues, coordination and control. This course is relevant to any engineering or technical discipline.

**SE 616 Requirements Engineering 3 cr**

Systems requirements are the foundation of all engineered systems. They form the basis for what the customer wants, what the engineer produces, and what the system accomplishes. There must be synergy between those three perspectives. This course addresses the process of identifying systems requirements before the system exists, writing effective and concise requirements, writing testable requirements, and the management of those requirements as the system is engineered.

**SE 621 Digital Twin Foundations 3 cr**

The realm of designing and defining digital twins will belong to the systems engineer of the future. The Unity game engine is a gateway to mastering development of high-caliber digital twins and creating unparalleled virtual prototypes. Students will be prepared to take the Unity Associate Game Developer Certification. Prior programming experience useful, but not required.

**SE 622 Systems Engineering Internship 1-3 cr**

The Systems Engineering Internship provides students with the opportunity to work up in an engineering role. In this course students will learn to apply their knowledge of Systems Engineering to practical engineering problems in the workplace.

**SE 690 Special Topics in SE 3 cr**

Topics of current interest in Systems Engineering.

**SE 692 Directed Studies 3 cr**

Directed study, under the guidance of a faculty advisor, of a topic from the field of Systems Engineering not offered in a regularly scheduled course.

Prerequisite: Instructor's permission.

Faculty Name	Faculty Department
LIPPERT, KARI JOANN (klippert@southalabama.edu)	General Engineering

**SE 699 Dissertation 1-6 cr**

An investigation of an original problem in Systems Engineering under the guidance of the student's major professor. Prerequisite: Approval of the dissertation prospectus by the student's Advisory Committee, the Graduate School, and consent of the Director of Engineering Graduate Studies.

## Faculty

Faculty Position	Degrees Held
Assistant Professor	BS, University of Toledo MS, Johns Hopkins University DSC, University of South Alabama

## Systems Engineering (MS) Degree Requirements

(30 Credit Hours)

An MSSE student is required to complete a total of 30 graduate credits. These credits include core courses and electives. The three possible options that an MSSE student may pursue are described below after the core courses:

Code	Title	Hours
<b>Core Courses For All MSSE Options</b>		
SE 500	Engr Probability & Statistics	3
SE 601	Systems Eng Fundamentals	3
SE 602	Risk and Failure Analysis	3
SE 603	Integration, Test & Evaluation	3
SE 606	Systems Architecture	3
<b>Options</b>		
Select one of the following Options:		15
Option 1: Thesis Option (p. 615)		
Option 2: Project Option (p. )		
Option 3: Course Only Option (p. 615)		
<b>Total Hours</b>		<b>30</b>

**Option 1: Thesis Option**

This option includes a traditional 6-credit Master's Thesis.

Code	Title	Hours
SE Core Courses required		15
SE 609	Engineering Research Methods	3
Required or Free Electives credit hours required		6
Responsible Conduct of Research (RCR) Training from CITI Program		0
Thesis or Dissertation credit hours required		6
<b>Total Hours</b>		<b>30</b>

Students following the thesis option will give an oral presentation of their work (i.e. thesis defense).

**Option 2: Project Option**

This option is suitable for students working on a project related to their employer's discipline and interests.

Code	Title	Hours
SE Core Courses required		15
SE 594	Projects in SE	3
Required or Free Electives credit hours required		12
Responsible Conduct of Research (RCR) Training from CITI Program		0
<b>Total Hours</b>		<b>30</b>

Students following the project option will give a written and oral presentation of their project work.

**Option 3: Course Only Option**

Under this option, the Master's degree is awarded after successful study of ten courses.

Code	Title	Hours
SE Core Courses required		15
Required or Free Electives credit hours required		15
<b>Total Hours</b>		<b>30</b>

## Systems Engineering (Ph.D.) Degree Requirements

(67 Credit Hours)

**Case 1: With Engineering Bachelor's Degree Only**

Code	Title	Hours
SE 601	Systems Eng Fundamentals	3
SE 606	Systems Architecture	3
SE 603	Integration, Test & Evaluation	3
SE 602	Risk and Failure Analysis	3
SE 609	Engineering Research Methods	3
Systems Engineering Elective		3
Other Systems Engineering or Engineering Electives		at least 30

Research Hours	at least 19
Responsible Conduct of Research RCR Training from CITI Program	0
Total credit hours required for completion:	at least 67

### Case 2: With STEM Bachelor's Degree (Other Than Engineering)

Code	Title	Hours
Pre-requisite undergraduate courses to be determined at the time of admission. It is highly recommended that the applicant has taken at least three semesters of calculus and a college-level physics course.		
SE 601	Systems Eng Fundamentals	3
SE 606	Systems Architecture	3
SE 603	Integration, Test & Evaluation	3
SE 602	Risk and Failure Analysis	3
SE 609	Engineering Research Methods	3
Systems Engineering Elective		3
Other Systems Engineering or Engineering electives	at least 30	
Research Hours	at least 19	
Responsible Conduct of Research RCR Training from CITI Program	0	
Total credit hours required for completion:	at least 67	

### Case 3: With Engineering Master's Degree

Code	Title	Hours
Engineering Master's degree transfer credits to be determined at the time of admission		
SE 601	Systems Eng Fundamentals	3
SE 606	Systems Architecture	3
SE 603	Integration, Test & Evaluation	3
SE 602	Risk and Failure Analysis	3
SE 609	Engineering Research Methods	3
Systems Engineering Electives		9-3
Research Hours	at least 19	
Responsible Conduct of Research RCR Training from CITI Program	0	
Total credit hours required for completion:	at least 67	

### Case 4: With STEM Master's Degree (Other Than Engineering)

Code	Title	Hours
Engineering Master's degree transfer credits to be determined at the time of admission		
SE 601	Systems Eng Fundamentals	3
SE 606	Systems Architecture	3

SE 603	Integration, Test & Evaluation	3
SE 602	Risk and Failure Analysis	3
SE 609	Engineering Research Methods	3
Systems Engineering Electives (total transfer credits to be determined at the time of admission)		TBD
Research Hours	at least 19	
Responsible Conduct of Research RCR Training from CITI Program	0	
Total credit hours required for completion:	at least 67	

## Required Examinations

The required examinations in the Systems Engineering Ph.D. program have two parts; each has a written component and an oral component. The examinations are:

- Qualifying Examination: Written and Oral
- Proposal Defense – Written and Oral: The Proposal Defense document must be made available to the Doctoral Advisory Committee at least two weeks before the scheduled defense. Feedback on the Proposal Defense will be given to the student by his/her Doctoral Advisor within seven days of its completion. To pass the Proposal Defense, a degree candidate must have a favorable vote from a majority of the Doctoral Advisory Committee, with at most a single negative vote. If the student does not pass the Proposal Defense, he/she has the option to complete the requirements for the Master's degree and exit the Doctoral program, or schedule a second Defense within one semester while remedying deficiencies noted in the first Defense. Students failing the Defense twice will be dismissed from the Doctoral program without the option to complete a Master's degree.
- Dissertation Defense – Written and Public Oral: As for the Proposal Defense requirements, if the student does not pass the final Dissertation Defense, he/she has the option to complete the requirements for the Master's degree or to schedule a second Defense within one semester while remedying deficiencies noted in the first Defense. Students failing the Defense twice will be dismissed from the Doctoral program without the option to complete a Master's degree.

## Systems Engineering Certificate Program

### Certificate Details

The University of South Alabama Systems Engineering Certificate is a 12-hour academic program. The program is intended to give students a solid grounding in systems engineering. This program is designed for those who do not want to pursue a full Master's degree, but need to know more about systems engineering than is typically covered in a Bachelor's degree.

Program Requirements: For acceptance in the program, applicants should have an engineering Bachelor's degree or equivalent math/science degree. Award of the Systems Engineering Certificate requires satisfactory completion of 12 credit hours with a minimum GPA of 3.0.

Code	Title	Hours
SE 601	Systems Eng Fundamentals	3
SE 603	Integration, Test & Evaluation	3
SE 605	Project Engineering	3
SE 606	Systems Architecture	3
<b>Total Hours</b>		<b>12</b>

## William B. Burnsed, Jr. Mechanical, Aerospace, and Biomedical Engineering

### Department Information

(251) 460-6168

Department of Mechanical, Aerospace and Biomedical Engineering website  
<https://www.southalabama.edu/colleges/engineering/me/index.html>  
[\(https://www.southalabama.edu/colleges/engineering/me/\)](https://www.southalabama.edu/colleges/engineering/me/)

### William B. Burnsed, Jr. Department of Mechanical, Aerospace, and Biomedical Engineering Faculty

Title	Name
Interim Chair	Anh-Vu Phan
Professors	Hsiao
Associate Professors	Kar, Montalvo, Richardson, Tambe
Assistant Professors	Dizbay-Onat

Mechanical Engineering is one of the broadest engineering disciplines. Mechanical engineers invent, analyze and design systems that produce power or convert energy. This encompasses such diverse applications as designing next-generation aircraft and automobiles, inventing novel methods of generating energy from renewable sources, and developing sophisticated new medical devices and systems. Mechanical engineers are in the forefront of exciting new technological fields, including nano-engineering, biomedical engineering, and energy research.

The basic fields of study for mechanical engineers include:

- Materials science, the study of the relationship between structure, properties, and processing of materials.
- Thermodynamics and heat transfer dealing with basic concepts and applications of work, energy, and power. Applications include power generation from fossil fuels, from renewable sources (solar, wind energy) and fuel cells.
- Engineering mechanics, the study of static and dynamic effects of forces applied to rigid and flexible solid bodies.
- Fluid mechanics, the study of the forces and motions of liquids and gases. Included in this area of study are hydraulics, gas dynamics, aerodynamics, and design and application of pumps, compressors, and turbines.
- Control systems including studies of transient and steady-state response of systems to external inputs.
- Design synthesis which integrates all fields of engineering in the production of safe, practical, efficient, and economically feasible solutions to real problems.

The curriculum leading to the degree of Bachelor of Science in Mechanical Engineering (BSME) is designed so that graduates can work

in any Mechanical Engineering field, or continue their education at the graduate level.

All BSME students complete a senior-year “capstone” design project, in which a team of students defines and solves a unique, real-world engineering problem.

### Aerospace Engineering Track

Students who plan to enter careers or graduate studies in aerospace, aeronautics, astronautics, or a related field may pursue the specialized track in Aerospace Engineering within the BSME program. Students in this track must complete AE 361 Introduction to Aerodynamics, in addition to two other approved aerospace engineering electives.

Students interested in the Aerospace Engineering track within the BSME program should consult their academic advisor.

### Biomedical Engineering Track

Students who plan to enter careers or graduate studies in biomedical engineering may pursue the specialized track in Biomedical Engineering within the BSME program. This track may also be appropriate for students planning to pursue a career in the health sciences (medical school, dental school, or other health profession programs).

Students in the Biomedical Engineering track must complete General Biology I & II with labs (BLY 121, BLY 121L, BLY 122, BLY 122L), General Chemistry II with lab (CH 132, CH 132L) and Introduction to Biomedical Engineering BME 467.

Students interested in the Biomedical Engineering track within the BSME program should consult their academic advisor.

Students planning to apply for admission to a health profession program should also consult a Pre-Health Profession Advisor to identify any additional courses that may be required.

## BSME Program Educational Objectives

Alumni of the Bachelor of Science in Mechanical Engineering (BSME) program should demonstrate the following traits and accomplishments within five years following graduation:

1. Graduates will achieve professional advancements or promotions with progressively higher levels of responsibility, competency, professional and ethical judgment and analysis. They will apply creative and innovative techniques to solve significant problems. They will apply team assimilation skills to successfully manage cross-disciplinary, collaborative projects that require global and multicultural perspectives.
2. Graduates will demonstrate effective written and oral communication skills in presenting, documenting and conveying their work via traditional and new media formats. They will use these skills in creating and supporting new or improved designs, inventions, and intellectual property, thereby contributing to the social, economic, and environmental well-being of local and global communities.
3. Graduates will demonstrate commitment to lifelong learning and continuous professional development through activities such as mentoring, participating in professional societies, completing advanced degrees and achieving professional registration or other certifications.

Mechanical Engineering graduates will accomplish these objectives in the course of professional employment, entrepreneurship, military or public service and postgraduate education.

## BSME Student Outcomes

By the time of graduation from the BSME program, a student will have demonstrated attainment of the following outcomes:

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, and environmental, and economic factors
3. an ability to communicate effectively with a range of audiences
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies

The Bachelor of Science degree program in Mechanical Engineering at the University of South Alabama is accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>, under the General Criteria and the Program Criteria for Mechanical and similarly named Engineering programs.

## Mechanical Engineering Accelerated Bachelor's to Master's Program

The William B. Burnsed Jr. Department of Mechanical, Aerospace, and Biomedical Engineering allows well-qualified undergraduates to follow an "Accelerated Bachelor's to Master's" (ABM) study plan. Under ABM, up to six credit hours of graduate coursework can count towards both the BSME (as Technical Electives) and the MSME degrees, so that the MSME degree is earned faster than usual. See a departmental advisor for specific details.

## Exam-Compliant Calculator Policy

Every Mechanical Engineering (ME) student must have an exam-compliant calculator. Only those calculators which are acceptable for use in the Fundamentals of Engineering (FE) exam are considered to be exam-compliant and may be used in Mechanical Engineering classes which allow calculator usage. Use of a calculator which is **not** exam-compliant in an ME test, quiz, or exam will be considered academic misconduct. For a list of exam-compliant calculator models, see <https://nces.org/exams/calculator/>.

## Degrees, Programs, or Concentrations

- Mechanical Engineering (BS) (p. 623)
- Mechanical Engineering (BS) - Aerospace Track (p. 626)

- Mechanical Engineering (BS) - Biomedical Engineering Track (p. 628)
- Mechanical Engineering (MS) (p. 631)
- Mechanical Engineering - Accelerated Bachelor's to Master's Program (p. 632)

## Courses

### Aerospace Engineering (AE)

#### AE 361 Fundamentals of Aerodynamics 3 cr

Conservation laws, potential flow, airfoil and wing analysis. Boundary layer theory and pressure gradients on plates and airfoils. Introduction to turbulent and vortex-dominated flows.

**Prerequisite:** (EG 360 Minimum Grade of C and MA 227 Minimum Grade of C and PH 202 Minimum Grade of C)

#### AE 464 Principles of Spacecraft Design 3 cr

Introduction to space launch vehicle and spacecraft design, including an understanding of the various subsystems and how the overall vehicle's optimization leads to good conceptual designs. Introduction to parameters in aerospace analysis and how they effect the design.

**Prerequisite:** (ME 228 Minimum Grade of C and EG 360 Minimum Grade of C)

#### AE 466 Principles of Aerospace Propulsion 3 cr

Airbreathing engines course. Apply fluids, thermodynamics, and heat transfer to analysis of air breathing engines. Topics to include: ideal cycle analysis, component performance, non-ideal cycle analysis, and blade aerodynamics.

**Prerequisite:** ME 312 Minimum Grade of D and EG 360 Minimum Grade of D and ME 317 (may be taken concurrently) Minimum Grade of D

#### AE 468 Principles of Aircraft Design 3 cr

Introduction to aircraft design, including an understanding of the various components leading to a good conceptual design. Introduction to parameters in aerospace analysis and how they may impact a design. Application of design concepts to an RFP (request for proposal) for design competition.

**Prerequisite:** (ME 328 (may be taken concurrently) Minimum Grade of C and EG 360 Minimum Grade of C)

**Cross-Listed:** ME 468

#### AE 469 Aircraft Stability and Control 3 cr

Introduction to flight dynamics of aerospace vehicles. Basic overview of stability analysis and linear feedback control.

**Prerequisite:** ME 328 Minimum Grade of D and EG 360 Minimum Grade of D

#### AE 470 Aircraft Structural Analysis 3 cr

Introduction to elasticity. Torsion, bending and shearing of thin-walled skin-stringer structures. Failure mechanisms. Buckling of beams and plates. Introduction to finite element analysis and composite structural analysis.

**Prerequisite:** EG 284 Minimum Grade of C and EG 315 Minimum Grade of C and ME 328 (may be taken concurrently) Minimum Grade of C

**Cross-Listed:** ME 470

## Biomedical Engineering (BME)

### BME 467 Intro to Biomedical Eng 3 cr

Survey of topics and current issues in the field of biomedical engineering. Topics include biomechanics, biomedical instrumentation, biomaterials engineering, biomedical imaging, cellular mechanics, tissue engineering, biomedical design and ethics. A portion of the course is devoted to basic biology concepts and principles. Students will review literature and discuss technical and technological developments relevant to biomedical engineering.

**Prerequisite:** ME 328 (may be taken concurrently) Minimum Grade of C  
**Cross-Listed:** ME 467

### BME 567 Principles of Biomedical Eng 3 cr

Survey of topics and current issues in the field of biomedical engineering. Topics may include biomechanics, biomedical instrumentation, biomaterials engineering, biomedical imaging, cellular mechanics, tissue engineering, biomedical design and ethics. A portion of the course is devoted to basic biology concepts and principles. Students will review literature and discuss technical and technological developments relevant to biomedical engineering.

**Prerequisite:** MA 507 (may be taken concurrently) Minimum Grade of C  
**Cross-Listed:** ME 567

## Mechanical Engineering (ME)

### ME 135 Engr Graphics and Comm 3 cr

Graphical representation of objects, orthographic, oblique, and isometric views. Freehand lettering and sketching, computer aided graphics, presentation of graphics based on numerical data using spreadsheet, word processor and presentation software.

**Prerequisite:** MA 125 (may be taken concurrently) Minimum Grade of C

### ME 228 Computational Engineering 3 cr

Introduction to programming concepts in mechanical engineering including topics in linear algebra, loop structures for summations used in applications, and regression analyses.

**Prerequisite:** (MA 237 Minimum Grade of C)

### ME 312 Mech Engr Thermodynamics 3 cr

Thermodynamics power and refrigeration cycles, gas mixtures, psychometrics, and combustion. One-half hour of design.

**Prerequisite:** EG 270 Minimum Grade of C

### ME 314 Machine Component Design 3 cr

Analysis and design of machine elements to accomplish given tasks within limits of stress and size. One hour of design.

**Prerequisite:** EG 284 Minimum Grade of C and EG 315 Minimum Grade of C

### ME 316 Instrumentatn & Exp Method 3 cr

Measuring system analysis and design, signal conditioning, analysis of data, statistical error analysis, communication of results.

**Prerequisite:** (EG 220 Minimum Grade of C and MA 238 Minimum Grade of C and PH 202 Minimum Grade of C) and (ME 228 Minimum Grade of C or ME 328 Minimum Grade of C)

### ME 317 Heat Transfer 3 cr

Steady and transient, multi-dimensional conduction, forced and natural convection, radiation, and heat exchangers. One-half hour of design.

**Prerequisite:** (EG 360 Minimum Grade of C or ME 360 Minimum Grade of C) and (ME 228 Minimum Grade of C or ME 328 Minimum Grade of C) and EG 270 Minimum Grade of C

### ME 319 Instrumentatn & Exp Method Lab 1 cr

Laboratory component of ME 316 Instrumentation. The same grade will be given in both courses.

**Prerequisite:** EG 220 Minimum Grade of D and (MA 238 Minimum Grade of D or MA 338 Minimum Grade of D) and (PH 202 Minimum Grade of D or PH 217 Minimum Grade of D)

**Corequisite:** ME 316

### ME 326 Materials Science 3 cr

Mechanical, chemical, and physical properties of materials. Relationship between structure, processing, and properties engineering materials. One-half hour of design.

**Prerequisite:** (PH 202 Minimum Grade of C or PH 217 Minimum Grade of C) and (CH 115 Minimum Grade of C or CH 131 Minimum Grade of C) and EG 315 Minimum Grade of C

### ME 328 Numerical Methods 3-4 cr

Numerical solutions of differential equations with applications to ME simulation and design. Introduction to Finite Element Analysis. One-half hour of design.

**Prerequisite:** (ME 228 Minimum Grade of C and MA 238 Minimum Grade of C)

### ME 336 Material Science Lab-W 1 cr

Experimental study on the effect of thermal and mechanical processing on properties.

**Prerequisite:** ME 326 Minimum Grade of D and PH 202 Minimum Grade of C and CH 131 Minimum Grade of C and EG 315 Minimum Grade of C

### ME 360 Mechanics of Fluids 3 cr

This course is a study of the properties of fluids including fluid statics and dynamics with applications to Mechanical Engineering and Aerospace Engineering. Topics include application of conservation of mass, momentum and energy; dimensional analysis; flow in pipes and duct; boundary layer flows; and compressible flow. Experiments are used to illustrate some principles.

**Prerequisite:** (EG 284 Minimum Grade of C and EG 270 Minimum Grade of C)

### ME 365 Design of Fluid Power Systems 3 cr

Fluid power components are studied in detail. Design of complete hydraulic systems is stressed. One hour of design.

**Prerequisite:** EG 284 Minimum Grade of D and EG 315 Minimum Grade of D and (EG 360 Minimum Grade of D or CE 365 Minimum Grade of D or ME 324 Minimum Grade of D) and ME 328 Minimum Grade of D

### ME 410 Principles of Eng Design-W 3 cr

In this course, students learn to apply engineering theory and methods to the design process. Topics include problem definition, concept development and evaluation, project management, materials selection, risk analysis, quality improvement and ethics in design (0-3-0).

**Prerequisite:** ME 314 Minimum Grade of C and EG 231 Minimum Grade of C and ME 336 (may be taken concurrently) Minimum Grade of C and ME 317 (may be taken concurrently) Minimum Grade of C and ME 316 Minimum Grade of C

### ME 411 Thermal System Design 3 cr

Thermal system design using principles of thermodynamics, fluid mechanics, heat transfer, and numerical simulation. Communication of results. Three hours of design.

**Prerequisite:** ME 312 Minimum Grade of D and ME 317 Minimum Grade of D and ME 328 Minimum Grade of D and (EG 360 Minimum Grade of D or CE 365 Minimum Grade of D or ME 324 Minimum Grade of D)

**ME 414 Capstone Design 1 cr**

This course is considered a "Senior Capstone Course."

**Prerequisite:** ME 410 Minimum Grade of D

**Corequisite:** ME 416

**ME 416 Capstone Design Project 2 cr**

This is a team-based capstone project course. Each team is assigned a unique design problem in mechanical engineering or a closely-related field. Students must be enrolled concurrently in ME 414 - Capstone Design.

**Prerequisite:** ME 410 Minimum Grade of D

**Corequisite:** ME 414

**ME 417 Dynamics of Machines 3 cr**

A study of the effects of external forces and moments on the motion of machines. Topics include the study of the position, velocity and acceleration of machine components during operation and the determination of forces on the connections and members. One hour of design.

**Prerequisite:** EG 284 Minimum Grade of D and EG 315 Minimum Grade of D and ME 328 Minimum Grade of D

**ME 419 Computer Aided Design & Manu 3 cr**

Introduction to computer aided design (CAD) and computer aided manufacturing (CAM) principles and their practical applications as fundamental elements of contemporary product design and manufacturing. This course is dual listed with an equivalent 500-level mechanical engineering course. One hour of design.

**Prerequisite:** ME 135 Minimum Grade of D and ME 314 Minimum Grade of D

**ME 421 Mechanical System Design 3 cr**

A study of design techniques as applied to mechanical components and systems. Computer simulation and numerical techniques. Communication of results. Three hours of design.

**Prerequisite:** ME 314 Minimum Grade of D and ME 328 Minimum Grade of D

**ME 422 Gas Turbines 3 cr**

Introduction to gas turbines covering thermodynamics, fluid mechanics, combustion, cycle analysis, compressors, turbines and component design. One hour of credit.

**Prerequisite:** (EG 360 Minimum Grade of D or CE 365 Minimum Grade of D or ME 324 Minimum Grade of D) and ME 312 Minimum Grade of D

**ME 426 Dynamic Systems and Control 3 cr**

Modeling dynamic systems. Introduction to the principles of feedback control systems. Analysis of linear systems.

**Prerequisite:** (MA 238 Minimum Grade of D or MA 338 Minimum Grade of D) and ME 316 Minimum Grade of D and ME 328 Minimum Grade of D

**ME 429 Controls & Instr. Lab 1 cr**

Design and implementation of analog and digital feedback control of systems. Design and implementation of measurement systems, including signal conditioning, analog-to-digital and digital-to-analog conversion, statistical estimation of error, data analysis. Communication of laboratory results is emphasized.

**Prerequisite:** ME 426 (may be taken concurrently) Minimum Grade of D

**ME 430 Mechanism Synthesis 3 cr**

Kinematic synthesis of planar linkages for function, path, and motion generation. Topics include: degrees of freedom; graphical, linear analytical, and nonlinear analytical methods; and curvature theory. This course is dual-listed with an equivalent 500-level mechanical engineering course. One hour of design.

**Prerequisite:** EG 284 Minimum Grade of D and ME 328 Minimum Grade of D

**ME 431 Gas Dynamics 3 cr**

Introduction to compressible fluid flow. Conservation laws, isentropic flow, adiabatic flow, flow with heat transfer, normal shock. One hour of design.

**Prerequisite:** (EG 360 Minimum Grade of D or CE 365 Minimum Grade of D or ME 324 Minimum Grade of D) and ME 312 Minimum Grade of D

**ME 432 Advanced Thermodynamics 3 cr**

Continuation of Mechanical Engineering Thermodynamics to develop a broader and deeper understanding of thermal energy transformations. One hour of design.

**Prerequisite:** ME 312 Minimum Grade of D

**ME 438 Finite Element Analysis 3 cr**

Introduction to the finite element method. Engineering application to stress-strain analysis is emphasized. Other field problems are also considered. This course is dual-listed with an equivalent 500-level mechanical engineering course.

**Prerequisite:** ME 328 Minimum Grade of D

**ME 439 Boundary Elements I 3 cr**

Fundamental concepts of the boundary element method of numerically solving partial differential equations. Application to potential flow problems in heat transfer. This course is dual listed with an equivalent 500-level mechanical engineering course.

**Prerequisite:** ME 328 Minimum Grade of D

**ME 441 Microprocessors for Mech Engr 3 cr**

Basic concepts of programming and applying microprocessors to the control of mechanical systems. Assembly language programming. Memory decoding and use. Input and output circuits. Interfacing with the PIA.

**Prerequisite:** EG 220 Minimum Grade of D and ME 316 Minimum Grade of D

**ME 450 Heat Vent and Air Conditioning 3 cr**

Addresses the heating and cooling of buildings. Covers related engineering sciences, cooling and heating loads, systems, and equipment. One hour of design.

**Prerequisite:** (EG 360 Minimum Grade of D or CE 365 Minimum Grade of D or ME 324 Minimum Grade of D) and ME 312 Minimum Grade of D and ME 317 Minimum Grade of D

**ME 451 Refrigeration Systems 3 cr**

Study of refrigeration systems including solutions of typical engineering design problems. Concepts from fluid mechanics, thermodynamics, and heat transfer are used. One hour of design.

**Prerequisite:** (EG 360 Minimum Grade of D or CE 365 Minimum Grade of D or ME 324 Minimum Grade of D) and ME 312 Minimum Grade of D and ME 317 Minimum Grade of D

**ME 452 Combustion 3 cr**

Introduction to the theory of combustion processes, chemical equilibrium, adiabatic flame temperatures, reaction kinetics. This course is dual listed with an equivalent 500-level mechanical engineering courses.

**Prerequisite:** ME 312 Minimum Grade of D

**ME 453 IC Engines 3 cr**

Principles for analysis and design of internal combustion (I.C.) engines. Topics: include fuel-air cycles, fuel, air and exhaust flows, heat and mass transfer, engine performance.

**Prerequisite:** (EG 360 Minimum Grade of D or CE 365 Minimum Grade of D or ME 324 Minimum Grade of D) and ME 312 Minimum Grade of D and ME 317 Minimum Grade of D

**ME 460 Intro to Marine Engineering 3 cr**

Categorization of Ships, Ship Geometry and Hydrostatics, Ship Stability, Ship Hazards, Resistance and Power, Propellers and Propulsion Systems, Ship Dynamics and Control.

**Prerequisite:** EG 360 Minimum Grade of D and EG 315 Minimum Grade of D

**ME 461 Turbomachinery 3 cr**

Energy transfer between fluid and rotor; fluid flow in turbomachines, centrifugal and axial flow pumps and compressors; radial and axial flow turbines. One hour of design.

**Prerequisite:** (EG 360 Minimum Grade of D or CE 365 Minimum Grade of D or ME 324 Minimum Grade of D) and ME 312 Minimum Grade of D

**ME 463 Intro. Biomedical Engineering 3 cr**

Survey of topics and current issues in the field of biomedical engineering. Topics include biomechanics, biomedical instrumentation, biomaterials engineering, biomedical imaging, cellular mechanics, tissue engineering, biomedical design and ethics. A portion of the course is devoted to basic biology concepts and principles. Students will review literature and discuss technical and technological developments relevant to biomedical engineering.

**ME 472 Vibration Analysis-Synthesis 3 cr**

Steady-state and transient vibration analysis of discrete and continuous systems. Vibration problems as related to design are also included.

**Prerequisite:** EG 284 Minimum Grade of C and EG 315 Minimum Grade of C and ME 328 Minimum Grade of D

**ME 474 Noise and Vibration Control 3 cr**

Principles of acoustics; human response to noise; control of noise and vibration by means of vibration isolation, sound barriers, and absorption. One hour of design.

**Prerequisite:** ME 472 Minimum Grade of D

**ME 490 Special Topics 1-3 cr**

Topics of current mechanical engineering interest. **Prerequisite:** Consent of instructor

**ME 494 Directed Studies 1-3 cr**

Selected mechanical engineering topics of special or current interest not available to regularly scheduled courses. **Prerequisite:** Consent of instructor.

**ME 499 Honors Senior Project - H 1-6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project, relevant to the field of Mechanical Engineering study, that will lead to a formal presentation at the Annual Honors Student Colloquium. The senior project will be judged and graded by three faculty, chaired by the honors mentor. This course is required for Honors recognition. A minimum of 4 credit hours is required, but students may enroll for a maximum of 6 credit hours over two semesters. **Prerequisites:** Completion of an approved project prospectus.

**ME 518 Adv Mechanical Engr Analysis 3 cr**

Application of numerical methods including finite differences; finite element and boundary element techniques to the solution of problems in Mechanical Engineering. **Prerequisite:** Consent of instructor.

**ME 519 Computer Aided Design/Manufac 3 cr**

Introduction to computer aided design (CAD) and computer aided manufacturing (CAM) principles and their practical applications as fundamental elements of contemporary product design and manufacturing. This course is dual listed with an equivalent 400-level mechanical engineering course.

**ME 520 Advanced Fluid Mechanics 3 cr**

Analysis of steady and unsteady motion of a viscous fluid. Topics include: conservation equations, Newtonian fluids and the Navier-Stokes equations, vorticity, analytical solutions, boundary layers, instability of viscous flows. **Prerequisite:** Consent of instructor.

**ME 522 Gas Turbines 3 cr**

Introduction to gas turbines covering thermodynamics, fluid mechanics, combustion, cycle analysis, compressors, turbines, and component matching.

**Prerequisite:** ME 520 Minimum Grade of C

**ME 525 Boundary Layer Theory 3 cr**

Development of Navier-Stokes and boundary layer equations, perturbation theory application and boundary layer transition. **Prerequisite:** Consent of instructor.

**ME 530 Mechanism Synthesis 3 cr**

Kinematic synthesis of planar linkages for function, path, and motion generation. Topics include: degrees of freedom; graphical, linear analytical, and nonlinear analytical methods; and curvature theory. This course is dual-listed with an equivalent 400-level mechanical engineering course. **Prerequisite:** Consent of instructor.

**ME 538 Finite Element Analysis 3 cr**

Introduction to the finite element method. Engineering application to stress-strain analysis is emphasized. Other field problems are also considered. This course is dual-listed with an equivalent 400-level mechanical engineering course. **Prerequisite:** Consent of instructor.

**Prerequisite:** MA 507 (may be taken concurrently) Minimum Grade of C or MA 508 (may be taken concurrently) Minimum Grade of C

**ME 539 Boundary Elements I 3 cr**

Fundamental concepts of the boundary element method of numerically solving partial differential equations. Application to potential flow problems in heat transfer. This course is dual listed with an equivalent 400 level mechanical engineering course. Requires special permission of instructor.

**ME 540 Advanced Heat Transfer 3 cr**

Steady and transient conduction, external and internal forced convection, natural convection, radiation with participating media, boiling heat transfer, Stefan condition. **Prerequisite:** Consent of instructor.

**ME 541 Conduction Heat Transfer 3 cr**

Closed form analytical and approximate numerical solutions of one, two- and three-dimensional steady state and transient problems in conduction heat transfer. **Prerequisite:** Consent of instructor.

**Prerequisite:** MA 507 Minimum Grade of C

**ME 542 Convection Heat Transfer 3 cr**

Fundamental laws of motion and energy balance for a viscous fluid, classical solution of the Navier-Stokes and energy equations, laminar/turbulent hydrodynamic and thermal boundary layers, convection heat transfer in laminar/ turbulent internal flows. **Prerequisite:** Consent of instructor.

**ME 543 Radiation Heat Transfer 3 cr**

Blackbody radiation, diffuse-gray surfaces, radiative exchange in a multi-surface enclosure, gas radiation in enclosures with participating media, introduction to available numerical methods. Prerequisite: Consent of instructor.

**ME 544 Heat Trans - Change of Phase 3 cr**

Boiling heat transfer and critical heat flux, condensation heat transfer, Stefan problem, freezing and melting, ablation, introduction to available numerical techniques. Prerequisite: Consent of instructor.

**Prerequisite:** ME 540 Minimum Grade of C or ME 542 Minimum Grade of C

**ME 545 Exp Fluid Mech and Heat Trans 3 cr**

Uncertainty analysis, system response, sampling theory and FFT, differential pressure measurement and multi-hole probes, thermo-couple and RTD, thermal anemometry, LDV and other non-intrusive optical methods, flow visualization. Prerequisites: Consent of instructor

**ME 550 Combustion 3 cr**

Introduction to the theory of combustion processes, chemical equilibrium, adiabatic flame temperature, reaction kinetics, flame structure. This course is dual-listed with an equivalent 400-level mechanical engineering course. Prerequisite: Consent of instructor.

**ME 551 Classical Thermodynamics 3 cr**

Postulational treatment of the physical laws of equilibrium, equations of state, processes, equilibrium, stability, reactive systems, phase transition. Prerequisite: Consent of instructor.

**ME 552 Statistical Thermodynamics 3 cr**

Principles of kinetic theory, quantum mechanics, and statistical mechanics with particular reference to thermodynamic systems. Conclusions of classical thermodynamics are established from the microscopic viewpoint. Prerequisite: Consent of instructor.

**ME 553 IC Engines 3 cr**

Principles for analysis and design of internal combustion (I.C.) engines. Topics include: fuel-air cycles, fuel, air and exhaust flows, heat and mass transfer, engine performance.

**ME 560 Compressible Fluid Flow 3 cr**

Foundations of fluid dynamics and thermodynamics of one dimensional flow and heat transfer, isentropic flow, shock waves and method of characteristics. Prerequisite: Consent of Instructor.

**ME 561 Turbomachinery 3 cr**

Energy transfer between fluid and rotor; fluid flow in turbomachines, centrifugal and axial-flow pumps and compressors; radial and axial flow turbines. Prerequisite: Consent of instructor.

**ME 562 Comp Fluid Dyn - Heat Trans I 3 cr**

Derivation of conservation equations, numerical solution of inviscid and viscous incompressible flow problems, emphasis on finite volume method, introduction to finite element and spectral method. Prerequisite: Consent of instructor.

**ME 563 Comp Fluid Dyn - Heat Trans II 3 cr**

Governing equations in general coordinates, differential geometry for curvilinear coordinates, grid generations, numerical uncertainties. Prerequisite: Consent of instructor.

**Prerequisite:** ME 562 Minimum Grade of C

**ME 564 Turbulent Flow 3 cr**

Reynolds equations, statistics of turbulence, analysis of free and wall turbulence, turbulence models. Prerequisite: Consent of instructor.

**Prerequisite:** ME 520 Minimum Grade of C

**ME 565 Lubrication 3 cr**

Friction of solids and fluids. Lubricants. Theory of sliding bearings. Multi-dimensional bearings with constant forces and velocities. Solid, hydrodynamic and gas lubrication. Design of bearings. Prerequisite: Consent of instructor.

**ME 566 Aerospace Propulsion 3 cr**

Airbreathing engines course. Apply fluids, thermodynamics, and heat transfer to analysis of air breathing engines. Topics to include: ideal cycle analysis, component performance, non-ideal cycle analysis, and blade aerodynamics.

**ME 569 Aircraft Stability and Control 3 cr**

Introduction to flight dynamics of aerospace vehicles. Basic overview of stability analysis and linear feedback control.

**Corequisite:** MA 507

**ME 571 Advanced Engineering Dynamics 3 cr**

Three-dimensional kinematics and kinetics of particles and rigid bodies, energy, momentum, and stability; application of Lagrange's equations to machinery and gyro dynamics. Prerequisite: Consent of instructor.

**ME 572 Advanced Vibrations 3 cr**

Free and forced vibrations of mechanical systems having lumped mass and elasticity; introduction to vibrations of continuous systems; engineering applications. Prerequisite: Consent of instructor.

**Prerequisite:** MA 507 (may be taken concurrently) Minimum Grade of C or MA 508 (may be taken concurrently) Minimum Grade of C

**ME 573 Vibrations of Continuous Sys 3 cr**

Equations of motion for strings, membranes, bars, and plates with various boundary conditions, steady state and transient solutions, exact and approximate methods; wave propagation in elastic media. Prerequisite: Consent of instructor.

**Prerequisite:** MA 507 Minimum Grade of C

**ME 574 Nonlinear Vibrations 3 cr**

Vibrations of damped and undamped systems with nonlinear restoring forces; free and forced oscillations in self-sustained systems; Hills equation and its application to the study of the stability of nonlinear oscillations. Prerequisites: Consent of instructor.

**Prerequisite:** ME 572 Minimum Grade of C and MA 508 Minimum Grade of C

**ME 575 Continuum Mechanics 3 cr**

Cartesian tensor analysis. Analysis of stress and strain, fundamental laws of continuum mechanics. Constitutive equations, application to solid and fluid mechanics. Prerequisite: Consent of instructor.

**ME 582 Advanced Materials Science 3 cr**

Classical and quantum mechanical model of atoms, bonding, magnetism, superconductivity, high strength low density materials, corrosion, biomedical materials. Prerequisite: Consent of the instructor.

**ME 583 Applied Elasticity 3 cr**

Classical problems in elasticity, torsion and bending theory, plane problems in rectangular and polar coordinates; axisymmetric problems, thermoelasticity. Prerequisite: Consent of instructor.

**Prerequisite:** MA 507 (may be taken concurrently) Minimum Grade of C or MA 508 (may be taken concurrently) Minimum Grade of C

**ME 584 Introductory Metal Theory 3 cr**

Theories of metal to explain electrical conductivity and scattering process, electronic and lattice heat capacity, magnetic behavior, cohesion and lattice constant. Prerequisite: Consent of instructor.

**Prerequisite:** MA 507 Minimum Grade of C

**ME 585 Theory of Plates 3 cr**

Basic equations of rectangular and circular plates with various boundary conditions; classical solutions and approximate methods in the theory of thin plates. Prerequisite: Consent of instructor.

**Prerequisite:** MA 507 Minimum Grade of C

**ME 586 Theory of Shells 3 cr**

Introduction to differential geometry; general equations for arbitrary shells; shallow shell theory with applications; solutions to membrane and bending theory for shells of revolution. Prerequisite: Consent of instructor.

**Prerequisite:** ME 585 Minimum Grade of C

**ME 589 Biomechanics 3 cr**

Discrete mass and continuum mechanics description of biological materials, biodynamics of limb and gross body motions, various models for injury to head, neck, torso, and extremities. Prerequisite: Consent of instructor.

**ME 590 Sp Top - 1-3 cr**

Topics of current mechanical engineering interest. Prerequisite: Consent of instructor.

**ME 592 Directed Independent Study 1-3 cr**

Directed study, under the guidance of a faculty advisor, of a topic from the field of Mechanical Engineering not offered in a regularly scheduled course. Requires permission of the instructor.

**ME 594 Projects in Mechanical Engr 1-3 cr**

May be repeated for credit. Prerequisite: Approved proposal and consent of director of engineering graduate studies.

**ME 599 Thesis 1-6 cr**

Thesis research may be taken more than once. Prerequisite: Approved prospectus.

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
CAULEY, LANIER S. (lcauley@southalabama.edu)	Mechanical Engineering	Associate Professor	BS, Virginia Polytechnic Inst and MS, Virginia Polytechnic Inst and PHD, Clemson University
DIZBAY-ONAT, MELIKE (monat@southalabama.edu)	Mechanical Engineering	Assistant Professor	MS, Auburn University MSEE, Auburn University PHD, Univ of Alabama-Birmingham
HSIAO, KUANG-TING (kthsiao@southalabama.edu)	Mechanical Engineering	Professor	BS, Natl Taiwan University PHD, University of Delaware
KAR, JULIA (jkar@southalabama.edu)	Mechanical Engineering	Associate Professor	ME, The University of Auckland MS, University of Louisville PHD, University of Louisville
MONTALVO, CARLOS J (cmontalvo@southalabama.edu)	Mechanical Engineering	Associate Professor	BS, Georgia Inst of Tech - Main MS, Georgia Inst of Tech - Main PHD, Georgia Inst of Tech - Main
PHAN, ANH-VU (vphan@southalabama.edu)	Mechanical Engineering	Professor	BS, Ho Chi Minh City Univ of Tech MS, Grenoble Inst of Technology PHD, University of Montreal
RICHARDSON, JOSEPH DAVID (jdrichardson@southalabama.edu)	Mechanical Engineering	Associate Professor	BSME, University of Mississippi MS, University of Mississippi PHD, Vanderbilt University
TAMBE, DHANANJAY T (dtambe@southalabama.edu)	Mechanical Engineering	Associate Professor	MS, Brown University PHD, Brown University

## Mechanical Engineering (BS)

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		<b>54</b>
<b>Major Requirements</b>		
<i>Engineering Course Requirements</i>		
Complete the following:		
EG 101	Intro to Engineering & Design (& Lab) (or EG 201 for LINK students)	2
EG 220	Electrical Circuits	3
EG 231	Intro to Ethics and Economics	3
EG 270	Engineering Thermodynamics	3
EG 283	Statics	3
EG 284	Dynamics	3

EG 315	Mechanics of Materials	3
EG 360	Fluid Mechanics	3
<i>Mechanical Engineering Course Requirements</i>		
ME 135	Engr Graphics and Comm (Only two attempts are permitted to earn grade C or better. Failure to meet this requirement will result in dismissal from the program.)	3
ME 228	Computational Engineering	3
ME 312	Mech Engr Thermodynamics	3
ME 314	Machine Component Design	3
ME 316	Instrumentatn & Exp Method	3
ME 317	Heat Transfer	3
ME 326	Materials Science	3
ME 328	Numerical Methods	3
ME 336	Material Science Lab-W	1

ME 410	Principles of Eng Design-W	3
ME 426	Dynamic Systems and Control	3
ME 429	Controls & Instr. Lab	1
ME 472	Vibration Analysis-Synthesis	3
ME 414	Capstone Design	1
ME 416	Capstone Design Project	2

*Science Elective*

Select one of the following (no Lab required): 3

BLY 121	General Biology I	
CH 132	General Chemistry II	
GY 111	Physical Geology	
MA 316	Linear Algebra II	
MA 354	Comp Assist Math Modeling - W	
MA 437	Complex Variables	
ST 315	Applied Probability-Statistics	
PH 303	Modern Physics (Lab required)	

*Mechanical Elective*

One course from ME or AE/BME 400 level Elective courses (excluding required courses but ME 490 or ME 494 may be taken only if approved by Chair) 3

*ME Technical Elective*

Select six hours from the following: 6

BLY 121	General Biology I	
BLY 122	General Biology II	
CH 201	Organic Chemistry I	
CH 202	Organic Chemistry II	
EG 450	Intro to Systems Engineering	
GY 305	Geophysics (lab required)	
GY 310	Environmental Earth Science	
MA 316	Linear Algebra II	
MA 332	Differential Equations II	
MA 334	Advanced Calculus I	
MA 335	Advanced Calculus II	
MA 354	Comp Assist Math Modeling - W	
MA 436	Numerical Analysis	
MA 437	Complex Variables	
MA 451	Probability	
ST 315	Applied Probability-Statistics	
ST 320	Applied Stat Analysis	
PH 303	Modern Physics (Lab required)	
ME 490 or ME 494 only if approved by Chair		

**FE Exam**

All students must attempt the NCEES FE (Fundamentals of Engineering) examination.

**Minor Requirements**

A minor is not required for this degree program 0

**Total Hours** 127

**General Education Requirements**

Code	Title	Hours
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**Area I – Written Composition**

Complete the following:

EH 101	English Composition I (Students who earn an English ACT score of 27, or a written SAT score of 610, can opt out of EH 101.)	3
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EH 102	English Composition II	3
or EH 105	Honors Composition - H	

**Area II – Humanities & Fine Arts**

A. Select one of the following: 3

EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	

B. Select one of the following: 3

ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	

C. Complete the following:

CA 110	Public Speaking	3
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**Area III – Natural Sciences & Mathematics**

MA 125	Calculus I	4
CH 131	General Chemistry I	4
& 131L	and General Chemistry I Lab	
PH 201	Calculus-Based Physics I	4
& 201L	and Calculus-Based Physics I Lab	

**Area IV – History, Social & Behavioral Sciences**

A. Select 3 hours from the following: 3

HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	

B. Select 3 hours from the following: 3

AN 100	Intro to Cultural Anthropology	
AN 101	Intro Archaeology-Bio Anthro	
CA 100	Intro to Communication	
CA 211	Interpersonal Comm	
ECO 215	Prin of Microeconomics	
ECO 216	Prin of Macroeconomics	
GEO 114	People, Places, Environment	
GEO 115	World Regional Geography	
GS 101	Intro to Gender Studies	
IS 100	Global Issues	
IST 201	Seasons of Life	
NAS 101	Intro Native American Studies	
PSC 130	Intro to US Government	
PSY 120	Introduction to Psychology	
PSY 250	Life Span Development	
SY 109	Introductory Sociology	
SY 112	Social Problems	

C. Select an additional 3 hours from either List A or List B above in Area IV 3

#### Area V - Pre-Professional, Major, Elective Courses

Complete the following:

MA 126	Calculus II	4
MA 227	Calculus III	4
MA 237	Linear Algebra I	3
MA 238	Differential Equations I	3
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	4

**Total Hours 54**

### Additional Information

It is important that students make adequate progress in the Mechanical Engineering program. Satisfactory completion of a set of fundamental courses is required before a student is allowed to take advanced courses. Professional Component Standing (PCS) is awarded by the Chair of the Department when the student completes the College of Engineering PCS requirements and the WBBJ MABE Departmental PCS requirements.

### College of Engineering PCS Courses

Minimum Grade C is required in all the following courses:

Code	Title	Hours
EH 101	English Composition I (if not exempt)	3
EH 102 or EH 105	English Composition II Honors Composition - H	3
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
MA 125	Calculus I	4
MA 126	Calculus II	4
PH 201	Calculus-Based Physics I (+Lab)	4

### Mechanical Engineering PCS Courses

Minimum Grade C is required in all the following courses:

Code	Title	Hours
EG 283	Statics	3
MA 227	Calculus III	4
MA 237	Linear Algebra I	3
ME 135	Engr Graphics and Comm	3
PH 202	Calculus-Based Physics II	4

## Graduation Plan

(127 Total Hours)

The Sample 4-year plan is designed as a guide for students preparing for their course selections. This information provides only a suggested schedule. Actual course selections should be made in consultation with an advisor. Courses listed as Milestones are required to obtain Professional Component Standing (PCS). Two designated writing (W) courses are required with at least one course chosen from offerings in the student's major or minor. Courses carrying this required credit are identified in the University Bulletin by a W after the course title.

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EG 101	Intro to Engineering & Design (and EG 101 Lab)	2
EH 101	English Composition I <sup>1,2</sup>	3
MA 125	Calculus I	4
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
General Education	Area II or IV <sup>1</sup>	3
<b>Milestone Notes</b>		
Must complete at least 12 hours with a 2.0 or higher GPA		
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
EH 102	English Composition II (or EH 105) <sup>1</sup>	3
MA 126	Calculus II	4
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	4
ME 135	Engr Graphics and Comm	3
CA 110	Public Speaking <sup>1</sup>	3
<b>Milestone Notes</b>		
MA 125	Calculus I	
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	
EH 101	English Composition I (if not exempt)	
<b>Hours</b>		<b>17</b>
<b>Second Year</b>		
<b>Fall</b>		
MA 227	Calculus III	4
MA 237	Linear Algebra I	3
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	4
EG 283	Statics	3
General Education	Area II or IV <sup>1</sup>	3
<b>Milestone Notes</b>		
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	
MA 126	Calculus II	
EH 102 or EH 105	English Composition II or Honors Composition - H	
ME 135	Engr Graphics and Comm	
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
EG 270	Engineering Thermodynamics	3
EG 284	Dynamics	3
EG 315	Mechanics of Materials	3
MA 238	Differential Equations I	3
ME 228	Computational Engineering	3
<b>Milestone Notes</b>		
MA 227	Calculus III	
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	
EG 283	Statics	
MA 237	Linear Algebra I	
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
EG 220	Electrical Circuits	3
EG 360	Fluid Mechanics	3
ME 314	Machine Component Design	3
ME 326	Materials Science	3
ME 328	Numerical Methods	3
<b>Milestone Notes</b>		

MA 238	Differential Equations I	
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EG 231	Intro to Ethics and Economics	3
ME 312	Mech Engr Thermodynamics	3
ME 316	Instrumentatn & Exp Method	3
ME 317	Heat Transfer	3
ME 336	Material Science Lab-W	1
General Education	Area II or IV <sup>1</sup>	3
<b>Milestone Notes</b>		
Apply for graduation		
Apply to take FE Exam		
<b>Hours</b>		<b>16</b>
<b>Fourth Year</b>		
<b>Fall</b>		
ME 410	Principles of Eng Design-W	3
ME 426	Dynamic Systems and Control	3
ME 472	Vibration Analysis-Synthesis	3
ME Elective	See Department List	3
Science Elective	See Department List	3
<b>Milestone Notes</b>		
FE Exam		
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ME 414	Capstone Design	1
ME 416	Capstone Design Project	2
ME 429	Controls & Instr. Lab	1
General Education	Area II or IV <sup>1</sup>	3
General Education	Area II or IV <sup>1</sup>	3
ME/Tech Elective I	See Department List	3
ME/Tech Elective II	See Department List	3
<b>Hours</b>		<b>16</b>
<b>Total Hours</b>		<b>127</b>

<sup>1</sup> Courses meet general education requirements.

<sup>2</sup> Students who earn an English ACT score of 27, or a written SAT score of 610, can opt out of EH 101.

**Note:** Students not Term 1-Calculus I ready will exceed the 127 hours required for this degree. If math is not started prior to Fall-Year 1, the four-year graduation timetable is likely to be extended. Students with ACT Math scores 21 and below should begin math courses in the summer before Fall-Year 1.

## Mechanical Engineering (BS) - Aerospace Track

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		<b>54</b>
<b>Major Requirements</b>		
<i>Engineering Course Requirements</i>		
Complete the following:		
EG 101	Intro to Engineering & Design (& Lab) (or EG 201 for LINK students)	2
EG 220	Electrical Circuits	3
EG 231	Intro to Ethics and Economics	3
EG 270	Engineering Thermodynamics	3

EG 283	Statics	3
EG 284	Dynamics	3
EG 315	Mechanics of Materials	3
EG 360	Fluid Mechanics	3

#### *Mechanical Engineering Course Requirements*

ME 135	Engr Graphics and Comm (Only two attempts are permitted to earn grade C or better. Failure to meet this requirement will result in dismissal from the program.)	3
ME 228	Computational Engineering	3
ME 312	Mech Engr Thermodynamics	3
ME 314	Machine Component Design	3
ME 316	Instrumentatn & Exp Method	3
ME 317	Heat Transfer	3
ME 326	Materials Science	3
ME 328	Numerical Methods	3
ME 336	Material Science Lab-W	1
ME 410	Principles of Eng Design-W	3
ME 426	Dynamic Systems and Control	3
ME 429	Controls & Instr. Lab	1
ME 472	Vibration Analysis-Synthesis	3
ME 414	Capstone Design	1
ME 416	Capstone Design Project	2

#### *Science Elective*

Select one of the following (no Lab required):		3
BLY 121	General Biology I	
CH 132	General Chemistry II	
GY 111	Physical Geology	
MA 316	Linear Algebra II	
MA 354	Comp Assist Math Modeling - W	
MA 437	Complex Variables	
ST 315	Applied Probability-Statistics	
PH 303	Modern Physics (Lab required)	

#### **Aerospace Track Requirements**

Complete the following:		
AE 361	Fundamentals of Aerodynamics	3
Approved AE Elective I (see Department list)		3
Approved AE Elective II (see Department list)		3

#### **FE Exam**

All students must attempt the NCEES FE (Fundamentals of Engineering) examination.

#### **Minor Requirements**

A minor is not required for this degree program

**Total Hours** **127**

### General Education Requirements

Code	Title	Hours
<b>Area I – Written Composition</b>		
EH 101	English Composition I (Students who have an English ACT score of 27, or a written SAT score of 610, can opt out of EH 101)	3
EH 102	English Composition II	3
or EH 105	Honors Composition - H	

**Area II – Humanities & Fine Arts**

CA 110	Public Speaking	3
A. Select one of the following: 3		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
B. Select one of the following: 3		
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	

**Area III – Natural Sciences & Mathematics**

MA 125	Calculus I	4
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	4

**Area IV – History, Social & Behavioral Sciences**

A. Select 3 hours from the following: 3		
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
B. Select 3 hours from the following: 3		
AN 100	Intro to Cultural Anthropology	
AN 101	Intro Archaeology-Bio Anthro	
CA 100	Intro to Communication	
CA 211	Interpersonal Comm	
CJ 105	Introduction to Criminal Justice	
ECO 215	Prin of Microeconomics	
ECO 216	Prin of Macroeconomics	
GEO 114	People, Places, Environment	
GEO 115	World Regional Geography	
GS 101	Intro to Gender Studies	
IS 100	Global Issues	
IST 201	Seasons of Life	
NAS 101	Intro Native American Studies	
PSC 130	Intro to US Government	
PSY 120	Introduction to Psychology	
PSY 250	Life Span Development	
SY 109	Introductory Sociology	
SY 112	Social Problems	

C. Select an additional 3 hours from either List A or List B above in Area IV 3

**Area V - Pre-Professional, Major, Elective Courses**

Complete the following:

MA 126	Calculus II	4
MA 227	Calculus III	4

MA 237	Linear Algebra I	3
MA 238	Differential Equations I	3
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	4
<b>Total Hours</b>		<b>54</b>

**Professional Component Standing (PCS)**

It is important that students make adequate progress in the Mechanical Engineering program. Satisfactory completion of a set of fundamental courses is required before a student is allowed to take advanced courses. Professional Component Standing (PCS) is awarded by the Chair of the Department when the student completes the College of Engineering PCS requirements and the WBBJ MABE Departmental PCS requirements.

**College of Engineering PCS Courses**

Minimum Grade C is required in all the following courses:

Code	Title	Hours
EH 101	English Composition I (if not exempt)	3
EH 102 or EH 105	English Composition II Honors Composition - H	3
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
MA 125	Calculus I	4
MA 126	Calculus II	4
PH 201	Calculus-Based Physics I (+Lab)	4

**Mechanical Engineering PCS Courses**

Minimum Grade C is required in all the following courses:

Code	Title	Hours
EG 283	Statics	3
MA 227	Calculus III	4
MA 237	Linear Algebra I	3
ME 135	Engr Graphics and Comm (maximum 2 attempts)	3
PH 202	Calculus-Based Physics II	4

**Graduation Plan**

(127 Total Hours)

This sample 4-year plan is designed as a guide for students preparing for their course selections. This information provides only a suggested schedule. Actual course selections should be made in consultation with an advisor. Courses listed as Milestones are required to obtain Professional Component Standing (PCS). Two designated writing (W) courses are required with at least one course chosen from offerings in the student's major or minor. Courses carrying this required credit are identified in the University Bulletin by a W after the course title.

Students not Term 1-Calculus I ready will exceed the minimum number of hours required for this degree. If math is not started prior to Fall-Year 1, the four-year graduation timetable is likely to be extended. Students with ACT Math scores 21 and below should begin math courses in the summer before Fall-Year 1.

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EG 101	Intro to Engineering & Design (and EG 101 Lab)	2
EH 101	English Composition I <sup>1,2</sup>	3

MA 125	Calculus I	4
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
General Education	Area II or IV <sup>1,2</sup>	3

**Milestone Notes**  
Must complete at least 12 hours with a 2.0 or higher GPA

**Hours** 16

**Spring**

EH 102	English Composition II <sup>1</sup>	3
MA 126	Calculus II	4
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	4
ME 135	Engr Graphics and Comm	3
CA 110	Public Speaking <sup>1</sup>	3

**Milestone Notes**

MA 125	Calculus I
CH 131 & 131L	General Chemistry I and General Chemistry I Lab
EH 101	English Composition I (if not exempt)

**Hours** 17

**Second Year**

**Fall**

MA 227	Calculus III	4
MA 237	Linear Algebra I	3
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	4
EG 283	Statics	3
General Education	Area II or IV <sup>1,2</sup>	3

**Milestone Notes**

PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab
MA 126	Calculus II
EH 102 or EH 105	English Composition II or Honors Composition - H
ME 135	Engr Graphics and Comm

**Hours** 17

**Spring**

EG 270	Engineering Thermodynamics	3
EG 284	Dynamics	3
EG 315	Mechanics of Materials	3
MA 238	Differential Equations I	3
ME 228	Computational Engineering	3
General Education	Area II or IV <sup>1,2</sup>	3

**Milestone Notes**

MA 227	Calculus III
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab
EG 283	Statics
MA 237	Linear Algebra I

**Hours** 18

**Third Year**

**Fall**

EG 220	Electrical Circuits	3
EG 360	Fluid Mechanics	3
ME 314	Machine Component Design	3
ME 326	Materials Science	3
ME 328	Numerical Methods	3

**Milestone Notes**

MA 238	Differential Equations I
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**Hours** 15

**Spring**

EG 231	Intro to Ethics and Economics	3
ME 312	Mech Engr Thermodynamics	3

ME 316	Instrumentatn & Exp Method	3
ME 317	Heat Transfer	3
ME 336	Material Science Lab-W	1
General Education	Area II or IV <sup>1,2</sup>	3

**Milestone Notes**  
Apply for graduation  
Apply to take FE Exam

**Hours** 16

**Fourth Year**

**Fall**

AE 361	Fundamentals of Aerodynamics	3
ME 410	Principles of Eng Design-W	3
ME 426	Dynamic Systems and Control	3
ME 472	Vibration Analysis-Synthesis	3
Science Elective	See Department List - lecture only	3

**Milestone Notes**

FE Exam
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**Hours** 15

**Spring**

ME 414	Capstone Design	1
ME 416	Capstone Design Project	2
ME 429	Controls & Instr. Lab	1
AE Elective I	See Department List	3
AE Elective II	See Department List	3
General Education	Area II or IV <sup>1,2</sup>	3

**Hours** 13

**Total Hours** 127

<sup>1</sup> Courses that meet General Education requirements.  
<sup>2</sup> Students who earn an English ACT score of 27, or a written SAT score of 610, can opt out of EH 101.

# Mechanical Engineering (BS) - Biomedical Engineering Track

## Degree Requirements

Code	Title	Hours
<b>See General Education Requirements</b>		<b>54</b>

**Major Requirements**

*Engineering Course Requirements*

Complete the following:

EG 101	Intro to Engineering & Design (& Lab) (or EG 201 for LINK students)	2
EG 220	Electrical Circuits	3
EG 231	Intro to Ethics and Economics	3
EG 270	Engineering Thermodynamics	3
EG 283	Statics	3
EG 284	Dynamics	3
EG 315	Mechanics of Materials	3
EG 360	Fluid Mechanics	3

*Mechanical Engineering Course Requirements*

ME 135	Engr Graphics and Comm (Only two attempts are permitted to earn grade C or better. Failure to meet this requirement will result in dismissal from the program.)	3
ME 228	Computational Engineering	3

ME 312	Mech Engr Thermodynamics	3
ME 314	Machine Component Design	3
ME 316	Instrumentatn & Exp Method	3
ME 317	Heat Transfer	3
ME 326	Materials Science	3
ME 328	Numerical Methods	3
ME 336	Material Science Lab-W	1
ME 410	Principles of Eng Design-W	3
ME 426	Dynamic Systems and Control	3
ME 429	Controls & Instr. Lab	1
ME 472	Vibration Analysis-Synthesis	3
ME 414	Capstone Design	1
ME 416	Capstone Design Project	2

**Biomedical Track Requirements**

BLY 121 & 121L	General Biology I and General Biology I Lab	4
BLY 122 & 122L	General Biology II and General Biology II Laboratory	4
BME 467	Intro to Biomedical Eng	3
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4

**FE Exam**

All students must attempt the NCEES FE (Fundamentals of Engineering) examination.

**Minor Requirements**

A minor is not required for this degree program 0

**Total Hours** 130

**General Education Requirements**

Code	Title	Hours
<b>Area I – Written Composition</b>		
EH 101	English Composition I (Students who earn an English ACT score of 27, or written SAT score of 610, can opt out of EH 101.)	3
EH 102 or EH 105	English Composition II Honors Composition - H	3
<b>Area II – Humanities &amp; Fine Arts</b>		
A. Select one of the following: 3		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
B. Select one of the following: 3		
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	
C. Complete the following: 3		
CA 110	Public Speaking	

**Area III – Natural Sciences & Mathematics**

MA 125	Calculus I	4
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	4

**Area IV – History, Social & Behavioral Sciences**

A. Select 3 hours from the following: 3

HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	

B. Select 3 hours from the following: 3

AN 100	Intro to Cultural Anthropology	
AN 101	Intro Archaeology-Bio Anthro	
CA 100	Intro to Communication	
CA 211	Interpersonal Comm	
CJ 105	Introduction to Criminal Justice	
ECO 215	Prin of Microeconomics	
ECO 216	Prin of Macroeconomics	
GEO 114	People, Places, Environment	
GEO 115	World Regional Geography	
GS 101	Intro to Gender Studies	
IS 100	Global Issues	
IST 201	Seasons of Life	
NAS 101	Intro Native American Studies	
PSC 130	Intro to US Government	
PSY 120	Introduction to Psychology	
PSY 250	Life Span Development	
SY 109	Introductory Sociology	
SY 112	Social Problems	

C. Select an additional 3 hours from either List A or List B above in Area IV 3

**Area V - Pre-Professional, Major, Elective Courses**

Complete the following:

MA 126	Calculus II	4
MA 227	Calculus III	4
MA 237	Linear Algebra I	3
MA 238	Differential Equations I	3
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	4

**Total Hours** 54

**Additional Information**

It is important that students make adequate progress in the Mechanical Engineering program. Satisfactory completion of a set of fundamental courses is required before a student is allowed to take advanced courses. Professional Component Standing (PCS) is awarded by the Chair of the Department when the student completes the College of Engineering PCS requirements and the WBBJ MABE Departmental PCS requirements.

**Mechanical Engineering PCS Courses**

Minimum Grade C is required in all the following courses:

Code	Title	Hours
MA 227	Calculus III	4
MA 237	Linear Algebra I	3
PH 202	Calculus-Based Physics II	4
EG 283	Statics	3
ME 135	Engr Graphics and Comm (maximum 2 attempts)	3

## College of Engineering PCS Courses

Minimum Grade C is required in all the following courses:

Code	Title	Hours
EH 101	English Composition I (if not exempt)	3
EH 102 or EH 105	English Composition II Honors Composition - H	3
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
MA 125	Calculus I	4
MA 126	Calculus II	4
PH 201	Calculus-Based Physics I (+Lab)	4

## Graduation Plan

(130 Total Hours)

The Sample 4-year plan is designed as a guide for students preparing for their course selections. This information provides only a suggested schedule. Actual course selections should be made in consultation with an advisor. Courses listed as Milestones are required to obtain Professional Component Standing (PCS). Two designated writing (W) courses are required with at least one course chosen from offerings in the student's major or minor. Courses carrying this required credit are identified in the University Bulletin by a W after the course title.

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EG 101	Intro to Engineering & Design (and EG 101 Lab)	2
EH 101	English Composition I <sup>1,2</sup>	3
MA 125	Calculus I	4
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4
General Education	Area II or IV <sup>1,2</sup>	3
<b>Milestone Notes</b>		
Must complete at least 12 hours with a 2.0 or higher GPA		
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
EH 102	English Composition II (or EH 105) <sup>1,2</sup>	3
MA 126	Calculus II	4
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	4
ME 135	Engr Graphics and Comm	3
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	4
<b>Milestone Notes</b>		
MA 125	Calculus I	
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	
EH 101	English Composition I (if not exempt)	
<b>Hours</b>		<b>18</b>

<b>Second Year</b>		
<b>Fall</b>		
MA 227	Calculus III	4
MA 237	Linear Algebra I	3
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	4
EG 283	Statics	3
General Education	Area II or IV <sup>1,2</sup>	3
<b>Milestone Notes</b>		
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	
MA 126	Calculus II	
EH 102 or EH 105	English Composition II or Honors Composition - H	
ME 135	Engr Graphics and Comm	
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
EG 270	Engineering Thermodynamics	3
EG 284	Dynamics	3
EG 315	Mechanics of Materials	3
MA 238	Differential Equations I	3
ME 228	Computational Engineering	3
<b>Milestone Notes</b>		
MA 227	Calculus III	
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	
EG 283	Statics	
MA 237	Linear Algebra I	
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
EG 220	Electrical Circuits	3
EG 360	Fluid Mechanics	3
ME 314	Machine Component Design	3
ME 326	Materials Science	3
ME 328	Numerical Methods	3
CA 110	Public Speaking	3
<b>Milestone Notes</b>		
MA 238	Differential Equations I	
<b>Hours</b>		<b>18</b>
<b>Spring</b>		
EG 231	Intro to Ethics and Economics	3
ME 312	Mech Engr Thermodynamics	3
ME 316	Instrumentatn & Exp Method	3
ME 317	Heat Transfer	3
ME 336	Material Science Lab-W	1
General Education	Area II or IV <sup>1,2</sup>	3
<b>Milestone Notes</b>		
Apply for graduation		
Apply to take FE Exam		
<b>Hours</b>		<b>16</b>
<b>Fourth Year</b>		
<b>Fall</b>		
ME 410	Principles of Eng Design-W	3
ME 426	Dynamic Systems and Control	3
ME 472	Vibration Analysis-Synthesis	3
BLY 121 & 121L	General Biology I and General Biology I Lab	4
General Education	Area II or IV <sup>1,2</sup>	3
<b>Milestone Notes</b>		
FE Exam		
<b>Hours</b>		<b>16</b>

Spring		
BLY 122 & 122L	General Biology II and General Biology II Laboratory	4
BME 467	Intro to Biomedical Eng	3
ME 414	Capstone Design	1
ME 416	Capstone Design Project	2
ME 429	Controls & Instr. Lab	1
General Education	Area II or IV <sup>1,2</sup>	3
<b>Hours</b>		<b>14</b>
<b>Total Hours</b>		<b>130</b>

<sup>1</sup> Courses meet general education requirements.

<sup>2</sup> Students who earn an English ACT score of 27, or a written SAT score of 610, can opt out of EH 101.

**Note:** Students not Term 1-Calculus I ready will exceed the number of hours required for this degree. If math is not started prior to Fall-Year 1, the four-year graduation timetable is likely to be extended. Students with ACT Math scores 21 and below should begin math courses in the summer before Fall-Year 1.

## Mechanical Engineering (MS)

### Degree Requirements

The program leading to the degree of Master of Science in Mechanical Engineering offers three plans of study (thesis option, project option, course work only option). Some graduate courses in Mechanical Engineering are offered at night for the benefit of full-time employed engineers within commuting distance of the campus. The MS program in Mechanical Engineering has several possible specializations including biomechanics, materials engineering, heat transfer, fluid mechanics, computational mechanics, vibrations, dynamics, simulation and controls.

### Admission to the MSME Program

The following criteria supplement the Graduate School admission criteria (see Admission to Graduate Programs (<https://www.southalabama.edu/graduatemajors/graduateschool/>)):

- **Regular Admission requirements**
  - A. Grade-point average of 3.0 or greater (A=4.0) on all undergraduate work.
  - B. Minimum score of 151 on the quantitative Graduate Record Exam (GRE) and a minimum score of 138 on the verbal GRE. Applicants must submit official GRE scores. This requirement is waived for students who received the BSME degree from the University of South Alabama. However, those students may need to present GRE scores to be eligible for some assistantships or fellowships.
  - C. For International students whose native language is not English, at least the following score on one of these English language tests:
    - paper-based TOEFL score 550, or
    - internet-based TOEFL score 79, or
    - IELTS band score 6.5, or
    - Pearson (PTE Academic) score 59, or
    - Duolingo score 100.
- **Provisional Admission requirements**
  - A. Minimum grade-point average of 2.5 (A=4.0) on all undergraduate work.
  - B. Requirements B and C as for regular admission.

### Degree Requirements for MSME

The requirements for the possible options of the MSME degree are:

- **Thesis Option:** 30 credit hours
  - **6 credit hours** required math courses MA 507 and MA 508, and
  - **9 credit hours** selected from **Mechanical Engineering Core graduate courses** (*one* course in Solid Mechanics, *one* course in Fluid Mechanics, and *one* course in Thermal Sciences), and
  - **9 credit hours** selected from **MSME Engineering elective graduate courses** and **MSME graduate courses in supporting areas** (but including *no more than 3 credit hours* from **MSME graduate courses in supporting areas**), and
  - Responsible Conduct of Research (RCR) training from CITI Program (<https://about.citiprogram.org/en/series/responsible-conduct-of-research-rcr/>), and
  - **6 credit hours** required Thesis courses ME 599 & ME 599, and
  - Satisfactory oral defense of Thesis.<sup>1,2</sup>
- **Project Option:** 33 credit hours
  - **6 credit hours** required math courses MA 507 and MA 508, and
  - **12 credit hours** selected from **Mechanical Engineering Core graduate courses** (including *one* course in Solid Mechanics, *one* course in Fluid Mechanics, and *one* course in Thermal Sciences), and
  - **12 credit hours** selected from **MSME Engineering elective graduate courses** and **MSME graduate courses in supporting areas** (but including *no more than 6 credit hours* from **MSME graduate courses in supporting areas**), and
  - Responsible Conduct of Research (RCR) training from CITI Program (<https://about.citiprogram.org/en/series/responsible-conduct-of-research-rcr/>), and
  - **3 credit hours** required Project course ME 594, and
  - Satisfactory oral defense of Project Report,<sup>1</sup> and
  - Pass written comprehensive examination (<https://www.southalabama.edu/colleges/engineering/me/resources/memscprehensiveexamrequirements.pdf>).
- **Course Option:** 33 credit hours
  - **6 credit hours** required math courses, MA 507 and MA 508, and
  - **12 credit hours** selected from **Mechanical Engineering Core graduate courses** (including *one* course in Solid mechanics, *one* course in Fluid mechanics, and *one* course in Thermal Sciences), and
  - **15 credit hours** selected from **MSME Engineering elective graduate courses** and **MSME graduate courses in supporting areas** (but including *no more than 6 credit hours* from **MSME graduate courses in supporting areas**), and
  - Pass written comprehensive examination (<https://www.southalabama.edu/colleges/engineering/me/resources/memscprehensiveexamrequirements.pdf>).

#### Mechanical Engineering Core graduate courses:

##### *Solid Mechanics:*

- ME 538 Finite Element Analysis
- ME 571 Advanced Engineering Dynamics
- ME 573 Vibrations of Continuous Sys
- ME 575 Continuum Mechanics (cannot count in Fluid Mechanics simultaneously)
- ME 583 Applied Elasticity

*Fluid Mechanics:*

ME 520 Advanced Fluid Mechanics  
 ME 560 Compressible Fluid Flow  
 ME 575 Continuum Mechanics (cannot count in Solid Mechanics simultaneously)

*Thermal Sciences:*

ME 540 Advanced Heat Transfer  
 ME 551 Classical Thermodynamics

**MSME Engineering elective graduate courses:**

*Any ME or other Engineering 500- or 600-level courses* excluding Thesis or Project courses, and excluding DIS courses more than 6 credit hours maximum.

**MSME graduate courses in supporting areas:**

*Any non-Engineering 500- or 600-level courses* subject to approval by the Graduate Coordinator in the MABE Department. The following courses will always be approved:

CIS 506 IS in Organizations  
 ISC 545 Management Information Systems  
 MA 567 Operations Research  
 ST 540 Stat in Research I.

<sup>1</sup> Should the student present an unsatisfactory defense, a second attempt will be allowed no sooner than 12 weeks after the first attempt. A second unsatisfactory defense will result in dismissal from the program.

<sup>2</sup> No written comprehensive examination is required of Thesis option MSME students. Successful defense of the Thesis will be deemed to satisfy the comprehensive examination requirement for Thesis option candidates.

## Mechanical Engineering - Accelerated Bachelor's to Master's Program

### Overview

The William B. Burnsed Jr. Department of Mechanical, Aerospace, and Biomedical Engineering allows well-qualified undergraduates to follow an "Accelerated Bachelor's to Master's" (ABM) study plan. Under ABM, up to **six credit hours of graduate coursework** can count towards **both** the BSME (as Technical Electives) and the MSME degrees, so that the MSME degree is earned faster than usual. This applies to both thesis and non-thesis degrees. (The coursework concerned must individually satisfy the requirements of both degrees.)

Example: the MSME degree (thesis option) requires 30 total credit hours (24 credit hours of coursework plus six credit hours of thesis work). ABM students may take up to **six** of the MSME **coursework** credit hours as Technical Electives for their BSME degree, leaving only 18 further credit hours of coursework plus six credit hours of thesis work needed to earn the MSME degree.

### Eligibility requirements:

- Must have at least **3.40 GPA** (Engineering **and** at USA), and
- Must be in junior or senior status and must have completed PCS requirements.

A student who later withdraws or is dismissed from the ABM program may not count graduate coursework towards both degrees. Graduate courses will only be counted towards the MSME degree if the undergraduate student earns an "A" or "B" grade.

ABM students must be registered for full-time study and must complete all Master's degree requirements within three semesters of the semester in which they were admitted to the Graduate School. An exception for a fourth semester may be granted where an additional semester is required for final revisions to and submission of a defended thesis. Exceptions to the ABM policy are at the discretion of the Dean of the Graduate School.

### Procedure:

If you satisfy these eligibility requirements, and wish to be considered for the ABM program:

1. Discuss ABM with the Department Chair and/or your advisor, for course planning;
2. Complete an undergraduate Advising Form at <https://www.southalabama.edu/colleges/engineering/currentstudents/resources/engineeringadvisingform.pdf> incorporating the ABM courses you have chosen;
3. Complete and print both the ABM Declaration form at <https://www.southalabama.edu/departments/eforms/graduateschool/abmdeclarationform.pdf> **and** the form requesting authorization to use graduate courses at [https://www.southalabama.edu/departments/eforms/registrar/graduate\\_level\\_course\\_for\\_undergraduate\\_degree.pdf](https://www.southalabama.edu/departments/eforms/registrar/graduate_level_course_for_undergraduate_degree.pdf) incorporating the ABM courses you have chosen;
4. Submit these printed forms to the Department Chair for formal approval and routing; and
5. Enroll in the **graduate section (500-level)** of your chosen ABM Technical Elective(s) (note that this will require course overrides).

These 500-level Technical Electives will count towards the MSME degree after you apply for graduate school (later) and successfully complete at least nine credit hours of graduate courses.

## Whiddon College of Medicine

### General Information

(251) 460-6153

Whiddon College of Medicine website  
<https://www.southalabama.edu/colleges/com/>

For more information about the M.D. program, visit: <https://www.southalabama.edu/colleges/com/futurestudents/index.html> (<https://www.southalabama.edu/colleges/com/futurestudents/>)

### Whiddon College of Medicine Administrative Staff

Title	Name
Dean	John V. Marymont, MD, MBA
Associate Dean for Research	Christopher Davies, Ph.D.

Associate Dean for Medical Education	T.J. Hundley, M.D.
Associate Dean for Student Affairs	Kelly Roveda, M.D.
Director of Graduate Studies/ Co-Director, Office of Research Education and Training	Robert Barrington, Ph.D.

## Departments of Instruction

- Basic Medical Sciences (p. 633)
  - Basic Medical Sciences (PhD) (p. 641)
- Doctor of Medicine Program (<https://www.southalabama.edu/colleges/com/com-bulletin/>) – see College of Medicine Bulletin

## Basic Medical Sciences

### Department Information

(251) 460-6153

Interdisciplinary Graduate Program in Basic Medical Sciences  
<https://www.southalabama.edu/colleges/com/doctoral-program/>

Title	Name
Director of Graduate Studies/ Co-Director, Office of Research Education and Training	Mark Taylor, Ph.D.
Co-Director, Office of Research Education and Training	Thomas Rich, Ph.D.
Assistant Director, Office of Research Education and Training	Shanoa Reed

Departments	Chair	Phone
Biochemistry and Molecular Biology	Richard Honkanen	(251) 460-6859
Comparative Medicine	Jonathan Scammell	(251) 460-6239
Microbiology and Immunology	Kevin Macaluso	(251) 460-6107
Pharmacology	Mark Gillespie	(251) 460-6497
Physiology and Cell Biology	Troy Stevens	(251) 460-7004

Tracks	Coordinator	Phone
Biomedical Engineering	Silas Leavesley	(251) 460-6168
Cancer Biology	Aishwarya Prakash	(251) 410-6915
Cell & Molecular Biology	Ronald Balczon	(251) 460-6776
Infectious Disease & Host Defese	Jonathon Audia	(251) 460-6929
Lung Biology	Sarah Sayner	(251) 460-6959
Vascular Biology	David Weber	(251) 460-6840

## Requirements for Admission

The requirements for admission to the Interdisciplinary Graduate Program for the Doctor of Philosophy degree in Basic Medical Sciences are:

1. The applicant shall possess, by the time of matriculation, a baccalaureate degree or the equivalent from an accredited college or university.
2. Two semesters or three quarters of undergraduate work are recommended in each of the following: physics, general chemistry, organic chemistry, biology, English composition, and mathematics (including calculus and statistics).
3. A grade-point average of at least 3.0 for all undergraduate and graduate work, on a 4.0 scale.
4. Satisfactory standing at the last educational institution attended.
5. Additionally, international applicants must present evidence of competence and fluency in spoken and written English with a TOEFL score of at least 95-100, an IELTS score of at least 7, an iTEP score of at least 4.5, or a PTE score of at least 68.

Matriculation is contingent upon review and recommendation by the Admissions Committee of the Graduate Program in Basic Medical Sciences.

## Procedures for Admission

Applications for the Basic Medical Sciences Interdisciplinary Graduate Program are accepted for matriculation in the Fall Semesters only. The Basic Medical Sciences Graduate Program does not accept students on a "non-degree" or "provisional" basis. Applications and materials should be accessed and submitted through the university's website: <https://www.southalabama.edu/departments/admissions/graduate.html>.

Information for the graduate program can be obtained on-line <https://www.southalabama.edu/colleges/com/doctoral-program/how-to-apply.html> or by contacting:

Associate Director of the Office of Research Education and Training  
 5795 USA Drive North, CSAB 212  
 College of Medicine, University of South Alabama  
 Mobile, Alabama 36688-0002  
 Telephone: (251) 460-6153  
 E-mail: [oret@southalabama.edu](mailto:oret@southalabama.edu)

To be considered for review by the Admissions Committee, an applicant must submit the following:

1. A completed application form through UNICAS.
2. An official transcript from each college or university attended.
3. For international applicants: An official score report from an English proficiency examination (TOEFL/IELTS/ITEP/PTE).
4. Supplemental materials required for the program in Basic Medical Sciences must be submitted through UNICAS. Supplemental materials include:
  - a. Three letters of recommendation from instructors, advisors, or other persons qualified to evaluate the student's academic performance and potential in graduate school.
  - b. A personal statement

All documents submitted for admissions review become the property of the University of South Alabama.

## Degrees, Programs, or Concentrations

- Basic Medical Sciences (PhD) (p. 641)

## Courses

### Biochemistry - MD

#### BCH 121 Medical Biochemistry 9 cr

This course provides the basic biochemical knowledge essential to the student's subsequent medical education experience. In addition, this course is intended to provide insight, where possible, into the mechanisms of disease at the molecular level. Finally, the course gives an adequate foundation to interpret and evaluate the current medical biochemical literature and stimulate continued education beyond the formal experience.

#### BCH 400 Biochemistry Externship 4 cr

To be determined.

#### BCH 410 Research in Biochem & Mol Biol 4 cr

: To carry out research under the supervision of a sponsoring faculty member. The student will help design experiments, learn and apply established techniques, record and evaluate data and make a final report both written and oral that describes the overall experimental results.

The faculty member will assist the student in the project. This rotation is highly recommended for the student considering a career in academic medicine. Research areas include the biochemistry and molecular biology of cancer, lung diseases, and RNA viruses.

#### BCH 471 Res-Biochem and Molec Biology 1-4 cr

To carry out research under the supervision of a sponsoring faculty member. The student will help design experiments, learn and apply established techniques, record and evaluate data and make a final report both written and oral that describes the overall experimental results.

The faculty member will assist the student in the project. This rotation is highly recommended for the student considering a career in academic medicine. Research areas include the biochemistry and molecular biology of cancer, malaria, lung diseases, lysosomal storage diseases, aging, RNA viruses, and drug design/synthesis.

#### BCH 520 Medical Biochemistry 7 cr

A basic course in biochemistry with emphasis on the physiochemical properties and intermediary metabolism of proteins, carbohydrates, lipids, and nucleic acids. The regulation and integration of metabolic pathways for energy transfer and biosynthesis of major cellular constituents are presented in detail. Enzymes, vitamins, hormones, biochemical genetics, and nutrition are included in the course material.

#### BCH 526 Biochemistry Lit Reports 1 cr

Students and faculty participate in a supervised reading of current literature and meet once a week to interact in a discussion of the selected article. The goal of this course is to maintain the student's level of information at a "state of the art" in both methods and theory in the discipline and to develop critical skills in reviewing the literature. Student presentation is required to receive credit.

#### BCH 527 Dir Studies Biochemistry 1-6 cr

Students participate in research under the direction of a graduate faculty member. The student may pursue independent research or participate in a literature project. This course should be taken by students who have completed their laboratory rotations, but have not yet submitted a research proposal.

#### BCH 590 Sp Top - 1-3 cr

This course provides in-depth tutorial exposure to specific areas in the discipline. Student and/or faculty presentations followed by group discussions (usually in the Socratic mode), examine the subject matter in an area of current interest either to one student or to a group of students. Credit and title are arranged with an individual faculty member.

#### BCH 620 Enzymes and Proteins 3 cr

The techniques used for the physical and chemical characterization of protein are presented and protein structure-function relationships, enzyme kinetics, and enzyme mechanisms are presented to provide a student with the basic knowledge to understand the role of functional proteins in life processes.

#### BCH 622 Molecular Biology 3 cr

The focus of this course is on cellular processes involving DNA repair, replication and translation. Current concepts regarding the organization and structure of chromosomes, genes and the regulation of gene expression will be discussed. Eukaryotic molecular biology is emphasized, however some eukaryotic and prokaryotic processes are compared and contrasted. This course stresses the methods and experimental design used to delineate and understand cellular information transfer and molecular phenomena.

#### BCH 626 Biochemistry Research Seminar 1 cr

Students and faculty present a research topic for discussion before members of the department. The presentations are usually scheduled on a rotational basis. The student may present research data for critique by the faculty.

#### BCH 799 Research-Dissertation 1-6 cr

Independent research by the student under the sponsorship of the graduate faculty. Students are required to submit a research project description form before enrolling in this course. Progress reports of the work accomplished are required every six months.

## Cell Biology/Neuroscience - MD

#### CBN 111 Medical Gross Anatomy 9 cr

Lectures by the faculty stress clinically important aspects of anatomy, utilizing both systemic and regional approaches. Student groups of four dissect the entire human body. Prosections and computer programs are available to augment information learned in the laboratory. The lecture and laboratory material is reinforced through physician-presented correlation conferences. Additionally, the students are required to complete a computer program in radiological anatomy.

#### CBN 112 Medical Histology 8 cr

The main objective is to teach the microscopic structure and functional anatomy of cells, tissues, and organs of the human body through lectures, laboratories, slides, demonstrations, and examinations. The course provides the student the opportunity to gain information and experience in the science of microscopic structure and to learn essential basic terminology for use and expansion in future courses.

#### CBN 112R Medical Histology 8 cr

Summer make-up course in Medical Histology at an LCME approved medical school.

#### CBN 113 Developmental Anatomy 3 cr

The course presents a synopsis of human development and related information. Clinically related topics are emphasized while normal development is closely correlated with the systemic lectures given in the gross anatomy course

#### CBN 114 Neuroanatomy 4 cr

The course consists of both laboratory and lecture material. Emphasis is given to the functional neurobiology of the human central nervous system. In addition to basic anatomical systems, considerable time is given to the delineation of the anatomical bases of human CNS dysfunction.

**CBN 215 Medical Neuroscience 9 cr**

This course is an organ-based multi-disciplinary course combining neuroanatomy, neuropathology, and neurophysiology to provide an integrated approach to neuroscience. The final exam is a mini-board from the National Board of Medical Examiners; students are charged a fee to purchase this exam.

**CBN 400 Cell Biol & Neuro Externship 4 cr**

To be determined.

**CBN 401 Adv Gross Anatomy I - Longitu 1-4 cr**

Each student is responsible for completing the dissection and study of the anatomy of the upper and lower extremities and selection and review of recent literature related to the region under study. Time will be divided between laboratory dissection, library reference study, and conference sessions with faculty, both clinical and basic science. Conferences directed by faculty will deal with the basic anatomy, both normal and anomalous, and with the practical utilization of that knowledge. Conferences directed by the student will deal with techniques from current literature.

**CBN 402 Adv Gross Anatomy II - Longitu 1-4 cr**

Each student is responsible for completing the dissection and study of the anatomy of the thorax, abdomen, and pelvis, and selection and review of recent literature related to the region under study. Time will be divided between laboratory dissection, library reference study, and conference sessions with faculty, both clinical and basic science. Conferences directed by faculty will deal with the basic anatomy, both normal and abnormal, and with the practical utilization of that knowledge. Conferences directed by the student will deal with techniques from current literature.

**CBN 403 Adv Gross Anatomy III-Longitu 1-4 cr**

Each student is responsible for completing the dissection and study of the anatomy of the head and neck, and selection and review of recent literature related to the region under study. Time will be divided between laboratory dissection, library reference study, and conference sessions with faculty, both clinical and basic science. Conferences directed by faculty will deal with the basic anatomy, both normal and abnormal, and with the practical utilization of that knowledge. Conferences directed by the student will deal with techniques from current literature.

**CBN 404 Adv Neuroanatomy-Longitu 1-4 cr**

The course will consist of three phases: (1) a review of the topographic and internal anatomy of the nervous system; (2) discussions by the faculty concerning current research of interest in neuroanatomy; (3) discussions of functional and clinical neuroanatomy and areas of special interest.

**CBN 405 Research Assistantship 1-4 cr**

Teaching assistantships are available in the following areas: head and neck; thorax and abdomen; pelvis and perineum; or extremities.

**CBN 406 Teach Asst-Histology 1-4 cr**

Participants will assist the faculty in teaching histology laboratories either pertaining to tissues (4 weeks) or organ systems (4 weeks, or 8 weeks for both). The student will be mentored by one of the listed faculty who will assume responsibility for the final evaluation of the student.

**CBN 407 Teach Assistantship - Anatomy 1-4 cr**

Teaching assistantships are available in the following areas: head and neck; thorax and abdomen; pelvis and perineum or extremities.

**CBN 501 Medical Gross Anatomy 8 cr**

A course consisting of lectures and laboratory experience stressing the more important aspects of human morphology using both systemic and regional approaches supplemented by introductory radiological features.

**CBN 510 Medical Histology 7 cr**

A study of the structure and function of cells, tissues and organs which includes lectures, demonstrations, and individual laboratory study of slides.

**CBN 511 Medical Neuroanatomy 6 cr**

This course consists of lectures and laboratories stressing the important aspects of the structures of the central nervous system and emphasizing the functional aspects which relate to human disease.

**CBN 513 Developmental Anatomy 2 cr**

A course which presents a synopsis of human development and related information. Clinically related topics are emphasized while normal development is closely correlated with the systemic lectures given in the gross anatomy course

**CBN 516 Cell Biol-Neurosci Lit Reports 1 cr**

Students and faculty participate in a supervised reading of the current literature and meet periodically (usually once a week) to interact in a discussion of the selected article or topic. The goal of this course is to maintain the faculty's and students' level of information at the "state of the art" in both methods and theory in the discipline to develop critical review skills in reviewing the literature. Student presentation is required to receive credit.

**CBN 517 Dir St - Cell Bio Neuroscience 1-6 cr**

Students participate in research under the direction of a graduate faculty member. The student may pursue independent research or participate in a literature project. This course should be taken by students who have completed their laboratory rotations, but have not yet submitted a research proposal.

**CBN 590 Sp Top - 1-3 cr**

This course provides in-depth tutorial exposure to specific areas in the discipline. Student and/or faculty presentations followed by group discussion (usually in the Socratic mode), examine the subject matter in an area of current interest either to one student or to a group of students. Credit and title are arranged with an individual faculty member.

**CBN 610 Molecular-Cellular Neuroscienc 2 cr**

A course which requires students to read and evaluate critically the contemporary literature dealing with the cellular and molecular mechanisms of neural function.

**CBN 612 Cytoskeleton-Membranes 2 cr**

This course requires students to read, present, and evaluate critically the modern literature on cytoskeleton and membrane structure, interactions, and function.

**CBN 614 Gene Expr- Reg- Repair- Ther 2 cr**

This course requires students to read, present, and evaluate critically the modern literature on gene expression and regulation, repair and therapy.

**CBN 615 Molecular-Cellular Development 2 cr**

This course examines embryonic development in animal systems. The focus is on the protein and molecular interactions that regulate the development of animal embryos. The course consists of lectures and written exams. Students are required to read from an assigned text and from the primary literature.

**CBN 616 Cell Biol-Neurosci Resrch Sem 1 cr**

Students and faculty present a research topic for discussion before members of the department. The presentations are usually scheduled on a rotational basis. The student may present research data for critique by the faculty.

**CBN 799 Research Dissertation 1-6 cr**

Independent research by the student under the sponsorship of the graduate faculty. Students are required to submit a research project description form before enrolling in this course. Progress reports of the work accomplished are required every six months.

**Interdepartmental Stds (IDL)****IDL 560 Cancer Biology 3 cr**

This course provides a comprehensive coverage of molecular and cellular aspects of carcinogenesis as well as clinical issues related to human cancer. This course will specifically cover areas of histology, pathology, epidemiology, genetics, viruses, oncogenes and tumor suppressor genes. Additionally, topics to be covered include cellular and molecular basis of chemotherapy, pharmacology of anticancer drugs, molecular and cellular basis of radiotherapy, and biological therapy of cancer and clinical trial design.

**IDL 566 Topics in Cancer Biology 1 cr**

Students and faculty participate in a supervised reading of current literature and meet once a week to interact in a discussion of the selected article. The goal of this course is to maintain the student's level of information at a "state of the art" in both methods and theory in the discipline and to develop critical skills in reviewing the literature.

**IDL 567 Dir Studies in Cancer Biology 1-6 cr**

Students participate in research under the direction of a graduate faculty member. The student may pursue independent research or participate in a literature project.

**IDL 570 Medical Pathology 7 cr**

The course is taught as an introduction to the study of the diseases of man by developing working definitions and classifications of disease on the basis of known causes and effects. After surveying the structural changes characterizing disease, the mechanisms involved in clinical and lab manifestations are analyzed for human diseases.

**IDL 571 Mouse Models Biomed Research 3 cr**

This course utilizes the primary scientific literature to provide students with in-depth knowledge regarding the development and utilization of mouse models in biomedical research. Students are required to actively participate in class discussions, present scientific papers, and develop a research project that utilizes mouse models.

**IDL 576 Interdisciplinary Lit Reports 1 cr**

Students and faculty participate in a supervised reading of the current literature and meet periodically (usually once a week) to interact in a discussion of the selected article or topic. The goal of this course is to maintain the faculty's and students' level of information at a "state of the art" in both methods and theory in the discipline and to develop critical skills in reviewing the literature.

**IDL 577 Intro to Research Methods 3 cr**

Theoretical and practical training in basic skills utilized in basic medical science research laboratories, for students entering the first year interdisciplinary curriculum. Discussion of regulatory issues in biomedical research will be interwoven with hands-on laboratory exercises. Offered concurrently with IDL 580.

**IDL 580 Fund Basic Medical Sciences I 8 cr**

First of a two-semester sequence designed for students in the first year interdisciplinary curriculum. In-depth exploration of the fundamentals of biochemistry, cell biology, and molecular biology prerequisite to advanced study of basic medical sciences. Didactic lectures will be complemented with discussions of the literature.

**IDL 581 Fund Basic Medical Sciences II 8 cr**

Second of a two-semester sequence designed for students in the first year interdisciplinary curriculum. Detailed exploration of the fundamentals of microbiology and immunology, developmental biology, integrative systems physiology, and mechanisms of drug action prerequisite to advanced study of basic medical sciences. Didactic lectures will be complemented with discussions of the literature.

**Prerequisite:** IDL 580 Minimum Grade of C

**IDL 590 Sp Top - 1-3 cr**

In-depth tutorial exposure to interdisciplinary topics in Basic Medical Sciences.

**IDL 593 IDL Dir Study Co-Op/Internship 6 cr**

Directed research study under the direction of a member of the graduate faculty.

**IDL 594 Interdisciplinary Dir Studies 1-6 cr**

Directed research study under the direction of a member of the graduate faculty. This course should be taken by students who have not yet identified a major professor in Basic Medical Sciences.

**IDL 595 Distinguished Scientist Sem 0 cr**

A seminar course in which outside speakers are brought in to discuss their research. Students will attend the seminar and have an opportunity to meet informally with the speaker. Attendance will be required, and the material will be testable during each student's qualifying exam.

**IDL 620 Biomedical Engineering I 4 cr**

Fundamental concepts of medical instrumentation, biomedical imaging and biological systems modeling as used in biomedical engineering. Course is cross-listed with EG 620.

**Cross-Listed:** EG 620

**IDL 621 Biomedical Engineering II 4 cr**

Fundamental concepts of transport phenomena, cellular and tissue mechanics, and materials as used in biomedical engineering. Course is cross-listed with EG 621.

**Cross-Listed:** EG 621

**IDL 630 Lung Biology 4 cr**

This course introduces an advanced level of lung physiology. An understanding of fundamental lung development, anatomy, and cell and organ physiology is emphasized. The course consists of lectures and written assignments and essay exams. Reading assignments are from the primary literature.

**Prerequisite:** IDL 580 Minimum Grade of C and IDL 581 Minimum Grade of C

**IDL 631 Lung Pathobiology 4 cr**

This course builds on an in-depth understanding of normal lung biochemistry, cell biology, pharmacology, and physiology to examine lung disease. Emphasis is given on understanding mechanism(s) underlying the genetic, cell biology, anatomy and physiology of disease development and progression. Current therapeutic interventions are discussed. Clinical correlations are utilized to track signs and symptoms of specified diseases, and provide a framework for treatment options. The course consists of lectures and written assignments and essay exams. Reading assignments are exclusively from the primary literature.

**Prerequisite:** IDL 630 Minimum Grade of C

**IDL 635 Advanced Signal Transduction 4 cr**

This course builds on signal transduction topics discussed in the Fundamentals course (IDL 580, 581). The mechanisms of more generalized signaling pathways (e.g., G-protein coupled pathways) to specific signaling pathways (e.g., TGF/BMP family) will be discussed. Signal transduction pathways will be examined using classic literature references, from the molecular details of pathway components to the effects on the organ-system. The course consists of lectures, student presentations, and essay/problem solving examinations.

**Prerequisite:** IDL 580 Minimum Grade of C and IDL 581 Minimum Grade of C

**IDL 640 Stat Exp Design in Biomed Res 2 cr**

This course covers statistical analysis, logic and hypothesis-driven experimental design in biomedical research, utilizing a combination of lectures, weekly practical data sets or written assignments, and student presentation.

**IDL 641 Effective Scientific Writing 1 cr**

This course provides strategies to improve communication skills via construction of logical scientific arguments and effective writing. Course format will include lecture/discussion, in class practical exercises, and writing assignments. In addition, participants will be introduced to the Turnitin software, reference databases, and other electronic resources useful in preparation of proposals and manuscripts.

**Prerequisite:** IDL 580 Minimum Grade of C and IDL 581 Minimum Grade of C

**IDL 645 Res Prog Smth Musc/Vasc Blgy 1 cr**

Students meet on alternate weeks for 2 hr with faculty and other research professionals to discuss on-going research projects in the field of smooth muscle and vascular biology. Signal transduction pathways, pathophysiological mechanisms in vascular disorders associated with smooth muscle, and other topics of interest will be discussed. Emphasis will be on up-to-date research results from laboratories as well as newly published literature findings. Students will be expected to present the results of their own laboratory research at least once a year to the group.

**IDL 650 Topics in Lung Biology 1 cr**

In-depth exposure to selected topics in lung biology or pathobiology. Course may be repeated for credit when course content varies.

**Prerequisite:** IDL 630 Minimum Grade of B and IDL 631 Minimum Grade of B

**IDL 656 Research Sem Lung Biology 1 cr**

Students and faculty present a research topic for discussion before members of the Center for Lung Biology. The presentations are usually scheduled on a rotational basis. The student may present research data for critique by the faculty.

**IDL 667 Cancer Biology Research Sem 1 cr**

Students and faculty present a research topic for discussion before members of the department. The presentations are usually scheduled on a rotational basis. The student may present research data for critique by the faculty.

**IDL 676 Literature Report Lung Biology 1 cr**

Students and faculty participate in a supervised reading of the current literature and meet once a week to discuss the selected article or topic and its relation to ongoing research. The goal of this course is to maintain the faculty's and students' level of information at a "state of the art" in both methods and theory in the discipline and to develop critical skills in reviewing the literature of lung biology.

**IDL 780 Applications Biomed Statistics 3 cr**

The course treats the conception, construction, criticism, and deployment of statistical models of biomedical data. Models of dose-response, identification, and survival are developed and applied to lab, clinical and epidemiological data. Course covers linear, generalized linear, and non-linear models of continuous, discrete, and censored data, and includes topics in experimental design, regression diagnostics, salvage of weak parameter estimates, and meta-analysis. Course is organized, for the greater part, on a case-study format.

**IDL 799 Research-Dissertation 1-6 cr**

Independent research by the student under the sponsorship of the graduate faculty in individual departments in the Basic Medical Sciences. Prerequisite: Approved formal research proposal

**Microbiology/Immunology - MD****MIC 211 Microbiology and Immunology 8 cr**

This course presents the fundamental aspects of pathogenic microbiology including morphology, metabolism and replication of micro-organisms, the basic principles of the use of chemotherapeutic agents, microbial genetics, and medical microbial ecology. The major bacterial, viral, mycotic, and parasitic diseases of humans are covered in detail. The basic principles of immunology and infection in relation to clinical disease of the various body systems are discussed.

**MIC 447 Molecular Basis Pathogenesis 1-4 cr**

Bench research on the biology or the rickettsiales family of intracellular pathogens and on the pathogenesis of the diseases caused by these organisms. Participation in ongoing research or initiation of new projects are possible.

**MIC 530 Microbes & Host Defense 3 cr**

Presents the fundamental aspects of microbiology including morphology, metabolism of micro-organisms, the basic principles of the use of antibiotics and chemotherapeutic agents, microbial genetics, virology, and medical microbial ecology. The principles of immunology and infection in relation to clinical disease are discussed with special emphasis on laboratory diagnosis.

**MIC 536 Literature Reports 1 cr**

Students and faculty participate in a supervised reading of the current literature and meet periodically to interact in a discussion of the selected article or topic. The goal of this course is to maintain the faculty's and students' level of information at a "state of the art" in both methods and theory in the discipline and to develop critical skills in reviewing the literature.

**MIC 537 Dir St - Microbiology 1-6 cr**

Students participate in research under the direction of a graduate faculty member. This course should be taken by students who have completed their lab rotations, but have not yet submitted a formal research proposal.

**MIC 590 Sp Top - 1-3 cr**

Each course provides in-depth tutorial exposure to specific areas in the discipline. Student and/or faculty presentations followed by group discussions, examine the subject matter in an area of current interest either to one student or a group of students. Credit and title are arranged with an individual faculty member.

**MIC 630 Adv Microbial Pathogenesis 3 cr**

This course discusses the fundamentals of this area with particular emphasis on *Escherichia coli* and *Salmonella typhimurium* as model systems. The development of problem solving skills will be stressed. Topics including aerobic vs. anaerobic metabolism, membrane physiology, biosynthesis of macromolecules and regulation of gene expression provide view of microbial cell.

**Prerequisite:** IDL 580 Minimum Grade of B and IDL 581 Minimum Grade of B

**MIC 632 Advanced Immunology 3 cr**

Selected topics in immunology are considered using formal lectures followed by student presentations. Design and interpretation of immunological experiments are emphasized throughout the course.

**Prerequisite:** IDL 580 Minimum Grade of B and IDL 581 Minimum Grade of B

**MIC 633 Advanced Virology 3 cr**

This course reviews the reproductive cycles of important human viruses and subviral agents and the diseases they cause. The focus is on the molecular biology of animal viruses and their mechanisms of regulation, assembly, and pathogenesis. Human immunodeficiency virus will be considered in detail. The course is constructed as an interactive lecture series with student reports and literature surveys.

**Prerequisite:** IDL 580 Minimum Grade of B and IDL 581 Minimum Grade of B

**MIC 636 Microbiology-Immun Res Sem 1 cr**

Students present a research topic for discussion before members of the department. Usually scheduled on a rotational basis. Student participation required after end of second year. Attendance required.

**MIC 799 Research-Dissertation 1-6 cr**

Independent research by the student under the sponsorship of the graduate faculty in individual departments in the Basic Medical Sciences. Students are required to submit a research project description form before enrolling in this course. Progress reports of the work accomplished are required every six months.

**Pharmacology (PHA)****PHA 540 Medical Pharmacology 7 cr**

This course is designed to provide the student with a basic understanding of the actions of drugs and their clinical uses. Basic principles, including dose-response relationships and receptor theory, are emphasized. Current concepts of drug effects, mechanisms, and sites of action are explored in detail with respect to major classes of drugs. Important considerations are also given to drug interactions and the toxicology of therapeutic agents, chemicals in the environment, and other biologically active substances.

**PHA 546 Pharmacology Lit Reports 1 cr**

Students and faculty participate in a supervised reading of the current literature and meet periodically (usually once a week) to interact in a discussion of the selected article or topic. The goal of this course is to maintain the faculty's and students' level of information at a "state of the art" in both methods and theory in the discipline and to develop critical skills in reviewing the literature. Student presentation is required to receive credit.

**PHA 547 Dir St in Pharmacology 1-6 cr**

Students participate in research under the direction of a graduate faculty member. The student may pursue independent research or participate in a literature project. This course should be taken by students who have completed their laboratory rotations, but have not yet submitted a formal research proposal.

**PHA 548 Physiological Pharmacology 6 cr**

This course covers both cellular and organ system physiology. It is designed to prepare graduate students for Medical Pharmacology (PHA 540), and for research in pharmacology.

**PHA 590 Sp Top - 1-3 cr**

Each course provides in-depth tutorial exposure to specific areas in the discipline. Student and/or faculty presentations followed by group discussions (usually in the Socratic mode), examine the subject matter in an area of current interest either to one student or to a group of students. Credit and title are arranged with an individual faculty member.

**PHA 640 Molecular-Cellular Pharmacology 3 cr**

This course consists of presentations and literature discussions. The central themes of signal transduction from cellular receptor to amplified response, structure-activity relationships, and drug design are studied comprehensively. Specific topics include receptor-ligand interactions, receptor structure and coupling mechanisms, the biochemical and molecular aspects of G-proteins, protein phosphorylation mechanisms, molecular modeling and protein crystallography. A comprehensive course in biochemistry is prerequisite for this course.

**PHA 643 Molecular-Cellular Toxicology 3 cr**

This course is concerned with the mechanisms by which toxic substances exert their effects at the molecular and cellular level. Detailed analysis of the processes by which toxic materials are metabolized to toxic intermediates is addressed. The mode of action of how toxic compounds interact with structural proteins and other macromolecules, enzymes and receptors, and the genome is included. Examples of toxicity of the heart, liver, lung, pancreas, brain, including teratogenic, mutagenic and carcinogenic effects are discussed at the mechanistic level.

**PHA 646 Cell Signaling Seminar 1 cr**

Students present a research topic for discussion before members of the department. The presentations are usually on a rotational basis. The student may present research data for critique by the faculty.

**PHA 799 Research Dissertation 1-6 cr**

Independent research by the student under the sponsorship of the graduate faculty in individual departments in the Basic Medical Sciences. Students are required to submit a research project description form before enrolling in this course. Progress reports of the work accomplished are required every six months.

**Physiology (PHS)****PHS 550 Medical Physiology 8 cr**

This course includes lectures and labs which introduce the student to the basic functions of the heart, circulation, lung, and kidney, as well as the endocrine, nervous, and gastrointestinal systems. Fundamental mechanisms are stressed with the intent of providing the student with the basic knowledge of organ function necessary for the understanding and treatment of disease. Overall integrated response of body to various stresses is discussed in detail.

**PHS 556 Literature Reports 1 cr**

Students and faculty participate in a supervised reading of the current literature and meet periodically to interact in a discussion of selected article or topic. The goal of this course is to maintain the faculty's and students' level of information at a "state of the art" in both methods and theory in the discipline and to develop critical skills in reviewing the literature. Student presentation is required to receive credit.

**PHS 557 Dir St Physiology 1-6 cr**

Students participate in research under the direction of a graduate faculty member. Student may pursue independent research or participate in a literature project. This course should be taken by students who have completed their lab rotations, but have not yet submitted a formal research project.

**PHS 590 Special Topics - 1-3 cr**

Each course provides in-depth tutorial exposure to specific areas in the discipline. Student and/or faculty presentations followed by group discussions (usually in the Socratic mode), examine the subject matter in an area of current interest either to one student or to a group of students. Credit and title are arranged with an individual faculty member.

**PHS 651 Adv Cardiovascular Physiology 5 cr**

This is an advanced course covering cardiac function and metabolism, peripheral circulation, and microcirculation. The objective is to provide the student with a thorough understanding of cardiovascular physiology at both the organ and cellular level.

**PHS 654 Transport Physiology Barriers 2 cr**

This course is designed to present a detailed analysis of physiological membranes and the physical principles governing the movement of solute and water across these barriers.

**PHS 656 Cell Signaling Seminar 1 cr**

Students present a research topic for discussion before members of the department. The presentations are usually scheduled on a rotational basis. The student may present research data for critique by the faculty.

**PHS 799 Research-Dissertation 1-6 cr**

Independent research by the student under the sponsorship of the graduate faculty in individual departments in the Basic Medical Sciences. Students are required to submit a research project description form before enrolling in this course. Progress reports of the work accomplished are required every six months.

## Faculty

### Biochemistry and Molecular Biology

Faculty Name	Faculty Department	Faculty Position	Degrees Held
BALCZON, RONALD D (rbalczon@southalabama.edu)	Biochemistry-Molecular Biology	Professor	BS, Florida State University PHD, Florida State University
GRELET, SIMON PIERRE ALAIN (sgrelet@southalabama.edu)	Biochemistry-Molecular Biology	Assistant Professor	BS, Uni of Reims Champagne-Ardenne MS, Uni of Reims Champagne-Ardenne PHD, Uni of Reims Champagne-Ardenne
HONKANEN, RICHARD ERIC (rhonkanen@southalabama.edu)	Biochemistry-Molecular Biology	Professor	BS, University of Georgia PHD, University of Georgia PHD, University of Georgia PHD, University of Georgia
PLANT, LUCIA RAMEH (luciaramehplant@southalabama.edu)	Biochemistry-Molecular Biology	Associate Professor	BS, Uni de Sao Paulo PHD, Uni de Sao Paulo
PRAKASH, AISHWARYA (aprakash@southalabama.edu)	Biochemistry-Molecular Biology	Associate Professor	BS, University of Nebraska- Omaha PHD, U of Nebraska Medical Center PHD, University of Nebraska- Omaha
RICHTER, WITO H (richter@southalabama.edu)	Biochemistry-Molecular Biology	Associate Professor	MS, Leipzig University PHD, Leipzig University
SWINGLE, MARK R. (mrswingle@southalabama.edu)	Biochemistry-Molecular Biology	Assistant Professor	BS, Spring Hill College MS, University of South Alabama PHD, University of South Alabama

## Comparative Medicine

Faculty Name	Faculty Department	Faculty Position	Degrees Held
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## Medical Education

Faculty Name	Faculty Department	Faculty Position	Degrees Held
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## Microbiology-Immunology

Faculty Name	Faculty Department	Faculty Position	Degrees Held
AUDIA, JONATHON (jaudia@southalabama.edu)	Microbiology-Immunology	Professor	BS, McMaster University MS, McMaster University PHD, University of South Alabama
BARRINGTON, ROBERT A. (rbarrington@southalabama.edu)	Microbiology-Immunology	Associate Professor	BS, Oregon State University PHD, Loyola University of Chicago
ELLIOTT, MICHAEL R (mrelliott@southalabama.edu)	Microbiology-Immunology	Associate Professor	BS, Wake Forest University PHD, Wake Forest University
HERMANCE, MEGHAN ELIZABETH (mhermance@southalabama.edu)	Microbiology-Immunology	Assistant Professor	BS, Texas A & M University PHD, University of Texas Med-Galv
KIM, JIN HYUN (jinkim@southalabama.edu)	Microbiology-Immunology	Assistant Professor	DVM, Konkuk Univ Seoul Korea MS, Konkuk Univ Seoul Korea PHD, University of Wisconsin-Madis
MACALUSO, KEVIN ROBERT (kmacaluso@southalabama.edu)	Microbiology-Immunology	Professor	BS, Colorado State University MS, Sul Ross State University PHD, Oklahoma State University
RAYNER, JONATHAN O (jrayner@southalabama.edu)	Microbiology-Immunology	Associate Professor	BS, University of Delaware PHD, Colorado State University
SCHULER, ANNE MICHELLE (mschuler@southalabama.edu)	Microbiology-Immunology	Professor	DVM, Auburn University PHD, Univ of Alabama-Birmingham
SHEA, ALLYSON ELIZABETH (aeshea@southalabama.edu)	Microbiology-Immunology	Assistant Professor	BS, University of SC-Columbia BS, University of SC-Columbia PHD, University of Florida

## Pharmacology

Faculty Name	Faculty Department	Faculty Position	Degrees Held
AL-MEHDI, ABU BAKR (mehdi@southalabama.edu)	Pharmacology	Professor	BS, Univ de Salamanca MD, Univ de Salamanca MD, Crimean St Medical University PHD, Crimean St Medical University
BAUER, NATALIE RENEE NORWOOD (nbauer@southalabama.edu)	Pharmacology	Associate Professor	BS, Delta State University PHD, University of South Alabama
GILLESPIE, MARK N (mgillesp@southalabama.edu)	Pharmacology	Professor	BS, University of Kentucky PHD, University of Kentucky
LANGLEY, RAYMOND JULIAN (rlangley@southalabama.edu)	Pharmacology	Assistant Professor	BA, University of New Mexico PHD, University of New Mexico
PASTUKH, VIKTOR MYKOLAYOVYCH (vpastukh@southalabama.edu)	Pharmacology	Instructor	MS, Kiev State Linguistic Univ PHD, Palladin Institute
RICH, THOMAS C. (trich@southalabama.edu)	Pharmacology	Professor	BA, Georgia Inst of Tech - Main PHD, Vanderbilt University

## Physiology and Cell Biology

Faculty Name	Faculty Department	Faculty Position	Degrees Held
ALEXEYEV, MIKHAIL F (malexeye@southalabama.edu)	Physiology & Cell Biology - MD	Professor	BS, Ukraine National Univ PHD, National Agri Univ Ukraine
COHEN, MICHAEL V (mcohen@southalabama.edu)	Physiology & Cell Biology - MD	Professor	AB, Harvard University MD, Harvard University
FRANCIS, CHRISTOPHER MICHAEL (michaelfrancis@southalabama.edu)	Physiology & Cell Biology - MD	Assistant Professor	BS, Auburn University PHD, University of South Alabama
LEE, JI YOUNG (jlee@health.southalabama.edu)	Physiology & Cell Biology - MD	Assistant Professor	MD, Pusan National University PHD, Elmezzi School of Molecular Me

LIN, MIKE (mlin@southalabama.edu)	Physiology & Cell Biology - MD	Professor	BS, Univ of British Columbia MS, Loma Linda University PHD, Loma Linda University
NELSON, AMY RENEE (arnelson@southalabama.edu)	Physiology & Cell Biology - MD	Assistant Professor	BS, Univ of Alabama-Birmingham MS, Univ of Alabama-Birmingham PHD, Univ of Alabama-Birmingham
SAYNER, SARAH L. (ssayner@southalabama.edu)	Physiology & Cell Biology - MD	Professor	PHD, Univ of South Alabama - COM
STEVENS, TROY (tstevens@southalabama.edu)	Physiology & Cell Biology - MD	Professor	BS, Chadron State College PHD, Colorado State University
TAYLOR, MARK S. (mtaylor@southalabama.edu)	Physiology & Cell Biology - MD	Professor	BS, Univ of Alabama-Birmingham PHD, University of South Alabama
WEBER, DAVID SCOTT (dweber@southalabama.edu)	Physiology & Cell Biology - MD	Professor	BS, Loras College PHD, Medical College Of Wisconsin
WILSON, EMILY (emilyw@southalabama.edu)	Physiology & Cell Biology - MD	Professor	AA, Emory University BS, Utah State University MS, Utah State University PHD, Emory University

## Basic Medical Sciences (PhD)

### Degree Requirements

#### Required Course Work

Students will matriculate into the first year interdisciplinary core curriculum for the Ph.D. Program in Basic Medical Sciences without needing to choose an advanced program prior to entry. In year one, students complete IDL 576, IDL 577, IDL 580, IDL 581, GIS 501, and three research rotations. The purpose of rotations is to acquaint the students with various research problems under investigation and aid in the selection of a major professor in their area of specialization.

By the end of the first year, each student selects a major professor and research track. Advanced curricula are determined by the student's chosen track, in conjunction with advising from their major professor and dissertation committee. Advanced curricula must include a minimum of 8 credit hours from 500 level and above courses with the following course prefixes: IDL, BCH, CBN, MIC, PHA, and PHS.

#### Degree Requirements

In addition to the requirements set by the Graduate School, the following requirements must be completed for the Ph.D. degree in the Basic Medical Sciences: completion of the core and advanced curricula, a minimum overall 3.0 grade-point average on all work attempted for credit, qualifying examination, a completed dissertation approved by the student's major professor and a majority of the Dissertation Committee, and closed and open defenses of the research presented in the dissertation.

All requirements for the Ph.D. degree should normally be completed within four to five years from the date of matriculation, and must be completed within seven years. A student who has not satisfactorily completed a dissertation in a seven-year period must apply for a defined extension to complete the degree.

Detailed information on program requirements and expectations can be found in the Basic Medical Sciences Student Handbook (<https://www.southalabama.edu/colleges/com/doctoral-program/resources/bms-handbook.pdf>). Additional information can also be obtained by contacting the Associate Director of the Office of Research Education and Training, the Office of Research Education and Training Co-directors,

or the individual Track Coordinators. (Contact information can be found on Department Information).

## College of Nursing

### General Information

(251) 445-9400

College of Nursing website  
<https://www.southalabama.edu/colleges/con/>

### College of Nursing Administrative Staff

Title	Name
Dean	Heather Hall
Associate Dean for Research Faculty Development, and Evaluation	Sharon Fruh
Associate Dean for Academic Affairs	Leigh Minchew
Assistant Dean for Academic Affairs	Shanda Scott
Director of Clinical Affairs	Emily Bentley
Director of Diversity, Equity and Inclusion	Shanda Scott
Director of the DNP Program	Leigh Minchew
Director of Special Projects & Evaluation	Rebecca Graves
Professors	S. Fruh, J. Gunn, H. Hall, J. Harris, M. Jacobs, R. Lawson, S. Ridner, E. VandeWaa
Associate Professors	K. Bydalek, C. Elkins, R. Graves, L. Hammonds, T. Harlan, T. Huey, P. Johnson, S. Lawrence, A. Marass, K. McCoy, T. McMullan, L. Minchew, C. Myers, M. Nadler, J. Pittman, B. Riley, D. Streeter, W. Stuart, D. Swanzy, K. Williams, S. Williams, T. Wright

## Assistant Professors

A. Adams, J. Anderson, M. Baker, C. Baughn, A. Beasley, E. Bentley, M. Bolton, A. Bowman, S. Brand, H. Breazeale, T. Brown, L. Byrd, A. Calvert Campbell, K. Cheshire, L. Dailey, A. Davis, S. Davis, W. Davis, N. Dixon, J. Ferry, M. Guy, C. Haboush, S. Harlan, S. Harris, A. Holley, H. Horton, P. Huffman, D. Hutto, C. Jackson, D. James, B. Johnson, P. Johnson, R. Johnson, L. Jones, K. Jordan, M. Korn, B. Lang, P. Levi, A. Lewis, S. Lewis, J. Lollar, C. Lynch, C. McCarter, K. McMurtrey, J. Miller, K. Miller, S. Montgomery, E. Moore, L. Moore, K. Norris, J. A. Otts, K. Pancione, T. Platt, W. Powell, D. Reed, S. Rudolf, C. Russ, S. Scott, C. Selwyn, T. Sikes-Doggett, M. Theard, A. Townsend, N. Turnham, S. Waweru, C. Williamitis, B. Woodmansee

Research Assistant Professors	Candice Selwyn
Senior Instructors	J. Cockrell
Instructors	K. Cadquist, J. Cockrell, K. Cooper, L. Emley, S. James, T. Jones, J. Ladhier, B. Mosley, C. Taylor, B. Urquhart, E. Woods
Department Chair, Adult Health Nursing	Theresa Wright
Department Chair, Community/Mental Health Nursing	Todd Harlan
Department Chair, Maternal/Child Health Nursing	Kristina Miller
Director, Academic Advising	Mary Phillips
Academic Advisors	Jennifer Bouvier, Katelyn Foster, Erin Masson, Brenda Mosley, Kristyn Seawell, Bailey Smith, Suzan Williams
Academic Records Specialists	Lisa Brock
Clinical Placement Advising and Assessment Coordinator	Kimberly McLean-Mundy
Clinical Affiliation Coordinators	Meredith Clough, Shari Lord, Yolanda Mack

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The College of Nursing has two locations, one is on the USA main campus, and the other is on the USA Baldwin County campus in downtown Fairhope. The resources of the University, the USA Hospitals and clinics, and the numerous clinical agencies provide excellent opportunities for students to acquire the knowledge and skills essential for professional nursing.

## Mission

The mission of the College of Nursing is to provide quality innovative educational programs to a diverse student body, to participate in research and scholarly activities, and to provide service to the University, the profession, and the public. The College accomplishes this by providing a caring, engaging environment for the empowerment of student learning potential, the professional development of faculty, and the promotion of the nursing profession.

## Goals

1. Cultivate a caring, innovative, and engaging environment to facilitate teaching, learning, scholarship, and service.
2. Deliver innovative quality nursing programs that meet the needs of a diverse student body and other communities of interest.
3. Promote the discovery, communication, and preservation of knowledge through scholarly activities and leadership.
4. Provide service to the University, the profession, and the public.
5. Develop community partnerships to promote nursing and the enhancement of the health care delivery system using interprofessional approaches.

## Accreditation

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655 K Street, NW, Suite 750  
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## Student Responsibility

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## Certificates Offered

Post-Graduate Certificates are awarded to students completing planned programs of study in a nursing specialty area and subspecialty areas.

## Departments of Instruction

- Nursing (p. 643)
  - Nursing (BS) - Accelerated (p. 679)
  - Nursing (BSN) - LPN-BSN (<http://bulletin.southalabama.edu/programs-az/nursing/nursing/lpn-bsn/>)

- Nursing (BSN) - RN-BSN (p. 682)
- Nursing (BSN) - Traditional (p. 686)
- Nursing (MSN) - BSN-Prepared RNs (p. 693)
- Nursing (MSN) - RN-MSN with Non-Nursing Baccalaureate (p. 698)
- Nursing Post-Graduate Certificate (p. 702)
- Nursing Practice (DNP) - BSN to DNP (p. 705)
- Nursing Practice (DNP) - MSN Clinical Nurse Leader Bridge to DNP Executive Nursing Administration Pathway (p. 711)
- Nursing Practice (DNP) - MSN to DNP Adding a New Concentration Area (p. 714)
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- Nursing Subspecialty Options (p. 724)

## Courses

### Adult Health Nursing (AHN)

#### AHN 447 Adult Gerontological Nursing 4 cr

Synthesize theories, concepts, research, issues and trends in caring for adult gerontological population with complex multisystem health care needs. Emphasis is on the role of the professional nurse in health promotion and maintenance, illness care, and rehabilitation of adult gerontological population in a variety of acute and community settings.  
**Prerequisite:** (CMN 350 Minimum Grade of C and CMN 351 Minimum Grade of C and MCN 352 Minimum Grade of C and MCN 353 Minimum Grade of C and MCN 354 Minimum Grade of C and MCN 355 Minimum Grade of C)

**Corequisite:** AHN 448

#### AHN 448 Adult Gerontological Nsg Clin 4 cr

The focus of this course is the application of theories, concepts, evidence, issues and trends in caring for adult gerontological population experiencing complex multisystem health care needs. Emphasis is on the role of the professional nurse and on the use of the nursing process with adult gerontological population experiencing complex multisystem health care needs and their families.

**Prerequisite:** CMN 350 Minimum Grade of C and CMN 351 Minimum Grade of C and MCN 352 Minimum Grade of C and MCN 353 Minimum Grade of C and MCN 354 Minimum Grade of C and MCN 355 Minimum Grade of C

**Corequisite:** AHN 447

#### AHN 513 AG/CNS Clinical Progression 1-9 cr

The purpose of this progression practicum course is to facilitate student independence in the Adult-Gerontological Clinical Nurse Specialist role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses and to develop the necessary skills to progress to the next level of competency in the Adult-Gerontological Clinical Nurse Specialist role. The emphasis is on the three spheres of influence and the continuum of healthcare services from wellness through acute care.

#### AHN 515 A/G CNS Shadowing Intensive 1 cr

This is a clinical practice course in adult health nursing. The focus is on the application of theories, concepts, research, and issues and trends in adult health nursing. The emphasis is on the role of the professional nurse in adult health nursing and on the use of the nursing process with adult/gerontological patients experiencing health concerns in the acute care setting.

**AHN 516 CNS Adult Geron Pract I 3 cr**

The purpose of this precepted practicum course is to provide students an immersion experience in the CNS role in the Acute Care setting through health promotion, wellness, and disease management across the lifespan from adolescent to adult to older adult. The focus of the course is to develop the CNS's ability to assimilate and apply evidence-based information in nursing care activities, to appraise nursing practice standards and norms, and to influence organizations to support the delivery of nursing care and achieve optimal health outcomes. The emphasis is on the CNS core competencies of Direct Care, Consultation, Systems Leadership, Collaboration, Coaching, Research, and Ethical Decision-Making/Moral Agency/Advocacy.

**Prerequisite:** NU 578 Minimum Grade of C

**Corequisite:** NU 515

**AHN 517 CNS Adult Geron Pract II 3 cr**

The purpose of this precepted practicum course is to provide students an immersion experience in the CNS role through health promotion, wellness, and disease management of acute and chronic conditions across the lifespan from adolescent to adult to older adult. The practicum experiences will occur in both the Acute Care setting and either 1) the Emergency or Urgent Care setting or 2) the Primary Care or Specialty Outpatient Clinic setting. The focus of the course is to enhance knowledge of advanced patient management through direct care practices including clinical assessment, differential diagnoses, pharmacological and non-pharmacological treatment, and advanced practice skills. The student should participate in direct interactions with patients and families, consultations, coaching, development of evidenced based policies/guidelines/protocols, educational guidance of other nursing personnel, and implementation of practices that improve quality and promote cost-effective outcomes. The emphasis is on the CNS core competencies of Direct Care, Consultation, Systems Leadership, Collaboration, Coaching, Research, and Ethical Decision-Making/Moral Agency/Advocacy.

**Corequisite:** NU 516

**AHN 518 CNS Adult Geron Pract III 3 cr**

The purpose of this precepted practicum course is to provide an immersion experience in the CNS role through health promotion, disease management, acute and chronic illness care, and exacerbations of chronic illness management across the lifespan from adolescent to adult to older adult. The practicum experiences will occur in both the Acute Care setting and either 1) the Emergency or Urgent Care setting or 2) the Primary Care or Specialty Outpatient Clinic setting. The focus of the course is to develop the CNS's ability to assimilate and apply evidence-based information in nursing care activities, to appraise nursing practice standards and norms, and to influence organizations to support the delivery of nursing care and achieve optimal health outcomes. The emphasis of this course is on the patient, nurse, and organization/system spheres of impact and the CNS core competencies of Direct Care, Consultation, Systems Leadership, Collaboration, Coaching, Research, and Ethical Decision-Making/Moral Agency/Advocacy.

**Prerequisite:** NU 516 Minimum Grade of C and AHN 517 Minimum Grade of C and NU 607 Minimum Grade of C and NU 613 Minimum Grade of C and NU 610 Minimum Grade of C

**Corequisite:** NU 517

**AHN 519 Diagnostic Reasoning and Advanced Patient Management for the Clinical Nurse Specialist 4 cr**

The purpose of this elective course is for the CNS to integrate advanced pharmacology, pathophysiology, and assessment for the diagnosis and management of acute and chronic problems of the adolescent/adult/old adult patients across the continuum of health services. The course focuses on the formulation of differential diagnoses and the development of pharmacologic and non-pharmacologic plans of care for the individual patients rather than aggregates. The emphasis is placed on synthesis and application of evidence-based practice to the development of differential diagnoses as a basis for health promotion and management.

**Corequisite:** NU 516

**AHN 520 AHN MSN Incomplete Extension 1-5 cr****AHN 530 Found Palliative Care/Adv Role 2 cr**

This didactic course prepares the advance practice palliative care student a forum for the evaluation of issues and trends encountered in palliative and end of life care. Students learn to coordinate and develop primary and palliative health care programs for patients and families across the lifespan. Emphasis is on critical analysis and management of issues in an interdisciplinary health care delivery system.

**AHN 531 Adv Palliative Cr/End of Life 2 cr**

This course provides students an in-depth study of the health care management for patients seeking palliative and end of life care. Emphasis is on the interaction among health care providers and psychological/spiritual care of the patient and family.

**Prerequisite:** AHN 530 Minimum Grade of C

**AHN 532 Adv Chronic Illness Care 2 cr**

This course provides a study of the illness trajectories of chronic diseases that are among the leading causes of death in our society. Assessment and management of the illnesses as well as associated pain and symptoms will be examined. The focus is on assisting patients, families, and other health professionals to anticipate/prevent/reduce adverse symptoms from life threatening illnesses to maximize quality of life across the lifespan.

**Prerequisite:** AHN 531 Minimum Grade of C

**AHN 533 Adv Palliative Care Practicum 1-9 cr**

This course provides a preceptor and faculty facilitated experience in which students have the opportunity to become proficient at providing comprehensive care to patients with serious illness by engaging in holistic assessment of pain and quality of life in a variety of settings. Advanced knowledge of palliative/end of life care will be integrated into assessing and managing the complex psychological, ethical, social, spiritual issues, and grief reactions while working as a member of a palliative care team.

**Prerequisite:** AHN 530 Minimum Grade of C

**AHN 538 HPDP Dual Role (FNP/AGACNP) 2 cr**

This didactic course prepares the Dual Role (Family NP/Adult-Gerontological Acute Care NP) student to identify and implement appropriate and culturally sensitive health promotion, health protection, and disease prevention strategies across the lifespan for clients in emergency, urgent, and ambulatory care settings. Emphasis is on health promotion, health protection, and disease prevention with strategic planning at the primary, secondary, and tertiary levels. Effective strategies for life-style behavioral changes will also be evaluated.

**AHN 548 Family Prim Care NP I 4 cr**

The purpose of this didactic course is to prepare (Family NP/Adult-Gerontological Acute Care NP) students to assess, diagnose, and manage selected health care needs of women and childbirth, infants, children, and families in a caring, competent manner. Emphasis is placed on (1) synthesis and application of nursing and related theories and scientific knowledge to the development of differential/nursing diagnoses as a basis for health promotion and management; (2) wellness and the pathophysiology and epidemiology underlying acute and chronic health problems; and (3) collaboration and communication among health care providers in a culturally diverse environment. The focus is on the advanced practice nursing of individuals and families in primary healthcare settings. Co-requisite: AHN 549 Pre-requisite: NU 518 Minimum Grade C and NU 545 Minimum Grade of C

**Prerequisite:** (NU 518 (may be taken concurrently) Minimum Grade of C and NU 545 (may be taken concurrently) Minimum Grade of C and AHN 538 Minimum Grade of C)

**Corequisite:** AHN 549

**AHN 549 Family Prim Care NP Prac I 4 cr**

The purpose of this practicum course is to provide opportunities for Dual Role (Family NP/Adult-Gerontological Acute Care NP) students to apply concepts from AHN 548 in selected clinical settings. The emphasis is on culturally competent delivery of health care, diagnostic reasoning, and decision making/critical thinking through communication and collaboration. The focus is continued refinement of cognitive and clinical skills needed to provide comprehensive health assessments, diagnoses, and management of selected health care needs of women and childbirth, infants, children, and families in primary healthcare settings. Co-requisite: AHN 548

**Prerequisite:** (NU 578 Minimum Grade of C and AHN 538 Minimum Grade of C)

**Corequisite:** AHN 548

**AHN 550 Family Prim Care NP II 4 cr**

This didactic course prepares the Dual Role (Family NP/Adult-Gerontological Dual Role) students to identify and implement appropriate and culturally sensitive health promotion and disease prevention strategies across the lifespan for clients in emergency, urgent, and ambulatory care settings. Emphasis is placed on health promotion and disease prevention with strategic planning at the primary, secondary, and tertiary levels. Prevention, early diagnosis, prompt treatment, and in-depth patient education will be emphasized. Effective strategies for life-style behavioral changes will also be evaluated. Co-requisite: AHN 551 Pre-requisite: NU 578 Minimum Grade of C and AHN 548 Minimum Grade of C

**Prerequisite:** NU 578 (may be taken concurrently) Minimum Grade of C and AHN 548 Minimum Grade of C

**Corequisite:** AHN 551

**AHN 551 Family Prim Care NP Pract II 5 cr**

The purpose of this course is to provide a preceptor and faculty facilitated experience for Dual Role (Family NP/Adult-Gerontological Acute Care NP) students to practice within an advanced nursing framework. The focus is on the role of the Family Nurse Practitioner in the health care management of children, adults, and families in primary health care settings with the application and synthesis of knowledge and skills acquired from AHN 550 and previous courses. Emphasis is on leadership, professionalism, and collaboration with other health care providers in a culturally diverse environment. Co-requisite: AHN 550

**Corequisite:** AHN 550

**AHN 552 Adult-Geron Acute Care NP I 4 cr**

The purpose of this course is to prepare Dual Role (Family NP/Adult-Gerontological Acute Care NP) students to assess, diagnose, and manage selected health care needs of young and older adults across the wellness-illness continuum in a caring, competent manner. Emphasis is placed on (1) synthesis of theoretical, scientific, and contemporary clinical knowledge used to develop differential diagnoses as a basis for health promotion, disease prevention, and management; (2) wellness and the pathophysiology and epidemiology underlying complex acute, critical, and chronic illness, disability, and/or injury; and (3) collaboration using appropriate processes for patient-centered, quality care in a culturally diverse system. The focus is on advanced practice nursing with the entire adult-older adult age spectrum and families in emergency, urgent, and ambulatory settings. Co-requisite: AHN 553 Pre-requisite: AHN 538 Minimum Grade of C and AHN 549 Minimum Grade of C and AHN 551 Minimum Grade of C and NU 607 Minimum Grade of C and NU 608 Minimum Grade of C

**Prerequisite:** AHN 538 Minimum Grade of C and AHN 549 Minimum Grade of C and AHN 551 Minimum Grade of C and NU 607 (may be taken concurrently) Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C

**Corequisite:** AHN 553

**AHN 553 Adult-Ger Acute Care NP Prac I 4 cr**

The purpose of this practicum course is to provide opportunities for Dual Role (Family NP/Adult-Gerontological Acute Care NP) students to apply concepts from AHN 552 in selected clinical settings. Emphasis is on critical thinking, diagnostic reasoning, differential diagnosis, communication, and collaboration in a culturally diverse system. The focus is refinement of cognitive and clinical skills needed to provide competent patient-centered care to young adults, adults, and older adults across the wellness-illness continuum with acute, critical and chronic illness, disability, and/or injury in emergency, urgent, and ambulatory care settings. Co-requisite: AHN 552

**Corequisite:** AHN 552

**AHN 554 Adult-Geron Acute Care NP II 4 cr**

The purpose of this didactic course is to (1) provide the Dual Role (Family NP/Adult-Gerontological Acute Care NP) students with an in-depth study of the health care management of young adults, adults, and older adults across the wellness-illness continuum and to (2) provide a forum for the critical analysis and evaluation of issues and trends encountered by the Adult-Gerontology Acute Care Nurse Practitioner in an interdisciplinary health care delivery system. Emphasis is on leadership and professionalism in a culturally diverse system. The focus is on ensuring quality, patient-centered care of the adult-older adult population with selected complex acute, critical and chronic illness, disability, and/or injury to improve health outcomes in emergency, urgent, and ambulatory settings. Co-requisite: AHN 555 Pre-requisite: AHN 552 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C

**Prerequisite:** AHN 552 Minimum Grade of C and NU 610 (may be taken concurrently) Minimum Grade of C and NU 613 (may be taken concurrently) Minimum Grade of C

**Corequisite:** AHN 555

**AHN 555 Adlt-Ger Acute Care NP Prac II 5 cr**

The purpose of this practicum course is to provide a preceptor and faculty facilitated experience for Dual Role (Family NP/Adult-Gerontological Acute Care NP) students to practice within an advanced nursing framework by synthesizing and applying the knowledge and skills required in AHN 554 and previous courses. Emphasis is on leadership, professionalism, and collaboration in a culturally diverse system. The focus is on implementing the role of the Adult-Gerontology Acute Care Nurse Practitioner in the health care management of young adults, adults, and older adults across the wellness-illness continuum with acute, critical and chronic illness, disability, and/or injury in emergency, urgent, and ambulatory health care settings. Co-requisite: AHN 554

**Corequisite:** AHN 554

**AHN 558 Dual Role FNP Clin Progression 1-9 cr**

The purpose of this progression practicum course is to facilitate student independence in the Dual Role Family Nurse Practitioner role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses and to develop the necessary skills to progress to the next level of competency in the Family Nurse Practitioner role of the Dual Role (FNP/AGACNP) program.

**AHN 559 Dual Role-AGAC Cli Progression 1-4 cr**

The purpose of this progression practicum is to facilitate student independence in the Nurse Practitioner role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses and to develop the necessary skills to progress to the next level of competency in the Dual Track AGACNP Nurse Practitioner role.

**AHN 566 AG/ACNP Clinical Progression 1-4 cr**

The purpose of this progression practicum is to facilitate student independence in the Adult-Geron Acute Care Nurse Practitioner role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses and develop the necessary skills to progress to the next level of competency in the Adult-Geron Acute Care Nurse Practitioner role.

**AHN 568 Intro to Adult-Geron Acute NP 3 cr**

The purpose of this first didactic course is to prepare the Adult-Gerontological Acute Care Nurse Practitioner students to assess, diagnose, and manage selected health care needs of adults and geriatrics. Emphasis is placed on synthesis and application of nursing and related theories and scientific knowledge to the development of differential/nursing diagnoses as a basis for health promotion and management.

**Prerequisite:** NU 545 (may be taken concurrently) Minimum Grade of C and NU 518 (may be taken concurrently) Minimum Grade of C

**Corequisite:** AHN 571

**AHN 571 HPDP Adult-Geron Acute Care NP 2 cr**

The purpose of this didactic course is to prepare the Adult-Gerontological Acute Care Nurse Practitioner student to identify and implement appropriate health promotion and disease prevention strategies in the adult and geriatric populations. The focus is on the advanced practice nursing of individuals and families in the acute care setting. Emphasis is placed on health promotion/disease prevention with strategic planning at the primary, secondary and tertiary levels of prevention. Various issues are explored pertinent to the advanced practice role.

**Prerequisite:** NU 578 Minimum Grade of C

**Corequisite:** AHN 568

**AHN 572 Adult-Geron Acute NP I 3 cr**

The purpose of this didactic course is to prepare Adult-Gerontological Acute Care Nurse Practitioner students to assess, diagnose, and manage selected health care needs of adults and geriatrics. The focus is on advanced practice nursing with adults and families in the acute care setting. Emphasis is placed on the wellness and the pathophysiology and epidemiology underlying acute and chronic health problems.

**Prerequisite:** AHN 568 Minimum Grade of C and NU 578 Minimum Grade of C

**Corequisite:** AHN 573

**AHN 573 Adult-Geron Acute NP Prac I 3 cr**

The purpose of this practicum course is to provide opportunities for students to apply concepts in select clinical settings. Focus is on adults and families in the acute care setting. The emphasis is on diagnostic reasoning and decision making/critical thinking.

**Prerequisite:** NU 578 Minimum Grade of C

**Corequisite:** AHN 572

**AHN 574 Adult-Geron Acute NP II 3 cr**

The purpose of this course is provide an in-depth study of the health care management of the Adult Geron Acute Care patient. Emphasis is on the interaction among health care providers in a culturally diverse environment.

**Prerequisite:** AHN 572 Minimum Grade of C

**Corequisite:** AHN 575

**AHN 575 Adult-Geron Acute NP Prac II 3 cr**

The purpose of this course is to provide an opportunity for the Adult Acute Care Nurse Practitioner student to practice within an advanced nursing framework. The focus is on the role of the advanced practice nurse in the health care management of adults. Emphasis is on collaboration with other health care providers in a culturally diverse environment.

**Corequisite:** AHN 574

**AHN 576 Adult Geron Acute NP Prac III 4 cr**

The purpose of this culminating course is to provide a preceptor and faculty facilitated experience in the Adult Geron Acute Care Nurse Practitioner role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses.

**Prerequisite:** (NU 607 Minimum Grade of C and AHN 574 Minimum Grade of C and AHN 575 Minimum Grade of C)

**Corequisite:** AHN 577

**AHN 577 Adult Geron Acute NP III 3 cr**

The purpose of this course is to provide a forum for the evaluation of issues and trends encountered in advanced adult gerontological acute care nursing. Emphasis is on a critical analysis and management of issues by the Adult Geron Acute Care Nurse Practitioner in an interdisciplinary health care delivery system.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and AHN 574 Minimum Grade of C)

**Corequisite:** AHN 576

**AHN 581 HP/DP Adlt-Geron Prim Care NP 3 cr**

The purpose of this didactic course is to prepare the adult-gerontological primary care nurse practitioner (AGPCNP) student with a knowledge base for identifying and implementing appropriate health promotion and disease prevention strategies with adolescents, adults, and older adults. The focus is on the AGPCNP care of adolescents, adults, and older adults in multiple health care settings and with multiple health professionals and disciplines. Emphasis is placed on health promotion/disease prevention and related health issues with collaborative, team-based strategic planning at the primary, secondary, and tertiary levels of prevention to improve patient outcomes. Various issues are explored which are pertinent to the AGPCNP's role in healthcare.

**Corequisite:** AHN 588

**AHN 588 Intro to Adult-Geron Prim NP 2 cr**

The purpose of this course is to expand the Adult-Gerontological Primary Care Nurse Practitioner (AGPCNP) student's knowledge and skills for obtaining, recording, and analyzing a systemic health assessment of the adult and older adult. Emphasis is placed on synthesis and application of nursing and related theories and scientific knowledge to the development of differential/nursing diagnoses as a basis for health promotion and management.

**Prerequisite:** NU 545 (may be taken concurrently) Minimum Grade of C and NU 518 (may be taken concurrently) Minimum Grade of C

**Corequisite:** AHN 581

**AHN 591 Adult-Geron Prim NP I 3 cr**

This didactic course prepares the adult-gerontological primary care nurse practitioner (AGPCNP) student to assess, diagnose, and manage selected health care needs of culturally diverse adolescent, adult, older adult, and frail geriatric populations. The focus is on the adult gerontological practice of nursing and interprofessional healthcare decision-making for adults and their families in a variety of health care settings. Emphasis is placed on wellness, the pathophysiology and epidemiology underlying acute and chronic health problems with a focus on the unique health care needs of the older adult population as well as ethical considerations and quality interactions among healthcare team members.

**Prerequisite:** AHN 588 Minimum Grade of C and NU 578 (may be taken concurrently) Minimum Grade of C

**Corequisite:** AHN 592

**AHN 592 Adlt-Geron Primary NP Pract I 3 cr**

The purpose of this practicum course is to provide opportunities for the Adult-Gerontological Primary Care Nurse Practitioner (AGPCNP) student to apply concepts from AHN 591 in primary and acute care settings with adults and families experiencing health concerns. This clinical course will offer clinical hours for targeting adult health and gerontological health issues. Students will divide clinical hours between young adults, middle aged adults, and elders.

**Prerequisite:** NU 578 Minimum Grade of C

**Corequisite:** AHN 591

**AHN 593 Adult-Gero Prim NP II 3 cr**

The purpose of this course is to provide the Adult-Gerontological Primary Care Nurse Practitioner student an in-depth study of health care management of adults, well and frail elders, and their families within the framework of advanced nursing. The focus is on selected acute and chronic complex health care problems. Emphasis is on the interaction among health care providers in a culturally diverse environment.

**Prerequisite:** AHN 591 Minimum Grade of C

**Corequisite:** AHN 594

**AHN 594 Adult-Geron Prim NP Prac II 3 cr**

The purpose of this course is to provide opportunity for the adult-gerontological primary care nurse practitioner (AGPCNP) to practice within an advanced nursing framework. The focus is on the role of the AGPCNP in the health care management of adult and geriatric patients with physical and psychiatric-mental health concerns. Emphasis is on collaboration with other health care providers in a culturally diverse environment. This clinical course will offer experience with diverse populations including young and middle aged adults and elders in a variety of settings.

**Corequisite:** AHN 593

**AHN 595 Adult-Gero Primary Care NP III 3 cr**

The purpose of this course is to provide a forum for evidence-based, collaborative evaluation of issues and trends encountered in adult and gerontological nursing care. Emphasis is on critical analysis and management of issues by the adult gerontological primary care nurse practitioner (AGPCNP) in an interdisciplinary health care delivery system, including providing care for vulnerable patient populations.

**Prerequisite:** AHN 593 Minimum Grade of C and NU 607 (may be taken concurrently) Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C and NU 610 (may be taken concurrently) Minimum Grade of C and NU 613 (may be taken concurrently) Minimum Grade of C

**Corequisite:** AHN 596

**AHN 596 Adult-Geron Prim NP Prac III 4 cr**

The purpose of this culminating course is to provide a preceptor- and faculty facilitated experience in the Adult-Gerontological Primary Care Nurse Practitioner (AGPCNP) role. The focus is the application and synthesis of knowledge and skills acquired in all previous courses. Students will have clinical experiences with all ages of adults and elders in a variety of settings.

**Prerequisite:** NU 607 (may be taken concurrently) Minimum Grade of C

**Corequisite:** AHN 595

**AHN 598 AG/PCNP Clinical Progression 1-4 cr**

The purpose of this progression practicum is to facilitate student independence in the Adult-Geron Primary Care Nurse Practitioner role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses and to develop the necessary skills to progress to the next level of competency in the Adult-Geron Primary Care Nurse Practitioner role.

**AHN 604 Adult-Geron Acute Care NP PP&D 3 cr**

This course assists the Adult-Gerontological Acute Care Nurse Practitioner DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the Adult-Gerontological Acute Care Nurse Practitioner students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C)

**AHN 617 AG ACNP Residency I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The Adult-Geron Acute Care Nurse Practitioner student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the Adult-Geron Acute Care Nurse Practitioner student will work with the primary faculty advisor to complete projects and advance their selected practice area. The Adult-Geron Acute Care Nurse Practitioner student will have access to and authority for expanded scope of practice to master the DNP competencies. Residency sites will depend upon the Adult-Geron Acute Care Nurse Practitioner student's career trajectory and approval by collaborating faculty. During the residency semester, students must participate in scheduled scholarly seminars online. Direct practice/management is required.

**Prerequisite:** AHN 604 Minimum Grade of S and NU 615 (may be taken concurrently) Minimum Grade of C

**AHN 618 AG ACNP Residency II 3 cr**

Provides Adult-Gerontological Acute Care Nurse Practitioner students the opportunity to fully express all DNP competencies. The Adult-Gerontological Acute Care Nurse Practitioner student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

**Prerequisite:** AHN 617 Minimum Grade of C and NU 616 (may be taken concurrently) Minimum Grade of C

**AHN 619 AG ACNP Residency III 3 cr**

Final course in residency series as Adult-Gerontological Acute Care Nurse Practitioner student continues to implement and evaluate project plan. Provides Adult-Geron Acute Care Nurse Practitioner student the opportunity to fully express all DNP competencies. The Adult-Gerontological Acute Care Nurse Practitioner student, guided by the core faculty and advisor, completes quality improvement evidence-based system's change project.

**Prerequisite:** AHN 618 Minimum Grade of C and NU 612 (may be taken concurrently) Minimum Grade of C

**AHN 630 Dysrhythmias and the Heart 2 cr**

The first of four cardiovascular specialization courses focuses on the development of a methodical approach to dysrhythmia interpretation. Emphasis is on diagnosis and management of the patient with cardiac dysrhythmias via an evidence-based approach.

**AHN 631 Foundations of Cardiac Care 2 cr**

This second of four cardiovascular specialization courses focuses on health promotion, prevention, health disparities and cultural competence for patients with common cardiovascular disorders. Emphasis is on cardiovascular nurse practitioner's role in managing patients as an integral part of the interdisciplinary health care team.

**Prerequisite:** AHN 630 (may be taken concurrently) Minimum Grade of C

**AHN 632 Diag & Mgmt of Acute CVD 2 cr**

The third of four cardiovascular specialization courses focuses on advanced healthcare management of patients with acute cardiovascular disorders. Emphasis is on diagnosis and management, to include assessment, diagnostic procedures, treatment and pharmacological management. Particular attention will be given to cardiovascular health disparities in a culturally diverse environment.

**Prerequisite:** AHN 631 Minimum Grade of C

**AHN 633 Dig/Mgmt Complex CV Disorders 2 cr**

The third of four cardiovascular specialization courses focuses on advanced healthcare management of patients with complex cardiovascular disorders. Emphasis is on diagnosis and management, to include assessment, diagnostic procedures, treatment and pharmacological management. Particular attention will be given to cardiovascular health disparities in a culturally diverse environment.

**Prerequisite:** AHN 632 Minimum Grade of C

**AHN 634 Adult-Geron CNS PP&D 3 cr**

This course assists the Adult-Gerontological Clinical Nurse Specialist DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning development as a preliminary step to the Adult-Gerontological Clinical Nurse Specialist students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C)

**AHN 635 Adult-Geron CNS Residency I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The Adult-Gerontological Clinical Nurse Specialist student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the Adult-Gerontological Clinical Nurse Specialist student will work with the primary faculty advisor to complete projects and advance their selected practice area. The Adult-Gerontological Clinical Nurse Specialist student will have access to and authority for expanded scope of practice to master the DNP competencies. Residency sites will depend upon the Adult-Gerontological Clinical Nurse Specialist student's career trajectory and approval by collaborating faculty. During the residency semester, student must participate in scheduled scholarly seminars online. A total of 180 clinical hours of direct practice/management is required.

**Prerequisite:** AHN 634 Minimum Grade of S and NU 615 (may be taken concurrently) Minimum Grade of C

**AHN 636 Adult-Geron CNS Residency II 3 cr**

Provides Adult-Gerontological Clinical Nurse Specialist students the opportunity to fully express all DNP competencies. The Adult-Gerontological Clinical Nurse Specialist student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

**Prerequisite:** AHN 635 Minimum Grade of C and NU 616 (may be taken concurrently) Minimum Grade of C

**AHN 637 Adult-Geron CNS Residency III 3 cr**

Final course in residency series as Adult-Gerontological Clinical Nurse Specialist student continues to implement and evaluate project plan. Provides Adult-Gerontological Clinical Nurse Specialist student the opportunity to fully express all DNP competencies. The Adult-Gerontological Clinical Nurse Specialist student, guided by the core faculty and advisor completes quality improvement evidence-based system's change project.

**Prerequisite:** AHN 636 Minimum Grade of C and NU 612 (may be taken concurrently) Minimum Grade of C

**AHN 670 AG-ACNP(DR) PP&D 3 cr**

This course assists the DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C)

**AHN 671 AG/ACNP (DR) Residency I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. In this course, students will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the student will work with the primary faculty advisor to develop a project to advance system's change in their selected practice area. The student will have access to and authority for expanded scope of practice to master all DNP competencies. Residency sites will depend upon the student's career trajectory and approval by collaborating faculty. During the residency semester, student must participate in scheduled scholarly seminars online. A total of 180 clinical hours of direct practice/management is required.

**Prerequisite:** (NU 608 Minimum Grade of C and AHN 670 Minimum Grade of S and NU 615 (may be taken concurrently) Minimum Grade of C)

**AHN 672 AG-ACNP (DR) Residency II 3 cr**

In this mentored and supervised experience, students will work with the primary faculty advisor to implement a scholarly project to advance system's change in their selected practice area. The student will have access to and authority for expanded scope of practice to master all DNP competencies. Residency sites will depend upon the student's career trajectory and approval by collaborating faculty. During the residency semester, students must participate in scheduled scholarly seminars online. A total of 180 clinical hours of direct/practice management is required.

**Prerequisite:** (NU 616 (may be taken concurrently) Minimum Grade of C and AHN 671 Minimum Grade of C)

**AHN 673 AG-ACNP(DR) Residency III 3 cr**

Final course in residency series as student continues to implement and evaluate project plan. Provides the student the opportunity to fully express all DNP competencies. The student, guided by the core faculty advisor, completes a quality improvement, evidence-based system's change project.

**Prerequisite:** (NU 612 (may be taken concurrently) Minimum Grade of C and AHN 671 Minimum Grade of C and AHN 672 Minimum Grade of C)

**AHN 680 Family NP (DR) PP&D 3 cr**

This course assists the DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, and a plan for evaluation and dissemination.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C)

**AHN 681 Family NP (DR) Residency I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. In this course, students will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the student will work with the primary faculty advisor to develop a project to advance system's change in their selected practice area. The student will have access to and authority for expanded scope of practice to master all DNP competencies. Residency sites will depend upon the student's career trajectory and approval by collaborating faculty. During the residency semester, student must participate in scheduled scholarly seminars online. A total of 180 clinical hours of direct practice/management is required.

**Prerequisite:** (AHN 680 Minimum Grade of S and NU 608 Minimum Grade of C and NU 615 (may be taken concurrently) Minimum Grade of C)

**AHN 682 FNP (DR) Residency II 3 cr**

In this mentored and supervised experience, students will work with the primary faculty advisor to implement a scholarly project to advance system's change in their selected practice area. The student will have access to and authority for expanded scope of practice to master all DNP competencies. Residency sites will depend upon the student's career trajectory and approval by collaborating faculty. During the residency semester, students must participate in scheduled scholarly seminars online. A total of 180 clinical hours of direct practice/management is required.

**Prerequisite:** (AHN 681 Minimum Grade of C and NU 616 (may be taken concurrently) Minimum Grade of C)

**AHN 683 FNP (DR) Residency III 3 cr**

Final course in residency series as student continues to implement and evaluate project plan. Provides the student the opportunity to fully express all DNP competencies. The student, guided by the core faculty and advisor, completes a quality improvement, evidence-based system's change project.

**Prerequisite:** (AHN 682 Minimum Grade of C and NU 612 (may be taken concurrently) Minimum Grade of C)

**AHN 692 AHN DNP Incomplete Extension 3 cr**

Students will register for this course to complete residency course work under supervision of faculty. Students must remain continuously enrolled until all residency requirements are completed.

**AHN 693 Adult-Geron Primary NP PP&D 3 cr**

This course assists the Adult-Geron Primary Care Nurse Practitioner student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the Adult-Geron Primary Care Nurse Practitioner students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C)

**AHN 694 Adult-Gero Primary Cr NP Res I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The Adult-Geron Primary Care Nurse Practitioner student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the Adult-Geron Primary Care Nurse Practitioner student will work with the primary faculty advisor to complete projects and advance their selected practice area. The Adult-Geron Primary Care Nurse Practitioner student will have access to and authority for expanded scope of practice to master the DNP competencies. Residency sites will depend upon the Adult-Geron Primary Care Nurse Practitioner student's career trajectory and approval by collaborating faculty. During the residency semester, student must participate in scheduled scholarly seminars online. Clinical hours of direct practice/management is required.

**Prerequisite:** AHN 693 Minimum Grade of S and NU 615 (may be taken concurrently) Minimum Grade of C

**AHN 695 Adlt-Gero Primary Cr NP Res II 3 cr**

Provides Adult-Geron Primary Care Nurse Practitioner students the opportunity to fully express all DNP competencies. The Adult-Geron Primary Care Nurse Practitioner student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

**Prerequisite:** AHN 694 Minimum Grade of C and NU 616 (may be taken concurrently) Minimum Grade of C

**AHN 696 Adlt-Gero Prim Care NP Res III 3 cr**

Final course in residency series as Adult-Geron Primary Care Nurse Practitioner student continues to implement and evaluate project plan. Provides Adult-Geron Primary Care Nurse Practitioner student the opportunity to fully express all DNP competencies. The Adult-Geron Primary Care Nurse Practitioner student, guided by the core faculty and advisor completes quality improvement evidence-based system's change project.

**Prerequisite:** AHN 695 Minimum Grade of C and NU 612 (may be taken concurrently) Minimum Grade of C

**Comm Mental Health Nurs (CMN)****CMN 350 Psy-Mental Health Nsg 2 cr**

Analysis of theories, concepts, evidence, issues and trends from contemporary nursing science and related disciplines in promoting the health of individuals and families experiencing psychiatric-mental health concerns. The emphasis is on the use of the nursing process and other systematic approaches to plan, implement, and evaluate health promotion and maintenance activities, illness care, and rehabilitation with individuals and families experiencing psychiatric-mental health concerns in a variety of acute and community settings.

**Prerequisite:** (NU 311 Minimum Grade of C and NU 327 Minimum Grade of C and HSC 342 Minimum Grade of C and NU 325 Minimum Grade of C and HSC 343 (may be taken concurrently) Minimum Grade of C)

**Corequisite:** CMN 351

**CMN 351 Psy-Mental Health Nsg Clin 2 cr**

The purpose of this course is to provide students the opportunity to analyze theories, concepts, research, and issues and trends in psychiatric-mental health nursing. The focus of the course is on internal and external factors affecting the mental health of children, adolescents, adults, elderly, and families. The emphasis is on the role of the professional nurse in health promotion and maintenance, illness care, and rehabilitation of children, adolescents, adults, elderly, and families experiencing psychiatric-mental health concerns.

**Prerequisite:** (NU 311 Minimum Grade of C and NU 325 Minimum Grade of C and NU 327 Minimum Grade of C and HSC 342 Minimum Grade of C and HSC 343 (may be taken concurrently) Minimum Grade of C)

**Corequisite:** CMN 350

**CMN 351B Psychiatric Mental Health Nursing Clinical 2 cr**

The purpose of this course is to provide students the opportunity to analyze theories, concepts, research, and issues and trends in psychiatric-mental health nursing. The focus of the course is on internal and external factors affecting the mental health of children, adolescents, adults, elderly, and families. The emphasis is on the role of the professional nurse in health promotion and maintenance, illness care, and rehabilitation of children, adolescents, adults, elderly, and families experiencing psychiatric-mental health concerns.

**CMN 420 Community Health Nursing 3 cr**

The purpose of this course is to provide students an opportunity to explore community health nursing concepts and principles from a population health care perspective. The changing needs of an increasingly culturally diverse population within the social context of the community systems are examined along with the environmental, economical, political, and legal constraints to the health of systems.

**Prerequisite:** (CMN 350 Minimum Grade of C and CMN 351 Minimum Grade of C and MCN 352 Minimum Grade of C and MCN 353 Minimum Grade of C and MCN 354 Minimum Grade of C and MCN 355 Minimum Grade of C)

**Corequisite:** CMN 421

**CMN 420B Community Health Nursing 3 cr**

The purpose of this course is to provide students an opportunity to explore community health nursing concepts and principles from a population health care perspective. The changing needs of an increasingly culturally diverse population within the social context of the community systems are examined along with the environmental, economical, political, and legal constraints to the health of systems.

**CMN 421 Community Health Nurs Clinical 1 cr**

The purpose of this course is to provide students the opportunity to complete a clinical project integrating community health nursing concepts and principles from an aggregate health care perspective. The changing needs of an increasingly culturally diverse population within the social context of the community are examined. Course content includes environmental, economical, political, and legal constraints to the health of aggregates.

**Prerequisite:** (CMN 350 Minimum Grade of C and CMN 351 Minimum Grade of C and MCN 352 Minimum Grade of C and MCN 353 Minimum Grade of C and MCN 354 Minimum Grade of C and MCN 355 Minimum Grade of C)

**Corequisite:** CMN 420

**CMN 421B Community Health Nursing Clinical 1 cr**

The purpose of this course is to provide students the opportunity to complete a clinical project integrating community health nursing concepts and principles from an aggregate health care perspective. The changing needs of an increasingly culturally diverse population within the social context of the community are examined. Course content includes environmental, economical, political, and legal constraints to the health of aggregates.

**CMN 520 CMN MSN Incomplete Extension 1-5 cr****CMN 548 Introduction to PMHNP 3 cr**

The purpose of this first didactic course is to prepare the Psychiatric-Mental Health Nurse Practitioner students to assess, diagnose, and manage selected health care needs of individuals across the lifespan. Emphasis is placed on synthesis and application of nursing and related theories and scientific knowledge to the development of differential/nursing diagnoses as a basis for health promotion and management.

**Prerequisite:** NU 545 (may be taken concurrently) Minimum Grade of C and NU 518 (may be taken concurrently) Minimum Grade of C

**Corequisite:** CMN 551

**CMN 550 PMHNP Clinical Progression 1-4 cr**

The purpose of this progression course is to provide opportunities for Psychiatric-Mental Health Nurse Practitioner students to apply concepts from PMHNP I in primary and acute care mental health settings with individuals and their families experiencing psychiatric-mental health concerns across the lifespan.

**CMN 551 HPDP & Issues for the PMHNP 2 cr**

This didactic course prepares the Psychiatric-Mental Health Nurse Practitioner student to identify and implement appropriate and culturally sensitive health promotion and disease prevention strategies of individuals and families across the lifespan in primary care settings. Emphasis is placed on health promotion/disease prevention with strategic planning at the primary, secondary, and tertiary levels.

**Corequisite:** CMN 548

**CMN 552 PMHNP I 3 cr**

This didactic course prepares the Psychiatric-Mental Health Nurse Practitioner student to assess, diagnose, and manage selected health care needs of culturally diverse populations across the life span. The focus is on advanced practice nursing with individuals and families in a variety of health care settings. Emphasis is placed on wellness and the pathophysiology and epidemiology underlying acute and chronic psychiatric-mental health problems.

**Prerequisite:** CMN 548 Minimum Grade of C and NU 578 (may be taken concurrently) Minimum Grade of C

**Corequisite:** CMN 553

**CMN 553 PMHNP Practicum I 3 cr**

The purpose of this practicum course is to provide opportunities for Psychiatric-Mental Health Nurse Practitioner students to apply concepts in primary and acute care settings with individuals and their families experiencing psychiatric-mental health concerns across the lifespan.

**Prerequisite:** NU 578 Minimum Grade of C

**Corequisite:** CMN 552

**CMN 554 PMHNP II 3 cr**

The purpose of this course is to provide the Psychiatric-Mental Health Nurse Practitioner student an in-depth study of psychiatric-mental health care management of individuals and their families across the lifespan within the framework of advanced nursing. The focus is on selected acute and chronic complex psychiatric-mental health care problems. Emphasis is on the interaction among health care providers in a culturally diverse environment.

**Prerequisite:** CMN 552 Minimum Grade of C

**Corequisite:** CMN 555

**CMN 555 PMHNP Practicum II 3 cr**

The purpose of this course is to provide opportunity for the Psychiatric-Mental Health Nurse Practitioner student to practice within advanced nursing framework. The focus is on the role of the advanced practice nurse in the health care management of individuals with psychiatric-mental health concerns across the lifespan. Emphasis is on collaboration with other health care providers in a culturally diverse environment.

**Corequisite:** CMN 554

**CMN 556 PMHNP Practicum III 4 cr**

The purpose of this culminating course is to provide a preceptor and faculty facilitated experience in the Psychiatric-Mental Health Nurse Practitioner role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses.

**Prerequisite:** CMN 554 Minimum Grade of C and NU 610 (may be taken concurrently) Minimum Grade of C or NU 607 (may be taken concurrently) Minimum Grade of C or NU 608 (may be taken concurrently) Minimum Grade of C or NU 613 (may be taken concurrently) Minimum Grade of C

**Corequisite:** CMN 557

**CMN 557 PMHNP III 3 cr**

The purpose of this course is to provide a forum for the evaluation of issues and trends encountered in the Psychiatric-Mental Health Nurse Practitioner role. Emphasis is on critical analysis and management of issues by the Psychiatric-Mental Health Nurse Practitioner in an interdisciplinary health care delivery system.

**Prerequisite:** NU 607 (may be taken concurrently) Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C and NU 610 (may be taken concurrently) Minimum Grade of C and NU 613 (may be taken concurrently) Minimum Grade of C

**Corequisite:** CMN 556

**CMN 566 Family NP Clin Progression 1-9 cr**

The purpose of this practicum course is to provide opportunities for the Family Nurse Practitioner to apply concepts from previous courses and CMN 572, 574, or 577 in select clinical settings. Focus is on individuals and families in primary care settings. The emphasis is on diagnostic reasoning and decision-making/critical-thinking.

**CMN 568 Intro to Family NP 3 cr**

The purpose of this first didactic course is to prepare Advanced Family Nurse Practitioner students to assess, diagnose, and manage selected health care needs of adults and children. Emphasis is placed on synthesis and application of nursing and related theories and scientific knowledge to the development of differential/nursing diagnoses as a basis for health promotion and management.

**Prerequisite:** NU 545 (may be taken concurrently) Minimum Grade of C and NU 518 (may be taken concurrently) Minimum Grade of C

**Corequisite:** CMN 571

**CMN 571 HPDP in Family NP 2 cr**

The purpose of this didactic course is to prepare the Advanced Family Nurse Practitioner student to identify and implement appropriate and culturally competent health promotion and disease prevention strategies across the lifespan. The focus is on the advanced practice nursing of individuals and families in primary care settings. Emphasis is placed on health promotion/disease prevention with strategic planning at the primary, secondary, and tertiary levels of prevention. Prevention, early diagnosis, prompt treatment, and in-depth patient education with dysmetabolic syndrome and diabetes will be emphasized. Effective strategies for life-style behavior change will also be evaluated.

**Corequisite:** CMN 568

**CMN 572 Family NP I 3 cr**

This didactic course prepares the Advanced Family Nurse Practitioner student to assess, diagnose, and manage selected health care needs of culturally diverse populations across the lifespan. The focus is on the advanced practice nursing of individuals and families in primary care settings. Emphasis is placed on wellness and the pathophysiology and epidemiology underlying acute and chronic health problems.

**Prerequisite:** CMN 568 Minimum Grade of C and NU 578 (may be taken concurrently) Minimum Grade of C

**Corequisite:** CMN 573

**CMN 573 Family NP Pract I 3 cr**

This practicum course provides opportunities for the Advanced Family Nurse Practitioner to apply concepts in select clinical settings. Focus is on individuals and families in primary care settings. The emphasis is on culturally competent delivery of health care, diagnostic reasoning and decision making/critical thinking.

**Prerequisite:** NU 578 Minimum Grade of C

**Corequisite:** CMN 572

**CMN 574 Family NP II 3 cr**

This course provides an in-depth study of the health care management of children, adults, and families within the framework of advanced nursing. Emphasis is on the interaction among health care providers in a culturally diverse environment. The focus is on selected acute and chronic complex health problems of children, adults, and families in primary health care settings.

**Prerequisite:** CMN 572 Minimum Grade of C

**Corequisite:** CMN 575

**CMN 575 Family NP Prac II 3 cr**

This practicum course provides an opportunity for the Advanced Family Nurse Practitioner student to practice within an advanced nursing framework. The focus is on the role of the advanced practice nurse in the health care management of children, adults, and families. Emphasis is on collaboration with other health care providers in a culturally diverse environment.

**Corequisite:** CMN 574

**CMN 576 Family NP Pract III 4 cr**

The purpose of this practicum course is to provide opportunities for the Family Nurse Practitioner student to apply concepts from CMN 577 and previously required courses in select clinical settings. Focus is on individuals and families in primary care settings. The emphasis is on diagnostic reasoning and decision making/critical thinking.

**Prerequisite:** NU 607 (may be taken concurrently) Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C

**Corequisite:** CMN 577

**CMN 577 Family NP III 3 cr**

The purpose of this course is to provide a forum for the evaluation of issues and trends encountered in health care. Emphasis is on critical analysis and management of these issues by the Advanced Family Nurse Practitioner student in an interdisciplinary health care system.

**Prerequisite:** NU 607 (may be taken concurrently) Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C and NU 610 (may be taken concurrently) Minimum Grade of C and NU 613 (may be taken concurrently) Minimum Grade of C

**Corequisite:** CMN 576

**CMN 604 PMHNP PP&D 3 cr**

This course assists the Family Psych Mental Health Nurse Practitioner student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the Family Psych Mental Health Nurse Practitioner student's selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C)

**CMN 617 PMHNP Residency I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The Family Psych Nurse Practitioner student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the Nurse Practitioner DNP student will work with the primary faculty advisor to complete projects and advance their selected practice area. The Nurse Practitioner student will have access to and authority for expanded scope of practice to master the DNP competencies. Residency sites will depend upon the student's career trajectory and approval by collaborating faculty. During the residency semester, students must participate in scheduled scholarly seminars online. Clinical hours of direct practice/management is required.

**Prerequisite:** CMN 604 Minimum Grade of S and NU 615 (may be taken concurrently) Minimum Grade of C

**CMN 618 PMHNP Residency II 3 cr**

Provides students the opportunity to fully express all DNP competencies. The student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

**Prerequisite:** CMN 617 Minimum Grade of C and NU 616 (may be taken concurrently) Minimum Grade of C

**CMN 619 PMHNP Residency III 3 cr**

Final course in residency series as student continues to implement and evaluate project plan. Provides student the opportunity to fully express all DNP competencies. The student, guided by the core faculty and advisor, completes quality improvement evidence-based system's change project.

**Prerequisite:** CMN 618 Minimum Grade of C and NU 612 (may be taken concurrently) Minimum Grade of C

**CMN 643 Public Health Admin PP&D 3 cr**

This course assists the public health nursing administration DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the public health students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C)

**CMN 644 Public Health Residency I 3-6 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The public health nursing administration student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the public health nursing administration DNP student will work with the primary faculty advisor to complete projects and advance their selected practice area. The public health nursing administration student will have access to and authority for expanded scope of practice to master the DNP competencies. Residency sites will depend upon the public health nursing administration student's career trajectory and approval by collaborating faculty. During the residency semester, student must participate in scheduled scholarly seminars online. Clinical hours of direct practice/management is required.

**Prerequisite:** CMN 643 Minimum Grade of S and NU 615 (may be taken concurrently) Minimum Grade of C

**CMN 645 Public Health Residency II 3-6 cr**

Provides public health nursing administration students the opportunity to fully express all DNP competencies. The public health nursing administration student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

**Prerequisite:** CMN 644 Minimum Grade of C and NU 616 (may be taken concurrently) Minimum Grade of C

**CMN 646 Public Health Residency III 3-6 cr**

Final course in residency series, the public health nursing administration student continues to implement and evaluate project plan. Provides public health nursing administration student the opportunity to fully express all DNP competencies. The public health nursing administration student, guided by the core faculty and advisor completes quality improvement evidence-based system's change project.

**Prerequisite:** CMN 645 Minimum Grade of C and NU 612 (may be taken concurrently) Minimum Grade of C

**CMN 680 Family NP PP&D 3 cr**

This course assists the family nurse practitioner student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the family nurse practitioner students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C)

**CMN 681 Family NP Residency I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The family nurse practitioner student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the family nurse practitioner student will work with the primary faculty advisor to complete projects and advance their selected practice area. The student will have access to and authority for expanded scope of practice to master the DNP competencies. Residency sites will depend upon the family nurse practitioner student's career trajectory and approval by collaborating faculty. During the residency semester, student must participate in scheduled scholarly seminars online. A total of 180 clinical hours of direct practice/management is required.

**Prerequisite:** CMN 680 Minimum Grade of S and NU 615 (may be taken concurrently) Minimum Grade of C

**CMN 682 Family NP Residency II 3 cr**

Provides family nurse practitioner students the opportunity to fully express all DNP competencies. The family nurse practitioner student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

**Prerequisite:** CMN 681 Minimum Grade of C and NU 616 (may be taken concurrently) Minimum Grade of C

**CMN 683 Family NP Residency III 3 cr**

Final course in residency series, the family nurse practitioner student continues to implement and evaluate project plan. This course provides the family nurse practitioner student the opportunity to fully express all DNP competencies. The family nurse practitioner student, guided by the core faculty and advisor completes quality improvement evidence-based system's change project.

**Prerequisite:** CMN 682 Minimum Grade of C and NU 612 (may be taken concurrently) Minimum Grade of C

**CMN 692 CMN DNP Incomplete Extension 3 cr**

Students will register for this course to complete residency course work under supervision of faculty. Students must remain continuously enrolled until all residency requirements are completed.

**Health Sciences (HSC)****HSC 101 Interprofessional Freshman Sem 2 cr**

The purpose of this course is to introduce the unique requirements and opportunities of the Health Sciences Division to beginning students who have declared or are considering a Health Science major (Nursing, Medicine, Pharmacy, Allied Health Professions, etc.). The course focuses on the value of higher education as a base for a career in Health Sciences and develops an awareness of activities and support services available within the University to enhance student success. Academic rules, regulations and policies related to admission, progression, and graduation in the University and Colleges of Nursing, Medicine, and Allied Health Professions are discussed.

**Cross-Listed:** AHP 101

**HSC 324 Death and Dying 2 cr**

Provides the student an opportunity to analyze theories, concepts, socioethical issues, and research related to dying and death. Focus is on assisting students to explore their feelings regarding death as well as developing self-awareness of the feelings of patients and families. Emphasis is on the acceptance of the process of mourning and death and applicable nursing interventions. Elective.

**HSC 342 Administration of Medication 1 cr**

The purpose of this course is to prepare the student to accurately calculate medication dosages. Mathematical and metric apothecary concepts are stressed.

**HSC 342B Administration of Medication 1 cr**

The purpose of this course is to prepare the student to accurately calculate medication dosages. Mathematical and metric apothecary concepts are stressed.

**HSC 343 Clinical Pharmacology 3 cr**

The purpose of the course is to provide the student with the opportunity to acquire information related to the clinical application of drug therapy and the concepts relating to the mechanisms of drug actions, interactions and adverse reactions, including the immunologic-idiosyncratic-allergic responses. Emphasis is on the current evidence related to pharmacokinetics, dosage, methods of administration, and adverse effects of major classifications of drugs to inform nursing care. Prerequisites: Admission to Professional Component or special permission of instructor.

**Prerequisite:** (NU 311 (may be taken concurrently) and NU 325 (may be taken concurrently))

**HSC 343B Clinical Pharmacology 3 cr**

The purpose of the course is to provide students with the opportunity to acquire information related to clinical application of drug therapy and concepts relating to the mechanisms of drug actions, interactions and adverse reactions, including the immunologic-idiosyncratic-allergic responses. Emphasis is placed on current evidence related to pharmacokinetics, dosage, methods of administration, and adverse effects of major classifications of drugs to inform nursing care.

Restricted to students enrolled in RN to BSN programs.

**Cross-Listed:** HSC 343

**HSC 385 Study Abroad Public Healthcare 3 cr****HSC 390 Special Topics - 1-9 cr**

Selected topics in Health Sciences. Requires special permission. Variable title and 1 to 9 variable credit hours.

**HSC 400 Gender Discrim and Healthcare 3 cr**

The purpose of this course is to provide students with an overview of gender discrimination and disparities in healthcare, with special attention to the intersection of gender and other vulnerable social identities (i.e., historically marginalized identities). Students will learn to identify instances of gender discrimination and disparities across the full gender spectrum, and to advocate for equitable healthcare.

**HSC 401 Diversity, Equity, and Inclusion in Healthcare 1 cr**

Healthcare professionals must be equipped to provide care to a diverse, multicultural population. This course will introduce diversity, equity, and inclusion terminology and examine its relationship in providing equitable and quality healthcare. Content includes topics related to but is not limited to implicit bias, cultural diversity, social determinants of health and healthcare discrimination.

**HSC 450 Ethical Consider Care of Aging 3 cr**

Interdisciplinary course on a critical investigation of ethical issues across the lifespan and on application of ethical principles.

**HSC 500 Address Gender Discrimination 3 cr**

The purpose of this course is to provide students with an overview of historical and current manifestations of gender discrimination and disparities in healthcare, with special attention to the intersection of gender and other vulnerable social identities (i.e., historically marginalized identities). Students will learn to trace historical discriminatory healthcare practices to modern indications of gender discrimination and disparities across the full gender spectrum, and to advocate for and implement equitable healthcare.

**HSC 501 Found of Diversity Healthcare 2 cr**

In a multicultural society, healthcare professionals must be able to work with patients and colleagues from a variety of backgrounds. This course will provide students with theoretical knowledge and introduce practical skills necessary to understand and promote diversity, equity and inclusion in healthcare. The course will introduce diversity, equity, and inclusion terminology and examine implicit biases, historical and institutionalized bias, and discrimination influencing health and healthcare in the community.

**HSC 502 Diversity Equity & Inclusion 2 cr**

The purpose of this course is for program participants to examine population-focused health disparities and the role of policy, socioeconomics, the environment, and the medical community in their origin and continuation. This course encourages students to reflect on the responsibility to provide culturally competent care as an expression of their professional values. The emphasis is on forming an evidence-based foundation for knowledge, attitude, and skill transformation that can reduce the incidence of suboptimal outcomes among certain groups through improved policy, clinical decision-making, and cross-cultural interactions with clients.

**Prerequisite:** (HSC 501 (may be taken concurrently) Minimum Grade of C)

**HSC 503 Curr Issues & Trends Diversity 2 cr**

This course will focus on issues and trends involving diversity, equity, and inclusion from a variety of healthcare perspectives. Students will reflect on current and critical topics and engage in online discussions about how these topics impact healthcare. The course provides a broader perspective of emerging issues and trends through interactive activities and community-based projects.

**Prerequisite:** (HSC 501 (may be taken concurrently) Minimum Grade of C)

**HSC 504 Lead&Change Mang Adv Diversity 2 cr**

This course will focus on leading and influencing change and fostering inclusive climates at the organizational and community level.

**Prerequisite:** (HSC 501 (may be taken concurrently) Minimum Grade of C)

**HSC 510 IPT for TI-IBH Primary Care 1 cr**

The purpose of this course is to prepare the healthcare professional for interprofessional practice within integrated behavioral health settings. This course will bring together students from multiple professional disciplines to learn about, from and with each other in service to promote effective clinical collaboration within behavioral health settings. Emphasis is on the team-based collaboration within administrative, screening, and intervention roles as trauma-informed behavioral health providers in integrated settings serving youth.

**HSC 511 IPT Telehealth Deliv TI-IBH 1 cr**

The purpose of this didactic course is preparation of delivery of team-based, trauma-informed integrated behavioral healthcare in telehealth settings across the lifespan. This course is available to students from multidisciplinary professions, to fully embody the spirit of integrated, interprofessional care.

**HSC 512 TI-MI in IBH Seminar 1 cr**

The purpose of this course is to offer interprofessional practice preparation within an integrated behavioral health setting. This course will bring together students from multiple disciplines to learn about, from, and with each other in the service of enabling effective motivational interviewing within integrated behavioral health settings. Emphasis is on motivational interviewing during screening, intake, intervention and trauma-informed care as behavioral health providers in integrated settings serving across the life-span.

**HSC 571 Managing Healthcare Personnel 3 cr**

The purpose of this course is to analyze frameworks for managing health care personnel. The course focuses on exploration and application of human resource management. Emphasis within the course is placed on leadership, communication, relationship management, diversity, legal and ethical principles, and workforce planning and maintenance.

**HSC 573 Resp Prescrib Common Used Drug 1 cr**

This course allows the student to become familiar with most-prescribed drugs in several areas including cardiac, respiratory, psychiatric, endocrine and gastrointestinal medicine. The student will examine use of commonly-prescribed agents in diverse patient populations, focusing on drug selection, dosing, laboratory values and follow-up. Additionally, the process of drug development will be studied, so that the student may become familiar with rationales for drugs coming to market, pricing, and ethical use.

**Prerequisite:** NU 578 Minimum Grade of C

**HSC 580 OUD/SUD Prevention/Screening 2 cr**

This course serves as a one of three courses in the Addictions Subspecialty nursing program. The purpose of this didactic course is preparation of OUD/SUD Screening in integrated health care and telehealth settings across the lifespan. While preparation is across the life span, emphasis will be focused on child, adolescent, and transitional age-populations. This course is available to students from any health-related discipline, to fully embody the spirit of integrated, interprofessional care.

**HSC 581 OUD/SUD Assessment/Treatment 2 cr**

This course serves as a one of three courses in the Addictions Subspecialty nursing program. The purpose of this didactic course is preparation of OUD/SUD Assessment and Treatment in integrated health care and telehealth settings across the lifespan. While preparation is across the life span, emphasis will be focused on child, adolescent, and transitional age-populations. This course is available to students from any health-related discipline, to fully embody the spirit of integrated, interprofessional care.

**Prerequisite:** (HSC 580 Minimum Grade of C)

**HSC 582 OUD/SUD Recovery/Sys Practice 2 cr**

This course serves as a one of three courses in the Addictions Subspecialty nursing program. The purpose of this didactic course is preparation of OUD/SUD recovery in integrated health care and telehealth settings across the lifespan. While preparation is across the life span, emphasis will be focused on child, adolescent, and transitional age-populations. This course is available to students from any health-related discipline, to fully embody the spirit of integrated, interprofessional care.

**Prerequisite:** (HSC 580 Minimum Grade of C and HSC 581 Minimum Grade of C)

**HSC 585 Study Abroad Public Healthcare 3 cr**

The purpose of this course for the undergraduate/graduate student is to develop an improved understanding of culture, to recognize any cultural practices that affect health care and other professions, and to incorporate this understanding into the provision of care.

**HSC 590 Special Topics 1-6 cr**

Study of topics significant to the health professions. Content varies and may be repeated.

**HSC 595 Evidence Basd Lipid Practice 2 cr**

This course serves as a foundational course in the Clinical Lipidology Subspecialty program. The purpose of this didactic course is to prepare the Clinical Lipid Specialist student to evaluate CVD epidemiology, cardiometabolic risk, and evidence based lipid practice in those with selected health care needs across the lifespan.

**HSC 596 Adv Vascular Biology 2 cr**

This course serves as a foundational course in the Clinical Lipidology Subspecialty program. The purpose of this didactic course is to prepare the Clinical Lipid Specialist student to evaluate lipoprotein metabolism and vascular biology in those with selected health care needs across the lifespan.

**HSC 597 Adv Pharm Complex Dyslipidemia 2 cr**

This course serves as a foundational course in the Clinical Lipidology Subspecialty program. The purpose of this didactic course is to prepare the Clinical Lipid Specialist student to evaluate advanced pharmacologic options in treating those with selected health care needs across the lifespan.

**Prerequisite:** (HSC 595 Minimum Grade of C and HSC 596 (may be taken concurrently) Minimum Grade of C)

**HSC 598 Diag/Mgt C-plex Dyslipidemia 2 cr**

This course serves as a final course in the Clinical Lipidology Subspecialty program. The purpose of this didactic course is to prepare the Clinical Lipid Specialist student to evaluate and manage complex dyslipidemia in those with selected health care needs across the lifespan.

**Prerequisite:** HSC 597 Minimum Grade of C

**HSC 603 Assmnt Vulnerable Populations 1 cr**

This online interdisciplinary course will implement evidence based and collaborative models to assess the needs of vulnerable populations who have multiple physical needs such as those evidenced by adults, elders, and returning veterans with multiple chronic illnesses and/or acute injury. The student will synthesize, critique, and apply evidence to improve patient care outcomes. The student will work in groups to complete an assessment of need for vulnerable patient populations.

**Prerequisite:** HSC 602 Minimum Grade of C

**Corequisite:** AHN 595, AHN 596

**HSC 690 Special Topics- 1-9 cr**

Study of health professional topics at the doctoral level. Credit hours will vary based on student need and depth of course subject matter. Content will vary and may be repeated up to 9 credits. Requires special permission.

**Maternal Child Nursing (MCN)****MCN 352 OB & GYN Nursing Care 2 cr**

Analysis of theories, concepts, evidence, and issues and trends in professional nursing care of the obstetric or gynecologic client and their families. Emphasis on the use of the nursing process and other systematic approaches to plan, implement, and evaluate health promotion and maintenance activities, illness care, and rehabilitation with individuals and families in various stages of pregnancy and childbirth, as well as the gynecologic care of women in a variety of acute and community settings.

**Prerequisite:** (NU 300 Minimum Grade of C and NU 301 Minimum Grade of C)

**Corequisite:** MCN 353

**MCN 353 OB & GYN Nsg Care Clinical 2 cr**

The purpose of this course is to provide students the opportunity to engage in clinical practice with obstetric and gynecologic clients and their families. Emphasis is on the role of the professional nurse in the application of concepts and theories related to health promotion and maintenance, illness care and rehabilitation with obstetric and gynecologic clients.

**Prerequisite:** (NU 300 Minimum Grade of C and NU 301 Minimum Grade of C)

**Corequisite:** MCN 352

**MCN 353B Obstetric & Gynecologic Nursing Care Clinical 2 cr**

The purpose of this course is to provide students the opportunity to engage in clinical practice with obstetric and gynecologic clients and their families. Emphasis is on the role of the professional nurse in the application of concepts and theories related to health promotion and maintenance, illness care and rehabilitation with obstetric and gynecologic clients.

**MCN 354 Pediatric Nursing Care 2 cr**

Analysis of theories, concepts, evidence, and issues and trends in professional nursing care of the pediatric client and their family. Emphasis on the use of the nursing process and other systematic approaches to plan, implement, and evaluate health promotion and maintenance activities, illness care, and rehabilitation with clients and families in various stages of development.

**Prerequisite:** (NU 300 Minimum Grade of C and NU 301 Minimum Grade of C)

**Corequisite:** MCN 355

**MCN 355 Pediatric Nsg Care Clinical 2 cr**

The purpose of this course is to provide students the opportunity to engage in clinical practice with the pediatric client and their family. Emphasis is on the role of the professional nurse in the application of concepts and theories related to health promotion and maintenance, illness care, and rehabilitation of clients and families in various stages of development.

**Prerequisite:** (NU 300 Minimum Grade of C and NU 301 Minimum Grade of C)

**Corequisite:** MCN 354

**MCN 355B Pediatric Nursing Care Clinical 2 cr**

The purpose of this course is to provide students the opportunity to engage in clinical practice with the pediatric client and their family. Emphasis is on the role of the professional nurse in the application of concepts and theories related to health promotion and maintenance, illness care, and rehabilitation of clients and families in various stages of development.

**MCN 520 MCN MSN Incomplete Extension 1-5 cr****MCN 538 Intro to Women's Health NP 3 cr**

The purpose of this course is to expand the Women's Health Nurse Practitioner student's knowledge and skills for obtaining, recording and analyzing a systematic health assessment of women. Emphasis is on the synthesis and application of nursing and related theories and scientific knowledge to the development of differential/nursing diagnoses as a basis for health promotion and management.

**Prerequisite:** NU 545 (may be taken concurrently) Minimum Grade of C and NU 518 (may be taken concurrently) Minimum Grade of C

**Corequisite:** MCN 541

**MCN 540 Women's Hlth NP CI Progression 1-4 cr**

The purpose of this progression practicum is to facilitate student independence in the Women's Health Nurse Practitioner role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses and to develop the necessary skills to progress to the next level of competency in the Women's Health Nurse Practitioner role.

**MCN 541 HPDP Women's Health NP 2 cr**

The purpose of this didactic course is to prepare the Women's Nurse Practitioner student to identify and implement appropriate health promotion and disease prevention strategies across the lifespan. The focus is on the advanced practice nursing of individuals and families in primary care settings. Emphasis is placed on health promotion/disease prevention with strategic planning at the primary, secondary and tertiary levels of prevention. Various issues are explored pertinent to the advanced practice role.

**Corequisite:** MCN 538

**MCN 542 Women's Health NP I 3 cr**

The purpose of this didactic course is to prepare the Women's Health Nurse Practitioner student to assess, diagnose, and manage selected health care needs of women. The focus is on advanced practice nursing with women primary, acute, and chronic health care settings. Emphasis is on wellness and the pathophysiology and epidemiology underlying acute and chronic health problems.

**Prerequisite:** MCN 538 Minimum Grade of C and NU 578 (may be taken concurrently) Minimum Grade of C

**Corequisite:** MCN 543

**MCN 543 Women's Health NP Pract I 3 cr**

The purpose of this practicum course is to provide opportunities for the Women's Health Nurse Practitioner student to apply concepts from MCN 542 Advanced Women's Health Nursing II in select clinical settings. Focus is on advanced practice nursing with women and families in primary, acute, and chronic health care settings. The emphasis is on diagnostic reasoning and decision making/critical thinking.

**Prerequisite:** NU 578 Minimum Grade of C

**Corequisite:** MCN 542

**MCN 544 Women's Health NP II 3 cr**

The purpose of this course is to provide the Women's Health Nurse Practitioner student an in-depth study of the health care management of women within the framework of advanced nursing. The focus is on selected acute and chronic complex health care problems. Emphasis is on the interaction among health care providers in a culturally diverse environment.

**Prerequisite:** MCN 542 Minimum Grade of C

**Corequisite:** MCN 545

**MCN 545 Women's Health NP Pract II 3 cr**

The purpose of this course is to provide opportunity for the Women's Health Nurse Practitioner student to practice within an advanced nursing framework. The focus is on the role of the advanced practice nurse in the health care management of women. Emphasis is on collaboration with other health care providers in a culturally diverse environment.

**Corequisite:** MCN 544

**MCN 546 Women's Health NP Prac III 4 cr**

The purpose of this culminating course is to provide a preceptor and faculty facilitated experience in the Women's Health Nurse Practitioner role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses.

**Prerequisite:** MCN 544 Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C and NU 607 (may be taken concurrently) Minimum Grade of C

**Corequisite:** MCN 547

**MCN 547 Women's Health NP III 3 cr**

The purpose of this course is to provide a forum for the evaluation of issues and trends encountered in advanced women's health nursing care. Emphasis is on critical analysis and management of issues by the Women's Health Nurse Practitioner student in an interdisciplinary health care system.

**Prerequisite:** NU 607 (may be taken concurrently) Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C and NU 610 (may be taken concurrently) Minimum Grade of C and NU 613 (may be taken concurrently) Minimum Grade of C

**Corequisite:** MCN 546

**MCN 548 Intro to Ped Primary Care NP 3 cr**

The purpose of this first didactic course is to prepare Pediatric Primary Care Nurse Practitioner students to assess, diagnose, and manage selected health care needs of children. Emphasis is placed on synthesis and application of nursing and related theories and scientific knowledge to development of differential diagnoses as a basis for health promotion and management.

**Prerequisite:** NU 545 (may be taken concurrently) Minimum Grade of C and NU 518 (may be taken concurrently) Minimum Grade of C

**Corequisite:** MCN 551

**MCN 551 HPDP Pediatric Primary Care NP 2 cr**

The purpose of this didactic course is to prepare the Pediatric Primary Care Nurse Practitioner student to identify and implement appropriate health promotion and disease prevention strategies for children from birth to adolescence. The focus is on the advanced practice nursing of children and families in primary care settings. Emphasis is placed on health promotion/disease prevention with strategic planning at the primary, secondary, and tertiary levels of prevention. Various issues are explored pertinent to the advanced practice role.

**Corequisite:** MCN 548

**MCN 552 Pediatric Prim Care NP I 3 cr**

The purpose of this didactic course is to prepare the Pediatric Primary Care Nurse Practitioner student to assess, diagnose, and manage selected health care needs of children from birth to school age. The focus is on advanced practice nursing with children and families in primary care settings. Emphasis is on the wellness, and the pathophysiology and epidemiology underlying acute and chronic health problems.

**Prerequisite:** MCN 548 Minimum Grade of C and NU 578 (may be taken concurrently) Minimum Grade of C

**Corequisite:** MCN 553

**MCN 553 Ped Prim Care NP Prac I 3 cr**

The purpose of this practicum course is to provide opportunities for the Pediatric Primary Care Nurse Practitioner student to apply concepts in select clinical settings. Focus is on advanced practice nursing with children and families in primary care settings. The emphasis is on diagnostic reasoning and decision making/critical thinking.

**Prerequisite:** NU 578 Minimum Grade of C

**Corequisite:** MCN 552

**MCN 554 Pediatric Primary Care NP II 3 cr**

The purpose of this course is to provide the Pediatric Primary Care Nurse Practitioner student an in-depth study of the health care management of children from school age to adolescence within the framework of advanced nursing. The focus is on selected acute and chronic complex health problems. Emphasis is on the interaction among health care providers in a culturally diverse environment.

**Prerequisite:** MCN 552 Minimum Grade of C

**Corequisite:** MCN 555

**MCN 555 Ped Prim Care NP Prac II 3 cr**

The purpose of this course is to provide opportunity for the Pediatric Primary Care Nurse Practitioner student to practice within an advanced nursing framework. The focus is on the role of the advanced practice nurse in the health care management of children. Emphasis is on collaboration with other health care providers in a culturally diverse environment.

**Corequisite:** MCN 554

**MCN 556 Ped Prim Care NP Pract III 4 cr**

The purpose of this culminating course is to provide a preceptor and faculty facilitated experience in the Pediatric Primary Care Nurse Practitioner role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses.

**Prerequisite:** MCN 554 Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C and NU 607 (may be taken concurrently) Minimum Grade of C

**Corequisite:** MCN 557

**MCN 557 Pediatric Primary Care NP III 3 cr**

The purpose of this course is to provide a forum for the evaluation of issues and trends encountered in advanced pediatric primary care health nursing. Emphasis is on critical analysis and management of issues by the Pediatric Primary Care Nurse Practitioner in an interdisciplinary health care delivery system.

**Prerequisite:** NU 607 (may be taken concurrently) Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C and NU 610 (may be taken concurrently) Minimum Grade of C and NU 613 (may be taken concurrently) Minimum Grade of C

**Corequisite:** MCN 556

**MCN 558 Intro Pediatric Acute Care NP 3 cr**

The course will introduce the Acute Pediatric Nurse Practitioner student to entry level NP decision making, evidenced based practice, documentation and resource optimization with an introductory emphasis on critical thinking skills in the development of appropriate history and examination, assessment, differential diagnosis, as well as diagnostic and treatment plans for pediatric patients in primary and acute care settings, as they prepare to start clinical rotations.

**Prerequisite:** NU 518 (may be taken concurrently) Minimum Grade of C and NU 545 (may be taken concurrently) Minimum Grade of C

**Corequisite:** MCN 571

**MCN 561 Peds Acute NP Clin Progression 1-4 cr**

This course provides an opportunity for the Acute Care Pediatric Nurse Practitioner student to apply more clinical time so as to master clinical concepts and improve competence before moving on to the subsequent term, or in their last clinical course before graduation.

**MCN 562 Pediatric Acute Care NP I 3 cr**

This course provides Acute Care Pediatric Nurse Practitioner students to assess, diagnose, and manage selected health care needs of children. The focus is on advanced practice nursing with children and families in acute care settings, evaluation diagnostic probability, evidenced based care and managing both inpatient and primary health care needs. Emphasis is placed on wellness, pathophysiology and epidemiology underlying acute and chronic health problems, as well as diagnostic reasoning, articulation of evidence based management plans, decision making, critical thinking and resource optimization.

**Prerequisite:** MCN 558 Minimum Grade of C and NU 578 (may be taken concurrently) Minimum Grade of C and MCN 571 Minimum Grade of C

**Corequisite:** MCN 563

**MCN 563 Ped Acute Care NP Prac I 3 cr**

This course provides an opportunity for the Acute Care Pediatric Nurse Practitioner student to apply concepts from Acute Care Pediatric Nurse Practitioner I course in select clinical inpatient and outpatient settings. The emphasis is on diagnostic reasoning, articulation of evidence based management plans, decision making, critical thinking and resource optimization. Practicum experiences will include primary care, inpatient hospitalist rotations, pediatric surgery rotations and urgent care rotations.

**Prerequisite:** NU 578 Minimum Grade of C

**Corequisite:** MCN 562

**MCN 564 Pediatric Acute Care NP II 3 cr**

This course prepares Acute Care Pediatric Nurse Practitioner students to assess, diagnose, and manage selected health care needs of both acute and chronically ill children, focusing on technology dependent children, hematology, transplant, infectious disease as well as those with hematological, medical and surgical emergencies. Emphasis is on diagnostic reasoning, articulation of evidence based management plans, decision making, critical thinking and resource optimization.

**Prerequisite:** MCN 562 Minimum Grade of C and MCN 563 Minimum Grade of C

**Corequisite:** MCN 565

**MCN 565 Ped Acute Care NP Prac II 3 cr**

This course provides an opportunity for the Acute Care Pediatric Nurse Practitioner student to apply concepts from Acute Care Pediatric Nurse Practitioner II in select clinical inpatient and outpatient settings. The emphasis is on diagnostic reasoning, articulation of evidence based management plans, decision making, critical thinking and resources optimization. Practicum experiences will include chronic subspecialty clinics and inpatient environments.

**Prerequisite:** MCN 562 Minimum Grade of C and MCN 563 Minimum Grade of C

**Corequisite:** MCN 564

**MCN 566 Ped Acute Care NP Pract III 4 cr**

This course provides an opportunity for the Acute Care Pediatric Nurse Practitioner student to apply concepts from Acute Care Pediatric Nurse Practitioner III in select clinical inpatient and outpatient settings. The emphasis is on diagnostic reasoning, decision making/critical thinking and resource utilization. Practicum experiences will include emergency departments and critical care/intensive care units.

**Prerequisite:** MCN 564 Minimum Grade of C and MCN 565 Minimum Grade of C or NU 607 (may be taken concurrently) Minimum Grade of C or NU 608 (may be taken concurrently) Minimum Grade of C or NU 610 (may be taken concurrently) Minimum Grade of C or NU 613 (may be taken concurrently) Minimum Grade of C

**Corequisite:** MCN 567

**MCN 567 Pediatric Acute Care NP III 3 cr**

This course prepares the Acute Care Pediatric Nurse Practitioner student to appropriately assess, diagnose and manage selected acute, emergent, unstable and life threatening pediatric health care conditions, focusing on psychiatric emergencies, trauma, shock, burns, organ failure, toxicology/ ingestions, environmental exposures, neurological presentations, as well as those requiring life support and end of life/palliative care, as the student prepares to graduate and assume a professional ACPNP role. The focus is on application and synthesis of knowledge and skills acquired in all previous courses.

**Prerequisite:** NU 607 (may be taken concurrently) Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C and NU 610 (may be taken concurrently) Minimum Grade of C and NU 613 (may be taken concurrently) Minimum Grade of C and MCN 564 Minimum Grade of C and MCN 565 Minimum Grade of C

**Corequisite:** MCN 566

**MCN 568 Intro to Neonatal NP 3 cr**

The purpose of this first didactic course is to prepare Advanced Neonatal Nurse Practitioner students to assess, diagnose, and manage selected health care needs of neonates. Emphasis is placed on synthesis and application of nursing and related theories and scientific knowledge to the development of differential/nursing diagnoses as a basis for health promotion and management.

**Prerequisite:** NU 545 (may be taken concurrently) Minimum Grade of C and NU 518 (may be taken concurrently) Minimum Grade of C

**Corequisite:** MCN 571

**MCN 571 HPDP NNP/Peds Acute NP 2 cr**

The purpose of this didactic course is to prepare the Neonatal and Acute Care Pediatric Nurse Practitioner students to identify and implement appropriate health promotion and disease prevention strategies for the neonate to age 21 years. The focus is on the advanced practice nursing of individuals and families in primary care settings. Emphasis is placed on health promotion/disease prevention with strategic planning at the primary, secondary and tertiary levels of prevention. Various issues are explored pertinent to the advanced practice role.

**MCN 572 Neonatal NP I 3 cr**

The purpose of this didactic course is to prepare the Advanced Neonatal Nurse Practitioner student to assess, diagnose, and manage selected health care needs of neonates. The focus is on neonates and families in primary, acute, and chronic health care settings. Emphasis is placed on wellness and the pathophysiology and epidemiology underlying acute and chronic health problems.

**Prerequisite:** MCN 568 Minimum Grade of C and NU 578 (may be taken concurrently) Minimum Grade of C

**Corequisite:** MCN 573

**MCN 573 Neonatal NP Pract I 3 cr**

The purpose of this practicum course is to provide opportunities for the Advanced Neonatal Nurse Practitioner student to apply concepts in select clinical settings. Focus is on advanced nursing practice with neonates and their families in primary, acute, and chronic health care settings. The emphasis is on diagnostic reasoning and decision making/critical thinking.

**Prerequisite:** NU 578 Minimum Grade of C

**Corequisite:** MCN 572

**MCN 574 Neonatal NP II 3 cr**

The purpose of this course is to provide the Advanced Neonatal Nurse Practitioner student an in-depth study of the neonate within the framework of nursing. The focus is on selected acute and chronic complex health problems of neonates in the primary, acute, and chronic care settings. Emphasis is on the interaction among health care providers in a culturally diverse environment.

**Prerequisite:** MCN 572 Minimum Grade of C

**Corequisite:** MCN 575

**MCN 575 Neonatal NP Prac II 3 cr**

The purpose of this course is to provide opportunity for the Advanced Neonatal Nurse Practitioner student to practice within an advanced nursing framework. The focus is on the role of the advanced practice nurse in the management of the neonate. Emphasis is on collaboration with other health care providers in a culturally diverse environment.

**Corequisite:** MCN 574

**MCN 576 Neonatal NP Pract III 4 cr**

The purpose of this culminating course is to provide a preceptor-faculty facilitated experience in the Advanced Neonatal Nurse Practitioner role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses.

**Prerequisite:** MCN 574 Minimum Grade of C and NU 607 (may be taken concurrently) Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C

**Corequisite:** MCN 577

**MCN 577 Neonatal NP III 3 cr**

The purpose of this course is to provide a forum of the evaluation of issues and trends encountered in advanced neonatal nursing care. Emphasis is on critical analysis and management of issues by the Advanced Neonatal Nurse Practitioner in an interdisciplinary health care system.

**Prerequisite:** NU 607 (may be taken concurrently) Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C and NU 610 (may be taken concurrently) Minimum Grade of C and NU 613 (may be taken concurrently) Minimum Grade of C

**Corequisite:** MCN 576

**MCN 578 Neonatal NP Clin Progression 1-4 cr**

The purpose of this culminating course is to provide a preceptor-faculty supervised experience in the Neonatal Nurse Practitioner role with a focus on the application and synthesis of knowledge and skills acquired in all previous courses.

**MCN 581 Peds Primary NP CI Progression 1-4 cr**

The purpose of this progression practicum is to facilitate student independence in the Pediatric Primary Care Nurse Practitioner role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses and to develop the necessary skills to progress to the next level of competency in the Pediatric Primary Care Nurse Practitioner role.

**MCN 604 Pediatric Acute Care NP PP&D 3 cr**

This course assists the Pediatric Acute Care Nurse Practitioner DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the Acute Care Pediatric Nurse Practitioner students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C)

**MCN 617 Pediatric Acute Care NP Res I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the student will work with the primary faculty advisor to complete projects and advance their selected practice area. The student will have access to and authority for expanded scope of practice to master the DNP competencies. Residency sites will depend upon the student's career trajectory and approval by collaborating faculty. During the residency semester, students must participate in scheduled scholarly seminars online. Clinical hours of direct practice/management is required.

**Prerequisite:** MCN 604 Minimum Grade of S and NU 615 (may be taken concurrently) Minimum Grade of C

**MCN 618 Pediatric Acute Care NP Res II 3 cr**

Provides students the opportunity to fully express all DNP competencies. The student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

**Prerequisite:** MCN 617 Minimum Grade of C and NU 616 (may be taken concurrently) Minimum Grade of C

**MCN 619 Pediatric Acute Care NP Res III 3 cr**

Final course in residency series as student continues to implement and evaluate project plan. Provides student the opportunity to fully express all DNP competencies. The student, guided by the core faculty and advisor, completes quality improvement evidence-based system's change project.

**Prerequisite:** MCN 618 Minimum Grade of C and NU 612 (may be taken concurrently) Minimum Grade of C

**MCN 644 Women's Health NP PP&D 3 cr**

This course assists the women's health nurse practitioner DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the women's health nurse practitioner student's selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C)

**MCN 645 Women's Health NP Residency I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The women's health nurse practitioner student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the women's health nurse practitioner student will work with the primary faculty advisor to complete projects and advance their selected practice area. The women's health nurse practitioner student will have access to and authority for expanded scope of practice to master the DNP competencies. Residency sites will depend upon the women's health nurse practitioner student's career trajectory and approval by collaborating faculty. During the residency semester, the women's health nurse practitioner student must participate in scheduled scholarly seminars online. Clinical hours of direct practice/management is required.

**Prerequisite:** MCN 644 Minimum Grade of S and NU 615 (may be taken concurrently) Minimum Grade of C

**MCN 646 Women's Health NP Residency II 3 cr**

Provides women's health nurse practitioner students the opportunity to fully express all DNP competencies. The women's health nurse practitioner student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

**Prerequisite:** MCN 645 Minimum Grade of C and NU 616 (may be taken concurrently) Minimum Grade of C

**MCN 647 Women's Health NP Res III 3 cr**

Final course in residency series as women's health nurse practitioner student continues to implement and evaluate project plan. Provides women's health nurse practitioner student the opportunity to fully express all DNP competencies. The women's health nurse practitioner student, guided by the core faculty and advisor completes quality improvement evidence-based system's change project.

**Prerequisite:** MCN 646 Minimum Grade of C and NU 612 (may be taken concurrently) Minimum Grade of C

**MCN 654 Pediatric Primary Care NP PP&D 3 cr**

This course assists the pediatric primary care nurse practitioner DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the pediatric primary care nurse practitioner student's selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C)

**MCN 655 Ped Prim Care NP Residency I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The pediatric primary care nurse practitioner student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the pediatric primary care nurse practitioner student will work with the primary faculty advisor to complete projects and advance their selected practice area. The pediatric primary care nurse practitioner student will have access to and authority for expanded scope of practice to master the DNP competencies. Residency sites will depend upon the pediatric primary care nurse practitioner student's career trajectory and approval by collaborating faculty. During the residency semester, the pediatric primary care nurse practitioner student must participate in scheduled scholarly seminars online. Clinical hours of direct practice/management is required.

**Prerequisite:** MCN 654 Minimum Grade of S and NU 615 (may be taken concurrently) Minimum Grade of C

**MCN 656 Ped Primary Care NP Res II 3 cr**

Provides pediatric primary care nurse practitioner students the opportunity to fully express all DNP competencies. The pediatric primary care nurse practitioner student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

**Prerequisite:** MCN 655 Minimum Grade of C and NU 616 (may be taken concurrently) Minimum Grade of C

**MCN 657 Ped Primary Care NP Res III 3 cr**

Final course in residency series as the Pediatric Primary Care Nurse Practitioner student continues to implement and evaluate project plan. Provides the Pediatric Primary Care Nurse Practitioner student the opportunity to fully express all DNP competencies. The Pediatric Primary Care Nurse Practitioner student, guided by the core faculty and advisor completes quality improvement evidence-based system's change project.

**Prerequisite:** MCN 656 Minimum Grade of C and NU 612 (may be taken concurrently) Minimum Grade of C

**MCN 674 Neonatal NP PP&D 3 cr**

This course assists the neonatal nurse practitioner DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the neonatal nurse practitioner students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C)

**MCN 675 NNP Residency I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The neonatal nurse practitioner student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the neonatal nurse practitioner student will work with the primary faculty advisor to complete projects and advance their selected practice area. The neonatal nurse practitioner student will have access to and authority for expanded scope of practice to master the DNP competences. Residency sites will depend upon the neonatal nurse practitioner student's career trajectory and approval by collaborating faculty. During the residency semester, the neonatal nurse practitioner student must participate in scheduled scholarly seminars online. Clinical hours of direct practice/management is required.

**Prerequisite:** MCN 674 Minimum Grade of S and NU 615 (may be taken concurrently) Minimum Grade of C

**MCN 676 NNP Residency II 3 cr**

Provides neonatal nurse practitioner students the opportunity to fully express all DNP competencies. The neonatal nurse practitioner student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

**Prerequisite:** MCN 675 Minimum Grade of C and NU 616 (may be taken concurrently) Minimum Grade of C

**MCN 677 NNP Residency III 3 cr**

Final course in residency series as neonatal nurse practitioner student continues to implement and evaluate project plan. Provides neonatal nurse practitioner student the opportunity to fully express all DNP competences. The neonatal nurse practitioner student, guided by the core faculty and advisor completes quality improvement evidence-based system's change project.

**Prerequisite:** MCN 676 Minimum Grade of C and NU 612 (may be taken concurrently) Minimum Grade of C

**MCN 692 MCN DNP Incomplete Extension 3 cr**

Students will register for this course to complete residency course work under supervision of faculty. Students must remain continuously enrolled until all residency requirements are completed.

**Nursing (NU)****NU 101 Freshman Seminar in Nursing 2 cr**

The purpose of this course is to introduce the unique requirements and opportunities of professional nursing to beginning students who have declared nursing as their major and are considering nursing as a major. The course focuses on the value of higher education as a base for a career in nursing and develops an awareness of activities and support services available within the University to enhance student success. Academic rules and regulations and policies related to admission, progression, and graduation in the University and College are discussed.

**NU 300 Foundations of Prof Nsg 5 cr**

The purpose of the course is to provide students the opportunity to appraise theories, concepts, evidence, issues and trends in promoting the health of an adult-geron population experiencing commonly occurring health care needs. Emphasis is on the use of the nursing process and other systematic approaches to assess, plan, implement, and evaluate health promotion and maintenance activities, illness care, and rehabilitation with adults in a variety of acute and community settings.

**Prerequisite:** (NU 325 Minimum Grade of C and NU 327 Minimum Grade of C and NU 311 Minimum Grade of C and HSC 343 (may be taken concurrently) Minimum Grade of C and HSC 342 (may be taken concurrently) Minimum Grade of C)

**Corequisite:** NU 301

**NU 301 Foundations of Prof Nsg Clin 3 cr**

Application of concepts and theories related to health promotion and maintenance, illness care, and rehabilitation with an adult-geron population experiencing commonly occurring health care needs. Emphasis is the role of the professional nurse and on the use of the nursing process with an adult-geron population in a variety of acute and community based settings.

**Prerequisite:** (NU 325 Minimum Grade of C and NU 327 Minimum Grade of C and NU 311 Minimum Grade of C) and (HSC 342 (may be taken concurrently) Minimum Grade of C and HSC 343 (may be taken concurrently) Minimum Grade of C)

**Corequisite:** NU 300

**NU 302 Essentials of Professional Nsg 4 cr**

The purpose of this course is to provide an overview of pathophysiology, pharmacology, clinical skills assessment, and medication administration. The course focuses on the responsibility of the professional nurse in ensuing quality and safety.

**Prerequisite:** (NU 325 (may be taken concurrently) and NU 311 (may be taken concurrently) and NU 327 (may be taken concurrently) and HSC 343 (may be taken concurrently))

**NU 303 Essen of Medical-Surgical Nsg 4 cr**

The purpose of this course is to provide an overview of pathophysiology, pharmacology, clinical skills assessment, and medication administration within the medical-surgical nursing environment. The course focuses on the responsibility of the professional nurse in ensuring quality and safety in providing medical-surgical care for diverse populations across the lifespan.

**NU 304 Evidence Based Practice NU- W 3 cr**

The purpose of this course is to introduce evidence-based practice (EBP), including the basic components of the research process to the undergraduate nursing student. Emphasis within the course is on evaluation of research relevant to nursing practice, and the implications of its application to care provided to the patient. Implications of research and EBP are examined, including the roles of clinical expertise, ethics, and patient values and preferences. This course requires professional component standing. This is a writing (W) course. NU 304 Course Objective Changes 1. Demonstrate foundational understanding of the research process, theory, and evidence-based practice process. 2. Integrate evidence into clinical practice by applying ethical and legal implications of research and using a systematic approach to evidence-based practice processes. 3. Evaluate evidence relevant to nursing practice. 4. Integrate professional writing standards in nursing research and evidence-based practice.

**NU 305 Essen of OB/Peds/Psych Nsg 4 cr**

The purpose of this course is to provide an overview of pathophysiology, pharmacology, clinical skills assessment, and medication administration within specialty areas of foci including the maternal, child, and mental health settings. The course focuses on the responsibility of the professional nurse in ensuring quality and safety in providing specialty care to women and children, and to those with mental health needs across the lifespan.

**NU 306 Essentials of Adult Geron Nsg 4 cr**

The purpose of this course is to provide an overview of pathophysiology, pharmacology, clinical skills assessment, and medication administration within the adult gerontological nursing environment. The course focuses on the responsibility of the professional nurse in ensuring quality and safety in providing care for diverse populations across the adult lifespan.

**NU 307 Concepts of Profess Nsg Pract 4 cr**

The purpose of this course is to provide an opportunity for students to remediate on practice accountability or professionalism in order to be successful post-graduation. The course focuses on the responsibility of the professional nurse in ensuring quality and safety in providing care to diverse populations across the lifespan, interacting as a member of an interdisciplinary health care team, and demonstrating accountability for personal actions within the professional practice environment.

**NU 311 Clinical Nursing Skills 3 cr**

The purpose of this course is to provide students the opportunity to acquire basic nursing care skills. The emphasis is on the responsibilities of the professional nurse in ensuring quality and safety. Students are introduced to simulation as an approach to sharpen clinical reasoning and communication skills in a safe environment. Prerequisites:

Admission or special permission of instructor.

**Corequisite:** NU 325

**NU 311B Clinical Nursing Skills 3 cr**

The purpose of this course is to provide students the opportunity to acquire basic nursing care skills. The emphasis is on the responsibilities of the professional nurse in ensuring quality and safety. Students are introduced to simulation as an approach to sharpen clinical reasoning and communication skills in a safe environment. Prerequisites:

Admission or special permission of instructor.

**NU 325 Health Assessment 3 cr**

The purpose of the course is to provide students the opportunity to acquire basic nursing assessment skills. The emphasis is on the assessment skills of the whole person, including physical, psychological, sociocultural, and spiritual aspects of persons from all stages of life. Students will learn skills associated with obtaining a health history and performing health assessments across the lifespan. Prerequisite:

Admission to professional component or special permission of instructor.

**Corequisite:** NU 311

**NU 325B Health Assessment 3 cr**

The purpose of the course is to provide students the opportunity to acquire basic nursing assessment skills. The emphasis is on the assessment skills of the whole person, including physical, psychological, sociocultural, and spiritual aspects of persons from all stages of life. Students will learn skills associated with obtaining a health history and performing health assessments across the lifespan. Prerequisite:

Admission to professional component or special permission of instructor. Restricted to students in the RN to BSN program.

**Corequisite:** NU 311

**Cross-Listed:** NU 325

**NU 327 Patho Basis of Nursing 3 cr**

The purpose of the course is to provide students the opportunity to acquire the theory and evidence applicable to the physiology and alterations in physiology of individuals across the lifespan. The emphasis of this course is alterations in cardiovascular, pulmonary, genitourinary, gastrointestinal, immune, neurological, musculoskeletal, and endocrine systems. Prerequisite: Admission to professional component or special permission of instructor.

**Prerequisite:** (NU 311 (may be taken concurrently) Minimum Grade of C and NU 325 (may be taken concurrently) Minimum Grade of C)

**NU 327B Patho Basis of Nursing 3 cr**

The purpose of the course is to provide students the opportunity to acquire the theory and evidence applicable to the physiology and alterations in physiology of individuals across the lifespan. The emphasis of this course is alterations in cardiovascular, pulmonary, genitourinary, gastrointestinal, immune, neurological, musculoskeletal, and endocrine systems. Prerequisite: Admission to professional component or special permission of instructor. Restricted to students in the RN to BSN program.

**NU 332 Clinical Nutrition 2 cr**

The purpose of this course is to provide students the opportunity to acquire nutritional theory and evidence required for health promotion and disease prevention of individuals across the lifespan.

**Prerequisite:** (NU 325 Minimum Grade of C and NU 327 Minimum Grade of C and NU 311 Minimum Grade of C and HSC 343 Minimum Grade of C and HSC 342 Minimum Grade of C and NU 300 (may be taken concurrently) Minimum Grade of C and NU 301 (may be taken concurrently) Minimum Grade of C)

**NU 390 Sp Top - 1-8 cr**

Study of a significant topic or problem in Nursing and the Health Professions. This course may be repeated for a total of four credits. Requires special permission.

**NU 394 Directed Study - 1-4 cr**

Individual study in a nursing area chosen in consultation with instructor. Requires special permission.

**NU 395 Study Abroad Cultural Exp 9 cr**

The purpose of this course for the undergraduate student is to develop an improved understanding of culture, Leininger's theory of Diversity and Universality, to recognize any cultural practices that affect health care, to incorporate this understanding into the provision of care. Culture will be examined through writing, cultural experiences, through collaboration. The course is underpinned by Dr. Leininger's definition of culture and her theory of culture care.

**NU 405 Transition to RN Practice 2 cr**

Building on previous knowledge and experience in the practical nursing role, this course will prepare Licensed Practicum Nurses (LPN) to transition to the baccalaureate-prepared registered nursing (RN) role through critical analysis of the relationship between leadership, policy advocacy, and membership within the interdisciplinary healthcare team. Students will also examine how nursing theory guides professional practice. Students will build confidence in professional nursing roles including leader, advocate, and caregiver to deliver inclusive, person-centered, trauma-informed healthcare in a diverse society.

**Prerequisite:** NU 447

**Corequisite:** NU 460

**NU 412 Dec Making Prof Nsg Practice 3 cr**

This course focuses on continuing the leadership development of the student within the context of providing professional nursing care to patients and families across the lifespan. Decision-making, delegation, and motivation competencies are emphasized.

**Prerequisite:** (CMN 420 (may be taken concurrently) Minimum Grade of C and CMN 421 (may be taken concurrently) Minimum Grade of C and AHN 447 Minimum Grade of C and AHN 448 Minimum Grade of C and NU 414 (may be taken concurrently) Minimum Grade of C)

**Corequisite:** NU 460

**NU 414 Issues & Trends Healthcare -W 3 cr**

The purpose of this web based course is to provide students the opportunity to integrate leadership roles and functions, management strategies, current issues and trends affecting nursing and health care and continued professional development, into a personal lifelong learning plan. Emphasis is on the professional nurse as a leader in improving patient care and cost effectiveness of health care and the development of a current nursing workforce. National interest areas such as patient safety, policy, patient centered care, and the process for quality improvement are primary focuses.

**Prerequisite:** (AHN 447 (may be taken concurrently) Minimum Grade of C and AHN 448 (may be taken concurrently) Minimum Grade of C)

**NU 450 Lead/Mang Roles Prof Nsg Pra-W 4 cr**

The purpose of this course is the continued development of conceptual and practical knowledge of professional nursing leadership and management roles in a complex adaptive healthcare system. Content includes but is not limited to: management, systems leadership, professional values, personal vs organizational philosophy, quality improvement, and performance appraisal. Other topics related to professional nursing include social, political, legal, and ethical issues.

**NU 451 Current Issues/Trends Prof Nsg 4 cr**

Current issues and trends affecting nursing and healthcare in society will be reviewed. Emphasis will be on the development of professional nursing contributions to the changing healthcare environment. Content includes but is not limited to: Issues in the healthcare environment including social, legal, ethical, safety and political.

**Prerequisite:** (NU 450 (may be taken concurrently) Minimum Grade of C)

**NU 452 Clinical Preven & Pop Health 4 cr**

Theoretical concepts related to healthcare promotion/disease prevention to improve health at individual, family, and population level in the global community. Content includes but is not limited to: health behaviors, health literacy, at-risk populations, genetics, chronic illness, socioeconomic status, environmental exposures, ethics, advocacy, social justice, civic responsibility and strategies of risk reduction and improvement in disparities in outcomes are evaluated and applied to population health.

**Prerequisite:** (NU 450 (may be taken concurrently) Minimum Grade of C)

**NU 453 Infor Manag & Tech in Hlthcare 4 cr**

This course will prepare Registered Nurse students to recognize the critical role of information management and patient care technology in identifying technological solutions to enhance delivery of quality patient care and outcomes. Content includes but is not limited to: nurse sensitive indicators (assessment, pathophysiology), safety, ethical and legal aspects.

**Prerequisite:** NU 450 Minimum Grade of C

**NU 454 Research & EBP Practicum-W 4 cr**

This course allows Registered Nurse students to analyze basics research process and methodology. Students will complete direct and indirect clinical care experiences, identify practice issues, levels of evidence, identify and synthesize evidence, and propose practice initiatives by participating in quality improvement in a variety of diverse healthcare or community systems. Content includes but is not limited to: organizational models, change theory, critical thinking, ethical, legal and political influences. \*Practice integrated experience - develop a quality improvement initiative to address a system or community health need or problem. This is a direct and indirect clinical course.

**Prerequisite:** (NU 450 Minimum Grade of C and NU 451 Minimum Grade of C and NU 452 (may be taken concurrently) Minimum Grade of C and NU 453 (may be taken concurrently) Minimum Grade of C and NU 455 (may be taken concurrently) Minimum Grade of C) or EH 102 Minimum Grade of C or EH 105 Minimum Grade of C

**NU 455 Concept Interprofessional Care 4 cr**

Develop skills to support communication and collaboration among healthcare professionals and delivery of safe, high quality patient care. Focus on applying current Interprofessional Education Collaborative (IPEC) competencies, including collaborative strategies and resource management in complex healthcare systems.

**Prerequisite:** NU 450 Minimum Grade of C

**NU 460 Practicum 6 cr**

Culminating clinical practice course to provide students an in-depth learning experience in a selected areas of nursing practice. The leadership, management, and caregiver roles of the professional nurse with patients and their families in a selected areas of nursing practice is will be emphasized. Students are assigned to nurse preceptors and with faculty guidance focus on leadership and management, and application of the nursing process, theories, concepts, issues and trends in caring for patients in a variety of preceptorship placements in acute and community settings. Concepts of interprofessional practice will be emphasized. A total of 270 clinical hours will be required.

**Prerequisite:** (AHN 447 Minimum Grade of C and AHN 448 Minimum Grade of C and CMN 420 (may be taken concurrently) Minimum Grade of C and CMN 421 (may be taken concurrently) Minimum Grade of C and NU 414 (may be taken concurrently) Minimum Grade of C)

**Corequisite:** NU 412

**NU 490 Special Topics 9 cr**

Study of a significant topic or problem in nursing and the health professions. This course may be repeated for a total of four credits. Requires special permission.

**NU 496 Service Abroad Hlth Related EX 9 cr**

This is a service learning course that will culminate in select communities in the international setting Emphasis is on providing culturally competent care by providing and immersion experience.

**NU 499 NU Honors Senior Project 1-6 cr**

The purpose of the course is to provide students the opportunity to investigate scholarly undergraduate research, service-learning, or study abroad experiences resulting in development of the written honors thesis. Nursing Honors Program. Requires special permission.

**Prerequisite:** HON 301 (may be taken concurrently) Minimum Grade of D

**NU 500 Explore Culture Sexual Assault 2 cr**

The purpose of this course is to provide nursing students an in-depth exploration of forensic nursing concepts and principles related to caring for the victim and survivor of sexual violence from a population health care perspective with a cultural emphasis. A spectrum of compassionate care incorporating cultural understanding and respect that is cognizant from assault to post trauma aftermath including life-long sequelae and its prevention is utilized. Prevention and health promotion models of care within the context of transcultural global health priorities are reviewed. Forensic nursing concepts and principles related to caring for the victim of sexual violence from a culturally congruent population healthcare perspective across the lifespan are explored including compassionate continued care post-sexual assault.

**NU 502 Sexual Assault Vic Practicum 1 cr**

The purpose of this course is to provide nursing students opportunities to apply didactic principles to ensure competency in the care of the sexually traumatized patient with particular emphasis on complex forensic histories involving special populations and challenging treatment situations. Students will conduct forensic interviews, exams, preserve evidence, and determine proper techniques involving patients from diverse cultural backgrounds. Students will identify, critical analyze, determine follow up, and evaluate patient responses that may include a variety of cultural, economic, and physical challenges.

**Prerequisite:** NU 500 (may be taken concurrently) Minimum Grade of C

**NU 503 Trauma Care Sexual Assault Vic 2 cr**

The purpose of this course is to expand the graduate nursing student's knowledge of trauma, particularly sexual trauma. The focus is on examining ongoing threats to safety among individuals, communities, and witnesses to trauma. The course will facilitate students to create policy initiatives, community service activities, and to become violence prevention advocates. The student will understand NP leadership in collaboration with SART, professional nurse testimony and participation in the legal process to empower victims, decrease revictimization, and ensure social justice and healthcare access to the victim, suspect, witness and communities impacted by sexual violence.

**Prerequisite:** NU 500 Minimum Grade of C

**NU 504 Adv Pharm Care Post Assault 2 cr**

The purpose of this course is to examine the pharmacological principles and the current treatment modalities of post-sexual assault care. The focus is the selection and monitoring of drug therapy of sexual assault victims throughout the the lifespan and across post trauma disease processes. Motivational patient education and follow-up to incentivize adherence and prevent complications will be explored using the pathology of infectious and communicable disease, psychosocial science, pediatric growth and development, and the legal systems as its framework.

**Prerequisite:** NU 500 Minimum Grade of C

**NU 505 Sup Care Comorbid Post Assault 2 cr**

The purpose of this course is to increase the graduate student's knowledge of the victim/survivor's response to trauma, particularly sexual trauma. The focus is on examining the behavioral, psychological, and physiologic response of victims/survivors across the lifespan with consideration of gender and socio-cultural factors. The emphasis is on patient centered care and includes a multidisciplinary team approach to developing individualized plans of care to facilitate restorative healing for victims/survivors of sexual trauma.

**Prerequisite:** NU 500 Minimum Grade of C

**NU 506 EBP & Informatics Prof Nurses 4 cr**

This course assists students who have completed Registered Nurse training to apply principles of evidence-based practice (EBP) and informatics to modern nursing practice issues. The focus of the course is on the application, interpretation, and incorporation of research principles to promote improvement of health care outcomes. Emphasis is on critical appraisal of research and use of data in quality improvement.

**NU 507 Leadership & Management Roles 4 cr**

This course assists students who have completed Registered Nurse training to development conceptual and practical knowledge of professional nursing leadership and management roles in a complex adaptive healthcare system. The focus of the course is on nursing roles related to management, system leadership, professional values, personal vs organizational philosophy, quality improvement, and performance appraisal. Social, political, legal, and ethical issues surrounding professional nursing leadership will be evaluated.

**NU 508 Clinical Prevention & Pop Hlth 4 cr**

The purpose of this graduate course for Registered Nurse students is to promote knowledge and understanding of theoretical concepts related to the professional nurses' role in population health promotion. Emphasis will be on healthcare promotion/disease prevention to improve health at individual, family, and population levels in the global community. Content related to health behaviors, health literacy, at-risk populations, genetics, chronic illness, socioeconomic status, environmental exposures, ethics, advocacy, social justice, civic responsibility and strategies of risk reduction and improvement in disparities in outcomes are evaluated and applied by the registered nurse to population health will be a focus.

**NU 509 Bioethics Advan Practice Nsg 1 cr**

This course examines bioethical topics that emerge in contemporary health care and explores the socio-political, legal, technological, and economic variables that contribute to these issues. Students will gain understanding of ethical and legal concepts and apply the principles in advanced nursing practice

**NU 510 Addictions Practicum I 1 cr**

This course serves as a one of three practicum courses in the Addictions Subspecialty nursing program. The purpose of this practicum course is preparation in prevention, screening, assessment, diagnosing, and management/treatment including recovery care of OUD/SUD integrated health care and telehealth settings across the lifespan. While preparation is across the life span, emphasis will be focused on child, adolescent, and transitional-age populations.

**Corequisite:** HSC 580

**NU 511 Addictions Practicum II 2 cr**

This course serves as a one of three practicum courses in the Addictions Subspecialty nursing program. The purpose of this practicum course is preparation in prevention, screening, assessment, diagnosing, and management/treatment including recovery care of OUD/SUD integrated health care and telehealth settings across the lifespan. While preparation is across the life span, emphasis will be focused on child, adolescent, and transitional-age populations.

**Prerequisite:** (NU 510 Minimum Grade of C and HSC 580 Minimum Grade of C)

**Corequisite:** HSC 581

**NU 512 Addictions Practicum III 2 cr**

This course serves as a one of three practicum courses in the Addictions Subspecialty nursing program. The purpose of this practicum course is preparation in prevention, screening, assessment, diagnosing, and management/treatment including recovery care of OUD/SUD integrated health care and telehealth settings across the lifespan. While preparation is across the life span, emphasis will be focused on child, adolescent, and transitional-age populations.

**Prerequisite:** (NU 510 Minimum Grade of C and NU 511 Minimum Grade of C and HSC 580 Minimum Grade of C and HSC 581 Minimum Grade of C)

**Corequisite:** HSC 582

**NU 513 Addictions Practicum IV 4 cr**

This course serves as an optional fourth practicum in the Addictions Specialty nursing program. The purpose of this practicum course is reinforcement of prevention, screening, assessment, diagnosing, and management/treatment including recovery care of OUD/SUD and other addiction disorders within integrated health care and telehealth settings across the lifespan. Emphasis will be focused on child through geriatric age population.

**Prerequisite:** (NU 510 Minimum Grade of C and NU 511 Minimum Grade of C and NU 512 Minimum Grade of C and HSC 580 Minimum Grade of C and HSC 581 Minimum Grade of C and HSC 582 Minimum Grade of C)

**NU 515 Clinical Concepts/CNS Role I 2 cr**

The purpose of this course is to introduce students to the role of the Clinical Nurse Specialist and examine the epidemiologic, assessment, diagnostic, management and evaluation of adolescent/adult/old adult patients across the continuum of healthcare services (from wellness through acute care). The course focuses on health promotion, health protection, and disease management of patients with cardiovascular, pulmonary, and musculoskeletal health issues to include differential diagnoses and pharmacotherapeutics. The course explores the dynamic interplay between the pathophysiologic basis of disease and the psychosocial and socio-cultural responses to acute illness and injury as clinical decision-making skills are developed. Emphasis within the course is placed on synthesizing and applying the core competencies of the Clinical Nurse Specialist.

**Prerequisite:** NU 545 (may be taken concurrently) Minimum Grade of C and NU 578 (may be taken concurrently) Minimum Grade of C and NU 518 (may be taken concurrently) Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C

**Cross-Listed:** AHN 515

**NU 516 Clinical Concepts/CNS Role II 3 cr**

The purpose of this course is to integrate advanced pharmacology and pathophysiology, and assessment for the provision of advanced nursing care across the continuum of healthcare services (from wellness through acute care) to meet the specialized needs of adolescent/adult/old adult patients. The course focuses on health promotion, health protection, and disease management of patients with endocrine, neurologic, gastrointestinal, renal, and genitourinary health problems. Emphasis within the course is placed on the CNS's influence on health care incorporating the perspectives of technology, social justice, fiscal stewardship, patient advocacy, and evidence-based practice.

**Prerequisite:** NU 515 Minimum Grade of C and AHN 516 Minimum Grade of C

**Corequisite:** AHN 517

**NU 517 Clinical Concepts/CNS Role III 3 cr**

The purpose of this course is to provide a forum for the analysis, synthesis, and application of knowledge required for the CNS role in the management of acute and chronic problems as well as management and prevention of exacerbations of chronic health problems from adolescent/adult/older adult age groups. The course focuses on health promotion, health protection, and disease management of patients with hematology/oncology, immunology, infectious disease, integumentary, and psychosocial health issues. The emphasis is on the CNS spheres of influence to identify problems, manage resources and fiscal outcomes, design and select therapeutic interventions, and evaluate products and devices for use with patients and health team members from diverse cultural and ethnic backgrounds. Potential for contributions and entrepreneurial opportunities within nursing will be addressed.

**Prerequisite:** NU 516 Minimum Grade of C and AHN 517 Minimum Grade of C and NU 607 (may be taken concurrently) Minimum Grade of C and NU 610 (may be taken concurrently) Minimum Grade of C and NU 613 (may be taken concurrently) Minimum Grade of C

**Corequisite:** AHN 518

**NU 518 Adv Nursing Assessment 3 cr**

This course is designed to further develop the student's advanced knowledge and skills for obtaining and recording a systematic health history and advanced physical examination of individuals and families across the lifespan. The course involves synthesis and application of nursing, biologic, psychologic, and socio-cultural knowledge and theories in comprehensive health assessment for the purposes of health promotion, differential diagnosis, and development of health records. The central objective is the development of cognitive and clinical skills needed to provide comprehensive care to individuals of all ages in primary, secondary, and tertiary care settings.

**NU 520 NU MSN Incomplete Extension 1-5 cr****NU 526 Trauma-Informed Integrated Behavioral Healthcare Practicum I 1 cr**

The purpose of this practicum course is to prepare graduate nursing students in interprofessional behavioral health assessment, and professionalism in trauma-informed care in integrated settings serving patients across the life-span. While preparation is across the life span with emphasis focused on child through transitional age population.

**Corequisite:** HSC 512

**NU 527 Trauma-Informed Integrated Behavioral Healthcare Practicum II 2 cr**

This course serves as the second of three practicum courses in the Trauma-Informed Integrated Behavioral Healthcare nursing subspecialty. The purpose of this practicum course is to prepare the graduate nursing student to apply knowledge of screening, intake, intervention and trauma-informed care in integrated telehealth settings serving across the lifespan with emphasis on child through transitional age populations.

**Prerequisite:** (NU 526 Minimum Grade of C and HSC 512 Minimum Grade of C)

**Corequisite:** HSC 511

**NU 528 Trauma-Informed Integrated Behavioral Healthcare Practicum III 2 cr**

This course serves as the third of three practicum courses in the Trauma-Informed Integrated Behavioral Healthcare nursing subspecialty. The purpose of this practicum course is to prepare graduate nursing students to participate in screening, intake, intervention, and trauma-informed care in integrated settings serving across the lifespan with emphasis on child through transitional age populations.

**Prerequisite:** (NU 526 Minimum Grade of C and NU 527 Minimum Grade of C and HSC 511 Minimum Grade of C and HSC 512 Minimum Grade of C)

**Corequisite:** HSC 510

**NU 535 Clin Ldr Role & Competencies 3 cr**

The purpose of this courses is to explore the role and function of the clinical nurse leader. The course focuses on the implementation of the role which will vary across settings and facilities. The emphasis is on evidenced-based practice and knowledge and skills that the CNL role requires for successful enactment of the role.

**Prerequisite:** NU 607 Minimum Grade of C and NU 518 (may be taken concurrently) Minimum Grade of C and NU 545 (may be taken concurrently) Minimum Grade of C and NU 578 (may be taken concurrently) Minimum Grade of C

**Corequisite:** NU 536

**NU 536 Clin Nurse Ldr Pract I 5 cr**

The purpose of this first of two capstone Clinical Nurse Leader courses is to provide students an in-depth preceptor-based clinical experience in a selected area of nursing practice. The focus of the course is on the CNL as caregiver, leader, and care manager. Emphasis is on the application of the nursing process, theories, concepts, research, issues and trends in providing care in complex patient situations and managing the care of a group of patients.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 578 Minimum Grade of C)

**Corequisite:** NU 535

**NU 537 Clin Nurse Leader Synthesis 3 cr**

The purpose of this culminating synthesis course for the CNL role is provide students an opportunity to analyze and evaluate actual CNL practice patterns. The course focuses on continuing to build the students competencies in clinical decision making, problem identification, resource management, and outcome measurement for a selected patient population at the point of care. The emphasis is on working with patients and health team members from diverse cultural and ethnic background, accountability for coordination, delegation and supervision of care within a multidisciplinary team.

**Prerequisite:** (NU 535 Minimum Grade of C and NU 536 Minimum Grade of C) and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 607 Minimum Grade of C

**Corequisite:** NU 538

**NU 538 Clinical Nrsr Ldr Prac II 4 cr**

The purpose of this second of two capstone Clinical Nurse Leader courses is to provide students an immersion experience in the CNL role in a selected area of nursing practice. The focus of the course is to further develop CNL competencies with emphasis on team leading and building, advocacy, communication, resource and outcomes management, and evidenced based practice.

**Prerequisite:** NU 535 Minimum Grade of C and NU 536 Minimum Grade of C

**Corequisite:** NU 537

**NU 539 Intro to Nursing Informatics 3 cr**

The purpose of this course is to provide the student an introduction to nursing informatics and the evolving importance of the application and evaluation of information technology in nursing and health care. The emphasis of the course is to provide the students the expertise and knowledge to function effectively in the modern health care information technology (IT) environment.

**NU 545 Physio-Patho Basis of Adv Nsg 3 cr**

The purpose of this course is to provide the advanced practice nurse with knowledge of normal physiology and alterations in physiology in individuals across the life span. The focus is theory and research applicable to organ systems and cellular events. Emphasis is on regulatory and compensatory functions in health and in pathophysiological conditions.

**NU 553 Administrative Concepts 2 cr**

The purpose of this course is to examine concepts, theories and current trends in healthcare administration. The focus is the identification of leadership and management strategies in the management of physical, financial, and human resources in healthcare systems. Emphasis is placed on organizational leadership and management theories, ethical and legal issues, human resource management, and teamwork and collaboration to meet the health care needs of vulnerable populations in culturally diverse communities.

**Prerequisite:** NU 607 (may be taken concurrently) Minimum Grade of C

**Corequisite:** NU 554

**NU 554 Resource Manag Field Study 1 cr**

The purpose of the supervised field study activity is to provide the student with a clinical experience to investigate the purpose and structure of a health care agency in the community. The course focus is on administration and resource management in health care organizations. Emphasis within the course is placed on the synthesis of the knowledge acquired in previous courses.

**Prerequisite:** NU 607 (may be taken concurrently) Minimum Grade of C

**Corequisite:** NU 553

**NU 556 Informatics & Qual Care Improv 3 cr**

The purpose of this course is to focus on quality improvement models and methods which will use client outcome measures across a broad range of health care settings. Emphasis will be placed on Continuous Quality Improvement (CQI) methods and their relationships with current health care systems.

**Prerequisite:** (ISC 555 Minimum Grade of C and ISC 550 Minimum Grade of C and NU 539 Minimum Grade of C and NU 553 Minimum Grade of C and NU 554 Minimum Grade of C and NU 565 Minimum Grade of C)

**Corequisite:** NU 557

**NU 557 Clinical Informatics Pract I 2 cr**

This clinical course allows students to integrate concepts and theories in clinical informatics in selected health care settings. This practicum offers students an opportunity to work closely with a health care vendor and integrate concepts/theories in clinical informatics. Additionally students will begin to learn how to configure and customize operating systems. Students will also begin to identify their site for Clinical Informatics Practicum II.

**Corequisite:** NU 556

**NU 558 Seminar in Nursing Informatics 3 cr**

This course will provide students the opportunity to discover the responsibilities of the Nursing Informatics Specialist's role by applying legal/ethical concepts to selected case studies in a variety of situations.

**Prerequisite:** NU 607 (may be taken concurrently) Minimum Grade of C and NU 610 (may be taken concurrently) Minimum Grade of C and NU 613 (may be taken concurrently) Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C

**Corequisite:** NU 559

**NU 559 Clinical Informatics Pract II 2 cr**

This clinical course allows students to integrate and apply informatics competencies in the nurse informatics specialty role while working closely with a guided preceptor. This role may take place within a variety of health care settings.

**Corequisite:** NU 558

**NU 560 Adm & Mgt for Adv Nsg Practice 3 cr**

The purpose of this course is to examine concepts and methods of nursing administration. The focus is on management of physical, financial, and human resources in dynamic healthcare systems. Emphasis is on leadership, communication, interprofessional team functioning, and collaboration and to meet healthcare needs in culturally diverse populations.

**Prerequisite:** NU 607 (may be taken concurrently) Minimum Grade of C and NU 613 (may be taken concurrently) Minimum Grade of C

**NU 561 Nursing Admin Concepts-Theory 3 cr**

The purpose of this course is to introduce the role of the nurse executive. The course focuses on role expectations and professional competency requirements. Emphasis within the course is placed on the influential role of the nurse executive in improving patient care, improving health of populations, and reducing healthcare costs.

**Corequisite:** NU 566

**NU 563 Exec Admin Clin Progression 1-4 cr**

The purpose of this progression practicum is to facilitate student independence in the Executive Nurse Administrator role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses and to develop the necessary skills to progress to the next level of competency in the Executive Nurse Administrator role.

**NU 565 Nursing Administration Finance 3 cr**

The purpose of this course is to introduce nurse administrators to healthcare financial management. The course focuses on reimbursement and expenditures for healthcare delivery. Emphasis within the course is placed on basic accounting, financial decision-making, statement analysis, & staffing plans.

**Prerequisite:** (NU 607 (may be taken concurrently) Minimum Grade of C and NU 539 Minimum Grade of C and NU 553 (may be taken concurrently) Minimum Grade of C and NU 554 (may be taken concurrently) Minimum Grade of C)

**NU 566 Nursing Admin Field Study 4 cr**

The purpose of this first practicum course is to provide the nurse executive student a faculty and preceptor facilitated clinical experience in a healthcare setting. The course focuses on the professional role and competencies of the nurse executive. Emphasis within the course is placed on the application and synthesis of knowledge and skills acquired in previous courses.

**Prerequisite:** NU 565 Minimum Grade of C and NU 554 Minimum Grade of C and HSC 571 Minimum Grade of C

**Corequisite:** NU 561

**NU 567 Nursing Admin Internship 3 cr**

The purpose of this culminating practicum course is to provide students a faculty and preceptor facilitated clinical experience in a healthcare setting. The course focuses on continued professional role and competencies development of the nurse executive. Emphasis within the course is placed on the application and synthesis of knowledge and skills acquired in previous courses.

**Prerequisite:** NU 566 Minimum Grade of C and NU 539 Minimum Grade of C and NU 607 (may be taken concurrently) Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C and NU 610 (may be taken concurrently) Minimum Grade of C and NU 613 (may be taken concurrently) Minimum Grade of C

**Corequisite:** NU 568

**NU 568 Nursing Admin Seminar 3 cr**

The purpose of this course is to prepare students for the role of nurse executive. The course focuses on professional competency development. Emphasis within the course is placed on strategic planning, governance, regulations, politics, and current issues trend.

**Prerequisite:** NU 539 Minimum Grade of C and NU 561 Minimum Grade of C and NU 566 Minimum Grade of C

**Corequisite:** NU 567

**NU 570 Emergency NP I 2 cr**

This course is the first course in a series of four didactic courses for the Emergency Nurse Practitioner student. The purpose of this didactic course is to prepare Emergency Nurse Practitioner students to assess, diagnose, and manage the health care needs of patients across the lifespan in emergent, urgent, and ambulatory care settings. Emphasis is placed on (1) synthesis and application of critical thinking, diagnostic reasoning, and scientific knowledge in the development of differential as a basis of care management; (2) treatment of acute health problems across the lifespan based on current evidence-based practice; and (3) collaboration and communication among health care providers in culturally diverse environment. The focus of this course is on the advanced practice nursing role in caring for individuals in the emergency care settings with thoracic-respiratory and cardiovascular disorders.

**Corequisite:** NU 571

**NU 571 Emergency NP Practicum I 1-3 cr**

This course is the third course in a series of four practicum courses for the Emergency Nurse Practitioner student that will provide intensive study into clinical specialty. The purpose of this practicum course is to provide the Emergency Nurse Practitioner student the opportunity to apply and integrate knowledge acquired thorough coursework. Development and refinement of clinical expertise in advanced emergency nursing is expected throughout the four clinical courses. The focus is on advanced practice nursing role in caring for individuals of all ages in the emergency care setting.

**Prerequisite:** NU 578 Minimum Grade of C

**Corequisite:** NU 570

**NU 572 Emergency NP II 2 cr**

This course is the second course in a series of four didactic courses for the Emergency Nurse Practitioner student. The purpose of the didactic courses is to prepare Emergency Nurse Practitioner students to assess, diagnose, and manage the health care needs of patients across lifespan in emergent, urgent, ambulatory care settings. Emphasis is placed on (1) synthesis and application of critical thinking, diagnostic reasoning, and scientific knowledge in acute health problems across the lifespan based on current evidence based practice; and (3) collaboration and communication among health care providers in culturally diverse environment. The focus is on the advanced practice nursing role in caring for individuals in the emergency care setting with dermatologic, abdominal, and non-traumatic musculoskeletal disorders.

**Prerequisite:** NU 570 Minimum Grade of C and NU 571 Minimum Grade of C

**Corequisite:** NU 573

**NU 573 Emergency NP Practicum II 1-3 cr**

This course is the second course in a series of three practicum courses for the Emergency Nurse Practitioner student that will provide intensive study into clinical specialty. The purpose this practicum course is to provide the Emergency Nurse Practitioner student the opportunity to apply and integrate knowledge acquired through coursework. Development and refinement of clinical expertise in advanced emergency nursing is expected throughout the four clinical courses. The focus is on advanced practice nursing role in caring for individuals of all ages in the emergency care setting.

**Prerequisite:** NU 570 Minimum Grade of C and NU 571 Minimum Grade of C

**Corequisite:** NU 572

**NU 574 Emergency NP III 2 cr**

This course is the third course in a series of four didactic courses for the Emergency Nurse Practitioner student. The purpose of the didactic courses is to prepare Emergency Nurse Practitioner students to assess, diagnose, and manage the health care needs of patients across the lifespan in emergent, urgent, ambulatory care settings. Emphasis is placed on (1) synthesis and application of critical thinking, diagnostic reasoning, and scientific knowledge in the development of differential diagnosis as a basis for care management; (2) the treatment of acute health problems across the lifespan based on current evidence based practice; and (3) collaboration and communication among health care providers in a culturally diverse environment. The focus is on the advanced practice nursing role in caring for individuals in the emergency care setting with renal, genitourinary, endocrine, nervous, and head, eye, ear, nose, and throat system disorders.

**Prerequisite:** NU 570 Minimum Grade of C and NU 571 Minimum Grade of C and NU 572 Minimum Grade of C and NU 573 Minimum Grade of C

**Corequisite:** NU 575

**NU 575 Emergency NP Practicum III 1-3 cr**

This course is the third course in a series of four practicum courses for the Emergency Nurse Practitioner student that will provide intensive study into clinical specialty. The purpose of this practicum course is to provide the Emergency Nurse Practitioner student the opportunity to apply and integrate knowledge acquired through coursework. Development and refinement of clinical expertise in advanced emergency nursing is expected throughout the four clinical courses. The focus is on advanced practice nursing role in caring for individuals of all ages in the emergency care setting.

**Prerequisite:** NU 570 Minimum Grade of C and NU 571 Minimum Grade of C and NU 572 Minimum Grade of C and NU 573 Minimum Grade of C

**Corequisite:** NU 574

**NU 576 Emergency NP IV 2 cr**

This course is the final course in a series of four didactic courses for the Emergency Nurse Practitioner student. The purpose of the didactic courses is to prepare Emergency Nurse Practitioner students to assess, diagnose, and manage the health care needs of patients across the lifespan in emergent, urgent, ambulatory care settings. Emphasis is placed on (1) synthesis and application of critical thinking, diagnostic reasoning, and scientific knowledge in the development of differential diagnosis as a basis for care management; (2) the treatment of acute health problems across the lifespan based on current evidence based practice; and (3) collaboration and communication among health care providers in a culturally diverse environment. The focus is on advanced practice nursing role in caring for individuals in the emergency care setting with traumatic and psychiatric disorders.

**Prerequisite:** NU 570 Minimum Grade of C and NU 571 Minimum Grade of C and NU 572 Minimum Grade of C and NU 573 Minimum Grade of C and NU 574 Minimum Grade of C and NU 575 Minimum Grade of C

**Corequisite:** NU 577

**NU 577 Emergency NP Practicum IV 1-3 cr**

This course is the final course in a series of four practicum courses for the Emergency Nurse Practitioner student that will provide intensive study into clinical specialty. The purpose of this practicum course is to provide the Emergency Nurse Practitioner student the opportunity to apply and integrate knowledge acquired through coursework. Development and refinement of clinical expertise in advanced emergency nursing is expected throughout the four clinical courses. The focus is on the advanced practice nursing role in caring for individuals of all ages in the emergency care setting.

**Prerequisite:** NU 570 Minimum Grade of C and NU 571 Minimum Grade of C and NU 572 Minimum Grade of C and NU 573 Minimum Grade of C and NU 574 Minimum Grade of C and NU 575 Minimum Grade of C

**Corequisite:** NU 576

**NU 578 Pharm Adv Practice Nurses 3 cr**

The purpose of this course is to expand the pharmacological knowledge of the advanced practice nurse. The focus is the selection and monitoring of drug therapy for persons throughout the lifespan. Emphasis is on pharmacokinetics and pharmacotherapeutics of major drug classifications.

**Prerequisite:** NU 545 (may be taken concurrently) Minimum Grade of C

**NU 580 Hlth Promo & Ds Prev/FNP/ENP 2 cr**

The purpose of this course is to prepare the emergency nurse practitioner student to identify and implement appropriate and culturally competent health promotion and disease prevention strategies across the lifespan. The focus is on the advanced practice nursing of individuals and families in primary and emergency care settings. Emphasis is placed on health promotion and disease prevention with strategic planning at the primary, secondary and tertiary levels of prevention. Various issues are explored pertinent to the advanced practice nurse role.

**NU 581 Family/Emergency NP I 5 cr**

This course is the first course in a series of four didactic courses for the emergency nurse practitioner student. The purpose of this didactic course is to prepare emergency nurse practitioner students to assess, diagnose, and manage the health care needs of patients across the lifespan in emergent, urgent, and primary care settings. Emphasis is placed on (1) synthesis and application of critical thinking, diagnostic reasoning, and scientific knowledge in the development of differential diagnosis as a basis for care management; (2) the treatment of acute health problems across the lifespan based on current evidence-based practice; and (3) collaboration and communication among health care providers in a culturally diverse environment. The focus of this course is on the advanced practice nursing role in caring for individuals in the primary and emergency care setting with disorders of selected body systems.

**Corequisite:** NU 582

**NU 582 Family/Emerg NP Practicum I 2 cr**

This course is the first course in a series of four practicum courses for the emergency nurse practitioner student that will provide intensive study into the family nurse practitioner role and the emergency nurse practitioner specialty. The purpose of this practicum course is to provide the emergency nurse practitioner student the opportunity to apply and integrate knowledge acquired through coursework. Development and refinement of clinical expertise in primary and emergency care is expected throughout the four clinical courses.

**Prerequisite:** NU 578 Minimum Grade of C

**Corequisite:** NU 581

**NU 583 Family/Emergency NP II 5 cr**

This course is the second course in a series of four didactic courses where the Emergency Nurse Practitioner student will continue to develop and define assessment, diagnostic, and management skills needed to care for patients across the lifespan in emergent, urgent, and primary care settings. Emphasis is placed on (1) synthesis and application of critical thinking, diagnostic reasoning, and scientific knowledge in the development of differential diagnosis as a basis for care management; (2) the treatment of acute and chronic health problems across the lifespan based on current evidence-based practice; and (3) collaboration and communication among health care providers in a culturally diverse environment. The focus of this course is on the advanced practice nursing role in caring for individuals in the primary and emergency care setting with disorders of selected body systems.

**Prerequisite:** NU 581 Minimum Grade of C and NU 582 Minimum Grade of C

**Corequisite:** NU 584

**NU 584 Family/ Emerg NP Practicum II 4 cr**

This course is the second course in a series of four practicum courses for the emergency nurse practitioner student that will provide intensive study into the family nurse practitioner role and the emergency nurse practitioner specialty. The purpose of this practicum course is to provide the emergency nurse practitioner student the opportunity to apply and integrate knowledge acquired through coursework. Development and refinement of clinical expertise in primary and emergency care is expected throughout the four clinical courses.

**Prerequisite:** NU 581 Minimum Grade of C and NU 582 Minimum Grade of C

**Corequisite:** NU 583

**NU 585 Family/Emergency NP III 5 cr**

This course is the third course in a series of four didactic courses where the emergency nurse practitioner student will continue to develop and define assessment, diagnostic, and management skills needed to care for patients across the lifespan in emergent, urgent, and primary care settings. Emphasis is placed on (1) synthesis and application of critical thinking, diagnostic reasoning, and scientific knowledge in the development of differential diagnosis as a basis for care management; (2) the treatment of acute and chronic health problems across the lifespan based on current evidence-based practice; and (3) collaboration and communication among health care providers in a culturally diverse environment. The focus of this course is on the advanced practice nursing role in caring for individuals in the primary and emergency care setting with disorders of selected body systems.

**Prerequisite:** (NU 583 Minimum Grade of C and NU 584 Minimum Grade of C)

**Corequisite:** NU 586

**NU 586 Family/Emerg NP Practicum III 4 cr**

This course is the third course in a series of four practicum courses for the emergency nurse practitioner student that will provide intensive study into the family nurse practitioner role and the emergency nurse practitioner specialty. The purpose of this practicum course is to provide the emergency nurse practitioner student the opportunity to apply and integrate knowledge acquired through coursework. Development and refinement of clinical expertise in primary and emergency care is expected throughout the four clinical courses.

**Prerequisite:** (NU 583 Minimum Grade of C and NU 584 Minimum Grade of C)

**Corequisite:** NU 585

**NU 587 Family/Emergency NP IV 5 cr**

This course is the final course in a series of four didactic courses where the Emergency Nurse Practitioner student will continue to develop and define assessment, diagnostic, and management skills needed to care for patients across the lifespan in emergent, urgent, and primary care settings. Emphasis is placed on (1) synthesis and application of critical thinking, diagnostic reasoning, and scientific knowledge in the development of differential diagnosis as a basis for care management; (2) treatment of acute and chronic health problems across the lifespan based on current evidence-based practice; and (3) collaboration and communication among health care providers in a culturally diverse environment. The focus of this course is on the advanced practice nursing role in caring for individuals in the primary and emergency care setting with disorders of selected body systems.

**Prerequisite:** NU 585 Minimum Grade of C and NU 586 Minimum Grade of C

**Corequisite:** NU 588

**NU 588 Family/Emerg NP Practicum IV 4 cr**

This course is the final course in a series of four practicum courses for the emergency nurse practitioner student that will provide intensive study into the family nurse practitioner role and the emergency nurse practitioner specialty. The purpose of this practicum course is to provide the emergency nurse practitioner student the opportunity to apply and integrate knowledge acquired through coursework. Development and refinement of clinical expertise in primary and emergency care is expected throughout the four clinical courses.

**Prerequisite:** NU 585 Minimum Grade of C and NU 586 Minimum Grade of C

**Corequisite:** NU 587

**NU 589 Family/Emerg NP CI Progression 1-4 cr**

This course is a practicum progression course for the emergency nurse practitioner student that will provide intensive study into the family nurse practitioner role and the emergency nurse practitioner specialty. The purpose of this practicum course is to provide the emergency nurse practitioner student the opportunity to apply and integrate knowledge acquired through coursework. Development and refinement of clinical expertise in primary and emergency care is expected throughout the four clinical courses. At the discretion of the Emergency Nurse Practitioner track coordinator, satisfactory completion of this course may be required.

**Prerequisite:** NU 582 Minimum Grade of C

**NU 590 Special Topics - 9 cr**

Study of significant topics or problems in nursing and the health professions. Content will vary. May be repeated.

**NU 594 Directed Studies 1-11 cr**

Directed study under the direction of a member of the graduate faculty.

**NU 595 Study Abroad Cultural Exp 9 cr**

The purpose of this course for the graduate student is to develop an improved understanding of the culture, Leininger's theory of Diversity and Universality, to recognize any cultural practices that affect health care and to incorporate this understanding into the provision of care. Culture will be examined through writing cultural experiences, and through collaboration. The course is underpinned by Dr. Leininger's definition of culture and her theory of culture care.

**NU 596 Service Abroad Hlth Related Ex 0 cr**

This is a service learning course that will culminate in select communities in the international setting. Emphasis is providing culturally competent care by providing an immersion experience.

**NU 597 Intro to Scholarly Writing 3 cr**

The purpose of the course is to enhance scientific writing skills and provide a review of basic and advanced grammar, and development of rhythm, voice, and purpose in writing. There will be a focus on developing skills to utilize bibliographic search methodology and the American Psychological Association (APA) editorial format.

**NU 607 Scientific Underpinnings Adv Nsg 3 cr**

The purpose of this course is for the MSN/DNP student to explore the scientific underpinnings that define the nature of health and healthcare delivery and to provide the basis for practice at the highest level of nursing. The focus of this course is to explore the structure and nature of nursing science as it relates to advanced nursing practice. The course emphasis is on the exploration of a clinically relevant phenomena of interest that will be examined from the philosophical, theoretical, ethical, and conceptual context.

**NU 608 EBP & Quality Improvement HCS 3 cr**

The purpose of this course is to provide the MSN/DNP student with the foundational components required for effective utilization of evidence based practice within the scope of advanced nursing practice. The course focuses on the use of analytic methods to critically appraise existing literature and other evidence to determine and implement the best evidence for practice. The course emphasis is on the application of quantitative, qualitative, and quality improvement methodologies to promote safe, effective care within healthcare systems.

**NU 610 Healthcare Policy & Finance 3 cr**

The purpose of this course for the MSN/DNP student is to develop advanced nursing leaders who have the knowledge and skills to design, analyze, influence, and implement policies that frame health care financing, practice regulation, access, safety, quality, and efficacy. The course focuses on major contextual factors and policy triggers that influence health policy making at various levels. Principles of finance, business, and health care economics will be presented. The course emphasis is on developing essential competencies in health care policy advocacy and health care financing.

**NU 611 Translat Evidence Practice Sys 3 cr**

The purpose of this course for the DNP student is to provide the methodological basis for translating evidence into practice systems in a variety of healthcare settings. The course focuses on locating, evaluating, synthesizing, channeling, applying, and explaining appropriate findings from laboratory and experimental settings to improve the efficiency and effectiveness of nursing care. The course emphasis is on the use of applied techniques for evidence translation with an exploration of ethics and the protection of human research subjects.

**Prerequisite:** NU 608 (may be taken concurrently) Minimum Grade of C and NU 607 (may be taken concurrently) Minimum Grade of C

**NU 612 Clinical Prev Population Hlth 3 cr**

The purpose of this course for the DNP student is to explore the multifaceted issues pertaining to population health and health promotion in the local, regional, national, and global populations across the lifespan. The course focuses on health issues and strategies to eliminate health disparities across all population groups. The course emphasizes the use of health surveillance measures and determinants of health to characterize geographical locations and population groups as well as effective health promotion and disease and accident prevention strategies.

**Prerequisite:** NU 608 (may be taken concurrently) Minimum Grade of C and NU 607 (may be taken concurrently) Minimum Grade of C

**NU 613 Organizational & Sys Leadrshp 3 cr**

The purpose of this course for the MSN/DNP student is to synthesize leadership and organizational theory within the context of complex healthcare systems. The course focuses on the exploration and application of principles of advanced communication, collaboration, and team building to the process of systems change to prepare the student for advanced roles in leading change. Emphasis within the course is placed on assessment of organizational culture as a basis for improvement of individual and aggregate healthcare outcomes; models of quality improvement and project planning, implementation, and evaluation are also examined.

**NU 615 Qual Improv & Outcomes Assmnt 3 cr**

The purpose of this course is to build on the foundation established in NU 608 Evidence Based Practice and Quality Improvement in Healthcare Systems to provide the DNP student with additional knowledge and skills to develop, implement, and evaluate programs that improve health outcomes. The course focuses on the design, implementation, and evaluation of quality improvement methodologies. The course places emphasis on applying quality improvement processes to evaluate outcomes of practice against national benchmarks to determine variances in practice outcomes and population trends.

**Prerequisite:** NU 607 (may be taken concurrently) Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C

**NU 616 Data & Dec Mknng Healthcare Sys 3 cr**

The purpose of this course is to prepare the DNP student to be proficient in the evaluation and use of technology and information systems appropriate to specialized areas of advanced nursing practice. The course focuses on information systems and current technology in the management of healthcare outcomes. Within the course, emphasis is placed on the use of information systems and technology based resources to support clinical and administrative decision making.

**Prerequisite:** (NU 611 Minimum Grade of C and NU 615 Minimum Grade of C)

**NU 620 Prin Teach/Learn/Assess Nu Ed 3 cr**

The purpose of this course is to provide a foundation of principles of teaching and learning, including theories, styles, and application to the diverse learner. Emphasis is on analysis of teaching in the classroom and clinical setting, assessment techniques, and implementation of technology, all while incorporating evidence-based teaching practices

**NU 621 Curr Design/Outcome Eval Nu Ed 3 cr**

Analysis and synthesis of theories and concepts related to systematic curriculum development and outcomes evaluation in nursing education. Emphasis is on institutional purposes, goals, nursing curricula design, and outcomes evaluation that supports the requirements of the institution, the program, and accrediting agencies.

**NU 622 Current Topics in Nu Education 2 cr**

The purpose of this course is to engage the student in an analysis of concepts and theories basic to the nurse educator role in academic and in practice settings. Emphasis is on current issues and trends in nursing education, the role of the academic nurse educator, and professional, social, political, legal, cultural, and other issues related to nursing education.

**NU 623 Nsg Educ Synthesis Practicum 3 cr**

The purpose of this course is the synthesis of nursing education theory in practicum experience. Focus is on the application of nursing education theory in developing, teaching, and evaluating an education unit, exemplifying the nurse educator role, and adhering to institutional and legal guidelines.

**Prerequisite:** NU 620 Minimum Grade of C and NU 621 (may be taken concurrently) Minimum Grade of C and NU 622 (may be taken concurrently) Minimum Grade of C

**NU 656 Nursing Informatics PP&D 3 cr**

This course assists the Nursing Informatics DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the Nursing Informatics students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C)

**NU 657 Nursing Informatic Residency I 3-6 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The Nursing Informatics student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the Nursing Informatics student will work with the primary faculty advisor to complete projects and advance their selected practice area. The Nursing Informatics student will have access to and authority for expanded scope of practice to master the DNP competencies. Residency sites will depend upon the Nursing Informatics student's career trajectory and approval by collaborating faculty. During the residency semester, student must participate in scheduled scholarly seminars online.

**Prerequisite:** NU 656 Minimum Grade of S and NU 615 (may be taken concurrently) Minimum Grade of C

**NU 658 NU Informatics Residency II 3-6 cr**

Provides Nursing Informatics students the opportunity to fully express all DNP competencies. The Nursing Informatics student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

**Prerequisite:** NU 657 Minimum Grade of C and NU 616 (may be taken concurrently) Minimum Grade of C

**NU 659 NU Informatics Residency III 3-6 cr**

Final course in residency series as Nursing Informatics student continues to implement and evaluate project plan. Provides Nursing Informatics student the opportunity to fully express all DNP competencies. The Nursing Informatics student, guided by the core faculty and advisor completes quality improvement evidence-based system's change project.

**Prerequisite:** NU 612 (may be taken concurrently) Minimum Grade of C and NU 658 Minimum Grade of C

**NU 661 Executive Nsg Admin PP&D 3 cr**

This course assists the Nurse Executive Administration DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the Nurse Executive Administration students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C)

**NU 662 Nurse Exec Admin Res I 3-6 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The Nurse Executive Administration student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the Nurse Executive Administration student will work with the primary faculty advisor to complete projects and advance their selected practice area. The Nurse Executive Administration student will have access to and authority for expanded scope of practice to master the DNP competencies. Residency sites will depend upon the student's career trajectory and approval by collaborating faculty. During the residency semester, the Nurse Executive Administration student must participate in scheduled scholarly seminars online. Clinical hours of direct practice/management is required.

**Prerequisite:** NU 661 Minimum Grade of S and NU 615 (may be taken concurrently) Minimum Grade of C

**NU 663 Nurse Exec Admin Res II 3-6 cr**

Provides Nurse Executive Administration students the opportunity to fully express all DNP competencies. The student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

**Prerequisite:** NU 662 Minimum Grade of C and NU 616 (may be taken concurrently) Minimum Grade of C

**NU 664 Nurse Exec Admin Res III 3-6 cr**

Final course in residency series as the Nurse Executive Administration student continues to implement and evaluate project plan. Provides the Nurse Executive Administration student the opportunity to fully express all DNP competencies. The student, guided by the core faculty and advisor, completes quality improvement evidence-based system's change project.

**Prerequisite:** NU 663 Minimum Grade of C and NU 612 (may be taken concurrently) Minimum Grade of C

**NU 680 Family/Emergency NP PP&D 3 cr**

In this course, students will begin a systematic investigation of a clinically based topic relevant to the practice of the emergency nurse practitioner. Integration of scientific underpinnings, human caring values, ethical principles, and cultural competencies is expected. Emphasis is placed on developing a proposal for the Doctor of Nursing Practice scholarly project. Students will select and analyze strategies, models, and theories to plan, implement, and evaluate the scholarly project.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C)

**NU 681 Family/Emerg NP Residency I 3 cr**

This course is the first course in a progressive sequence of three residency courses that will develop the Emergency Nurse Practitioner student into a practice scholar. The purpose of the residency course is to integrate the application of leadership, theoretical, and specialty knowledge to improve patient and population health outcomes in the emergency care setting. The focus of this residency course is to provide the Emergency Nurse Practitioner student with faculty supervised and preceptor mentored experiences to begin the development and implementation of the Doctor of Nursing Practice scholarly project.

**Prerequisite:** (NU 680 Minimum Grade of C and NU 615 (may be taken concurrently) Minimum Grade of C)

**NU 682 Family/Emerg NP Residency II 3 cr**

This course is the second course in a progressive sequence of three residency courses that will develop the Emergency Nurse Practitioner student into a practice scholar. The purpose of the residency course is to integrate the application of leadership, theoretical, and specialty knowledge to improve patient and population health outcomes in the emergency care setting. The focus of this residency course is to provide the Emergency Nurse Practitioner student with faculty supervised and preceptor mentored experiences to implement the Doctor of Nursing Practice scholarly project.

**Prerequisite:** (NU 681 Minimum Grade of C and NU 616 (may be taken concurrently) Minimum Grade of C)

**NU 683 Family/Emerg NP Residency III 3 cr**

This course is the final course in a progressive sequence of three residency courses that will develop the Emergency Nurse Practitioner student into a practice scholar. The purpose of the residency course is to integrate the application of leadership, theoretical, and specialty knowledge to improve patient and population health outcomes in the emergency care setting. The focus of this residency course is to provide the Emergency Nurse Practitioner student with faculty supervised and preceptor mentored experiences to evaluate the effectiveness of and disseminate the findings of the Doctor of Nursing Practice scholarly project.

**Prerequisite:** (NU 682 Minimum Grade of C and NU 612 (may be taken concurrently) Minimum Grade of C)

**NU 690 Sp Top - 1-9 cr**

Selected topics in Nursing Science and/or Nursing Education. Requires special permission.

**NU 692 NU DNP Incomplete Extension 3 cr**

Students will register for this course to complete residency course work under the supervision of faculty. Students must remain continuously enrolled until all residency requirements are completed.

**NU 694 Directed Study and Research 1-6 cr**

Directed study and research facilitated by a member of the graduate faculty. Requires special permission.

## Faculty

### Adult Health Nursing

Faculty Name	Faculty Department	Faculty Position	Degrees Held
ADAMS, AMY DAWN (amyadams@southalabama.edu)	Adult Health Nursing	Assistant Professor	BSN, University of South Alabama MSN, University of South Alabama DNP, University of South Alabama
ANDERSON, JENNIFER ANN (janderson@southalabama.edu)	Adult Health Nursing	Assistant Professor	BSN, University of South Alabama MSN, Spring Hill College DNP, University of South Alabama
BAUGHN, CHRISTINA LEE (christinabaughn@southalabama.edu)	Adult Health Nursing	Assistant Professor	BSN, University of South Alabama MSN, University of South Alabama DNP, Samford University
BENTLEY, EMILY SAWYER (ebentley@southalabama.edu)	Adult Health Nursing	Assistant Professor	BSN, University of South Alabama MSN, University of South Alabama DNP, University of South Alabama
BOLTON, MARYANNE (mbolton@southalabama.edu)	Adult Health Nursing	Assistant Professor	BSN, Rutgers The St U Central Offic MSN, University of South Alabama DNP, University of South Alabama
BYDALEK, KATHERINE ANITA (kbydalek@southalabama.edu)	Adult Health Nursing	Associate Professor	BS, University of Saint Francis MSN, University of South Alabama PHD, Touro College

CAMPBELL, AMY CALVERT (amycalvertcampbell@southalabama.edu)	Adult Health Nursing	Assistant Professor	BA, University of Mississippi BSN, University of South Alabama MSN, University of South Alabama DNP, University of South Alabama
COOPER, KIM M. (kimcooper@southalabama.edu)	Adult Health Nursing	Instructor	BSN, William Carey University MSN, William Carey University
DAVIS, WESLEY DANIEL (wesleydavis@southalabama.edu)	Adult Health Nursing	Associate Professor	AH, Chesterfield-Marlboro Tech Col BS, Miscellaneous Institution 01 BSN, Chamberlain University MSN, University of South Alabama DNP, University of South Alabama
DIXON, NERKISSA CURTIS (kcurtisdixon@southalabama.edu)	Adult Health Nursing	Assistant Professor	BSN, University of South Alabama MSN, University of South Alabama EDD, Walden University
GRAVES, REBECCA JERMYN (rgraves@southalabama.edu)	Adult Health Nursing	Associate Professor	BS, University of Southern Miss BSN, University of South Alabama MSN, University of South Alabama PHD, University of Tennessee-Knox
GUY, MISTY DAWN (mguy@southalabama.edu)	Adult Health Nursing	Assistant Professor	BSN, University of South Alabama MSN, University of South Alabama CERTG, University of South Alabama
HABOUSH, CHRISTINE H. (haboush@southalabama.edu)	Adult Health Nursing	Assistant Professor	DNP, University of South Alabama BBA, American Univ in Beirut MS, National University BSN, Linfield College MSN, Vanderbilt University DNP, Oregon Health Sciences U ND, Cuny Borough of Manhattan Comm ND, Portland Community College ND, Cuny Hunter College
HARLAN, SHANA MARIE (sharlan@southalabama.edu)	Adult Health Nursing	Assistant Professor	BSN, University of South Alabama MSN, University of South Alabama DNP, University of South Alabama
HOLLEY, AMY GOODWIN (amyholley@southalabama.edu)	Adult Health Nursing	Assistant Professor	BSN, University of North Alabama MSN, University of North Alabama DNP, Samford University
HORTON, HEATHER VANCE (horton@southalabama.edu)	Adult Health Nursing	Assistant Professor	BSN, University of South Alabama MSN, University of South Alabama DNP, University of South Alabama
JOHNSON, PAMELA TATE (pamjohnson@southalabama.edu)	Adult Health Nursing	Associate Professor	BSN, Auburn University MSN, University of South Alabama DNP, University of South Alabama
JOHNSON, PATRICIA A. (patriciajohnson@southalabama.edu)	Adult Health Nursing	Assistant Professor	BSN, University of Mobile MSN, University of Mobile DNP, Samford University
JONES, LORETTA (lorettajones@southalabama.edu)	Adult Health Nursing	Assistant Professor	BSN, University of Mobile MSN, University of Mobile PHD, Univ of Alabama-Birmingham
JONES, TRACY LARUE (tracyljones@southalabama.edu)	Adult Health Nursing	Instructor	BS, Univ of Mississippi Med Center MSN, Univ of Mississippi Med Center
JORDAN, KIMBERLY DAVIS (kimberlyjordan@southalabama.edu)	Adult Health Nursing	Assistant Professor	BSN, University of South Alabama MSN, University of South Alabama DNP, Samford University
LAWSON, ROBIN MELANIE (robinlawson@southalabama.edu)	Adult Health Nursing	Professor	BSN, University of South Alabama MSN, University of South Alabama DNP, University of South Alabama

LEVI, PAULA MILLER (plevi@southalabama.edu)	Adult Health Nursing	Assistant Professor	BSN, University of South Alabama PHD, Univ of Alabama-Birmingham
LEWIS, ANGELIA D (lialewis@southalabama.edu)	Adult Health Nursing	Assistant Professor	AS, College of Central Florida BSN, University of Mobile MSN, University of Mobile DNP, University of Alabama
LYNCH, COLLEEN MARTIN (colleenlynch@southalabama.edu)	Adult Health Nursing	Assistant Professor	BS, Francis Marion University BS, Francis Marion University MSN, Univ of Alabama-Birmingham DNP, University of South Alabama
MILLER, JENNIFER JOHNSON (jennifermiller@southalabama.edu)	Adult Health Nursing	Assistant Professor	AS, Troy University-Main BSN, Troy University-Main MSN, University of South Alabama DNP, University of South Alabama
MOORE, ELLEN PEYTON (ellenmoore@southalabama.edu)	Adult Health Nursing	Assistant Professor	BA, Mississippi State University BSN, University of South Alabama MSN, University of South Alabama DNP, University of South Alabama
MOORE, LORI PREWITT (lmoore@southalabama.edu)	Adult Health Nursing	Assistant Professor	BSN, University of South Alabama MSN, University of South Alabama DNP, University of South Alabama
OTTS, JO ANN (jotts@southalabama.edu)	Adult Health Nursing	Associate Professor	BA, Graceland College MSN, Loyola University-New Orleans
RIDNER, STANLEY LEE (ridner@southalabama.edu)	Adult Health Nursing	Professor	DNP, Loyola University-New Orleans BSN, University of Kentucky MSN, University of Kentucky PHD, University of Kentucky
RUSS, CHONDRA NAKEIVA (chondraruss@southalabama.edu)	Adult Health Nursing	Assistant Professor	BS, University of LA at Lafayette BSN, University of South Alabama MSN, University of South Alabama DNP, University of Alabama
SIKES-DOGGETT, TELINA MICHELLE (tdoggett@southalabama.edu)	Adult Health Nursing	Assistant Professor	BSN, University of South Alabama MSN, University of South Alabama DNP, Samford University
STAUTER, KELLY JEANNETTE (kstauter@southalabama.edu)	Adult Health Nursing	Assistant Professor	BS, University of South Alabama BSN, University of South Alabama MSN, University of South Alabama DNP, University of South Alabama
STREETER, DONNA JANE (dcopeland@southalabama.edu)	Adult Health Nursing	Associate Professor	BSN, University of South Alabama MSN, University of South Alabama DNP, University of South Alabama
STUART, WILMA POWELL (wstuart@southalabama.edu)	Adult Health Nursing	Associate Professor	BSN, University of Texas Health Sc MA, Univ Of Texas At Tyler PHD, Univ of Alabama-Birmingham
STURM, TERRY ANN MARCEN (tsturm@southalabama.edu)	Adult Health Nursing	Assistant Professor	BS, Montana State U-Northern MSN, University of South Alabama DNP, University of Alabama
SWANZY, DEBRA MONTGOMERY (dswanzy@southalabama.edu)	Adult Health Nursing	Associate Professor	BSN, University of South Alabama MSN, University of South Alabama DNP, University of South Alabama
TAYLOR, COURTNEY ALLISON (courtneytaylor@southalabama.edu)	Adult Health Nursing	Instructor	BSN, University of Mobile MSN, Univ of Alabama-Birmingham
VANDEWAA, ELIZABETH (evandewaa@southalabama.edu)	Adult Health Nursing	Professor	BS, Hope College PHD, Michigan State University
WAWERU-SMITH, SYLVIA MUTHONI (swaweru@southalabama.edu)	Adult Health Nursing	Assistant Professor	BS, Univ of Alabama-Birmingham MS, Univ of Alabama-Birmingham

WRIGHT, THERESA FIELDS (twright@southalabama.edu)	Adult Health Nursing	Associate Professor	BSN, University of South Alabama MSN, University of South Alabama DNP, University of South Alabama
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## Community Mental Health Nursing

Faculty Name	Faculty Department	Faculty Position	Degrees Held
BAKER, MELANIE RENEE (melaniebaker@southalabama.edu)	Community Mental Health Nsg	Assistant Professor	AS, Delgado Community College BSN, University of South Alabama MSN, University of South Alabama DNP, University of South Alabama
BEASLEY, AMY MARIE (amybeasley@southalabama.edu)	Community Mental Health Nsg	Assistant Professor	BS, University of Alabama BSN, University of Alabama MSN, University of Alabama CERT, University of Alabama DNP, University of Alabama
BRAND, SALLIE MCCLENDON (sbrand@southalabama.edu)	Community Mental Health Nsg	Assistant Professor	BSN, Univ of Alabama-Birmingham MBA, Samford University MSN, Samford University DNP, Samford University
COCKRELL, JEANENE QUIMBY (jcockrell@southalabama.edu)	Community Mental Health Nsg	Senior Instructor	BSN, University of Saint Thomas MSN, University of South Alabama AS, University of Mobile
ELKINS, JOHN CASEY (celkins@southalabama.edu)	Community Mental Health Nsg	Associate Professor	AAS-AT, Mississippi Gulf Coast CC BSN, University of South Alabama MSN, University of South Alabama MED, North Central University DNP, Samford University
HAMMONDS, LINDA SUE (lshammonds@southalabama.edu)	Community Mental Health Nsg	Associate Professor	BSN, SUNY at Albany MSN, East Carolina University DNP, University of South Alabama
HARLAN, CHRISTOPHER T. (tharlan@southalabama.edu)	Community Mental Health Nsg	Associate Professor	BSN, University of South Alabama MSN, University of South Alabama DNP, University of TN-Memphis
HARRIS, JAMES L. (jameslharris@southalabama.edu)	Community Mental Health Nsg	Professor	BSN, University of South Alabama MSN, Univ of Alabama-Birmingham DSN, Univ of Alabama-Birmingham MBA, University of New Orleans
HARRIS, SHANNON KAY (shannonharris@southalabama.edu)	Community Mental Health Nsg	Assistant Professor	BSN, University of South Alabama MSN, University of Mobile DNP, University of South Alabama
JAMES, SHERRY R. (sherrydjames@southalabama.edu)	Community Mental Health Nsg	Instructor	BSN, University of Mobile MSN, University of Mobile
JOHNSON, BRIAN DAVID (brianjohnson@southalabama.edu)	Community Mental Health Nsg	Assistant Professor	BS, Emmanuel College MA, CA Sch Of Professional Psych- S PHD, CA Sch Of Professional Psych- S MDIV, Church Divinity Sch of The Pac MSN, University of South Alabama
KORN, MICKI SHARPE (mraber@southalabama.edu)	Community Mental Health Nsg	Assistant Professor	BSN, University of South Alabama MSN, Mississippi U For Women
MCCARTER, CAREY E. (cmccarter@southalabama.edu)	Community Mental Health Nsg	Assistant Professor	BBA, Mississippi State University BSN, Mississippi U For Women MSN, Mississippi U For Women DNP, University of TN-Memphis

MCCOY, KATHLEEN T. (mccoy@southalabama.edu)	Community Mental Health Nsg	Associate Professor	BS, SUNY at Stony Brook MS, State University of New York DNSC, University of TN-Memphis
MCMURTREY, KIMBERLY LORRAINE (kcmcmurtrey@southalabama.edu)	Community Mental Health Nsg	Assistant Professor	BSN, University of South Alabama MSN, University of South Alabama DNP, University of Alabama
MONTGOMERY, SUSAN LEIGH (slmontgomery@southalabama.edu)	Community Mental Health Nsg	Assistant Professor	BSN, University of South Alabama MSN, Univ of Mississippi Med Center DNP, Samford University
PANCIONE, KIRSTEN E. (kpancione@southalabama.edu)	Community Mental Health Nsg	Assistant Professor	AS, Lord Fairfax Community College BSN, Virginia Commonwealth U MSN, Florida Atlantic U-Boca Raton DNP, University of South Alabama
PITTMAN, JOYCE ANN (joycepittman@southalabama.edu)	Community Mental Health Nsg	Associate Professor	AS, Palm Beach State College BS, University of South Florida MSN, Indiana U-Purdue U- Indianapoli PHD, Indiana U-Purdue U-Indianapoli
POWELL LEWIS, SHANNON KIMBERLY (shannonlewis@southalabama.edu)	Community Mental Health Nsg	Assistant Professor	AS, Bishop State Community College  BSN, University of South Alabama MSN, University of South Alabama CERTG, University of South Alabama  DNP, University of South Alabama CERTG, University of South Alabama
REED, DEDRA MINGO (dedrareed@southalabama.edu)	Community Mental Health Nsg	Assistant Professor	BSN, University of South Alabama MED, University of South Alabama MSN, University of Mobile DNP, Univ of Alabama-Birmingham
RILEY, BETTINA HORNBUCKLE (briley@southalabama.edu)	Community Mental Health Nsg	Associate Professor	BSN, Univ of Alabama-Birmingham PHD, Univ of Alabama-Birmingham
RUDOLF, STEPHANIE ELAINE (srudolf@southalabama.edu)	Community Mental Health Nsg	Assistant Professor	BSN, University of South Alabama MSN, University of South Alabama DNP, Samford University
SCOTT, SHANDA FELISE BROWN (shaston@southalabama.edu)	Community Mental Health Nsg	Assistant Professor	BSN, University of South Alabama MSN, University of South Alabama MSN, Univ of Alabama-Birmingham DNP, Univ of Alabama-Birmingham
SELWYN, CANDICE NICOLE (cnselwyn@southalabama.edu)	Community Mental Health Nsg	Research Assistant Professor	BA, University of South Alabama MS, University of South Alabama PHD, University of South Alabama
TOWNSEND, AMANDA ALISA (aatownsend@southalabama.edu)	Community Mental Health Nsg	Assistant Professor	BSN, University of SC-Columbia MS, Georgia State University DNP, Case Western Reserve U
TURNHAM, NANCY MOORE (nturnham@southalabama.edu)	Community Mental Health Nsg	Assistant Professor	BSN, Troy University-Main MSN, Troy University-Main DNP, Univ of Alabama-Birmingham
WILLIAMS, KIMBERLY ANN (kwilliams@southalabama.edu)	Community Mental Health Nsg	Professor	BSN, University of South Alabama MSN, University of South Alabama DNSC, University of TN-Memphis
WILLIAMS, SUSAN GORDON (sgwilliams@southalabama.edu)	Community Mental Health Nsg	Associate Professor	BSN, University of South Alabama MSN, University of South Alabama PHD, Univ of Alabama-Birmingham

WOODS, ELISHA DOWDY (ewoods@southalabama.edu)	Community Mental Health Nsg	Instructor	BSN, University of South Alabama MSN, University of South Alabama ND, Tulane University ND, Coastal Alabama Comm College  ND, Hardin-Simmons University ND, Hinds Comm Col-Raymond Campus
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## Maternal Child Nursing

Faculty Name	Faculty Department	Faculty Position	Degrees Held
BOWMAN, ASHLEIGH ANN FICARINO (aficarino@southalabama.edu)	Maternal Child Nursing	Assistant Professor	BSN, Spring Hill College MSN, University of South Alabama DNP, University of South Alabama
BROWN, TRACY LEE (tracybrown@southalabama.edu)	Maternal Child Nursing	Assistant Professor	BSN, University of Mobile MSN, University of South Alabama CERT, University of South Alabama DNP, University of South Alabama
CARLQUIST, KELLY ALLISON (kcarlquist@southalabama.edu)	Maternal Child Nursing	Instructor	BS, Auburn University BSN, University of Texas- Arlington MSN, Auburn University
CHESHIRE, KRISTY LEIGH (kcheshire@southalabama.edu)	Maternal Child Nursing	Assistant Professor	BA, University of Miami BSN, University of South Alabama MSN, University of South Alabama DNP, University of South Alabama
DAILEY, LISA ANN (lisadailey@southalabama.edu)	Maternal Child Nursing	Assistant Professor	BSN, University of Wisconsin-Gr By MSN, University of South Alabama DNP, University of South Alabama
DAVIS, AMY ELIZABETH (amyedavis@southalabama.edu)	Maternal Child Nursing	Assistant Professor	AS, University of Mobile BSN, University of Mobile MSN, University of Mobile DNP, Samford University
DAVIS, SARA LAUBINGER (saradavis@southalabama.edu)	Maternal Child Nursing	Assistant Professor	BS, Spring Hill College BSN, University of South Alabama MSN, University of South Alabama PHD, Univ of Alabama-Birmingham
EMLEY, LISABETH NASH (bethemley@southalabama.edu)	Maternal Child Nursing	Instructor	BSN, University of South Alabama MSN, University of South Alabama CERT, University of South Alabama
HALL, HEATHER ROBERTS (heatherhall@southalabama.edu)	Maternal Child Nursing	Professor	BSN, University of South Alabama MSN, University of South Alabama PHD, Univ of Tenn Hlth Sci Center
HUFFMAN, PENNI COATES (pennicoates@southalabama.edu)	Maternal Child Nursing	Assistant Professor	BA, University of NC- Chapel Hill AS, Rockingham Community College  MSN, University of South Alabama DNP, University of South Alabama
HUTTO, DAPHNE TURRENTINE (dhutto@southalabama.edu)	Maternal Child Nursing	Assistant Professor	BSN, University of South Alabama MSN, University of South Alabama DNP, University of South Alabama
LADNIER, LEWIS JEREMY (jladnier@southalabama.edu)	Maternal Child Nursing	Instructor	AA, Mississippi Gulf Coast CC BSN, University of South Alabama MSN, University of South Alabama
MARASS, ASHLEY DENISE (amarass@southalabama.edu)	Maternal Child Nursing	Associate Professor	BS, University of Alabama BS, Georgia State University MS, Georgia State University DNP, Samford University

MCMULLAN, TARALYN WOOD (tmcnullan@southalabama.edu)	Maternal Child Nursing	Associate Professor	BSN, University of Texas Health Sc MSN, University of South Alabama DNP, University of South Alabama
MILLER, KRISTINA SCHNEIDER (ksmiller@southalabama.edu)	Maternal Child Nursing	Associate Professor	BSN, University of South Alabama MSN, University of South Alabama DNP, Samford University
MINCHEW, LEIGH ANNE (lminchew@southalabama.edu)	Maternal Child Nursing	Associate Professor	BS, Troy University-Dothan BSN, Troy University-Main MSN, Troy University-Main DNP, Case Western Reserve U PHD, Texas Woman's University
MOSLEY, BAILEY DINGWALL (baileymosley@southalabama.edu)	Maternal Child Nursing	Assistant Professor	BSN, University of South Alabama MSN, University of South Alabama ND, Coastal Alabama Comm College
NORRIS, KIMBERLY CARPENTER (kcnorris@southalabama.edu)	Maternal Child Nursing	Assistant Professor	BS, University of South Alabama BSN, University of South Alabama MSN, University of South Alabama CERTG, University of South Alabama  CERTG, University of South Alabama
PIERCE, CAROL CREEL (cacreel@southalabama.edu)	Maternal Child Nursing	Instructor	DNP, University of South Alabama AS, East Central Community College BBA, Mississippi State University BSN, University of South Alabama MSN, University of South Alabama
PLATT, TERRIE HUBBARD (tplatt@southalabama.edu)	Maternal Child Nursing	Assistant Professor	BSN, University of South Alabama MSN, University of Texas Health Sc DNP, Samford University
THOMAS, REBECCA MAEVE (rthomas@southalabama.edu)	Maternal Child Nursing	Assistant Professor	BSN, University of West Florida MSN, University of South Alabama DNP, University of South Alabama
THOMPSON, CHRISTINA NICOLE (cthompson@southalabama.edu)	Maternal Child Nursing	Assistant Professor	BSN, University of South Alabama MSN, University of South Alabama DNP, Samford University
URQUHART, BRADY BAKER (bbaker@southalabama.edu)	Maternal Child Nursing	Instructor	BSN, University of South Alabama MSN, University of South Alabama

## Nursing (BS) - Accelerated Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 680)		26
<b>Major Requirements</b>		
<i>Nursing (BS) Major Core</i>		
A. Complete the following Nursing Courses:		
HSC 342	Administration of Medication	1
HSC 343	Clinical Pharmacology	3
NU 300	Foundations of Prof Nsg	5
NU 301	Foundations of Prof Nsg Clin	3
NU 304	Evidence Based Practice NU- W	3
NU 325	Health Assessment	3
NU 327	Patho Basis of Nursing	3
NU 311	Clinical Nursing Skills	3

NU 332	Clinical Nutrition	2
AHN 447	Adult Gerontological Nursing	4
AHN 448	Adult Gerontological Nsg Clin	4
CMN 350	Psy-Mental Health Nsg	2
CMN 351	Psy-Mental Health Nsg Clin	2
CMN 420	Community Health Nursing	3
CMN 421	Community Health Nurs Clinical	1
MCN 352	OB & GYN Nursing Care	2
MCN 353	OB & GYN Nsg Care Clinical	2
MCN 354	Pediatric Nursing Care	2
MCN 355	Pediatric Nsg Care Clinical	2
NU 412	Dec Making Prof Nsg Practice	3
NU 414	Issues & Trends Healthcare -W	3
NU 460	Practicum	6
<b>Minor Requirements</b>		
A minor is not required for this degree program		0
<b>Total Hours</b>		<b>88</b>

## General Education Requirements

**Gen Ed Formatting Note: Graduate of a regionally accredited baccalaureate program with a minimum 2.75 GPA on a 4.0 scale.**

Code	Title	Hours
<b>Area I - Written Composition</b>		
No credit hours are needed in this area		
<b>Area II - Humanities &amp; Fine Arts</b>		
No credit hours are needed in this area		
<b>Area III - Natural Science &amp; Mathematics</b>		
A. Complete the following:		
BLY 101 & 101L	Life Science I and Life Science I Laboratory	4
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab	4
<b>Area IV - History, Social &amp; Behavioral Sciences</b>		
A. Complete the following Psychology Course:		
PSY 120	Introduction to Psychology (required)	3
<b>Area V</b>		
A. Select one of the following Microbiology Courses:		
BLY 213 & BLY 214	Microbiology and Lab Studies Microbiology	4
BMD 210 & 210L	Microbiology in Healthcare and Microbiology in Healthcare Lab	4
B. Complete the following Human Anatomy & Physiology Courses:		
BMD 251	Human Anatomy & Physiology I	4
BMD 252	Human Anatomy & Physiology II	4
C Select one of the following Statistics Courses:		
ST 210	Stat Reason and Application	3
BUS 245	Data Analytics I	
PSY 220	Res Design and Analysis I	
ST 305	Applied Stat Health Sciences	
<b>Total Hours</b>		<b>26</b>

### Notes:

- Microbiology with Lab (4 Credit Hours) is required
- PSY 120 is required

## Additional Information

### Bachelor of Science in Nursing – Accelerated BSN Pathway

The College of Nursing has a special Accelerated BSN Pathway for academically qualified and highly-motivated individuals. The pre-professional component, as listed below, must be completed prior to admission to the professional component. The professional component of the curriculum, which normally takes 5 semesters to complete, can be completed in 12 months of full-time study. The curriculum and credit hours are the same as required for the traditionally taught BSN degree offered by the College, except that the course schedule is accelerated and is not confined by the traditional academic calendar. Students in the first 12 months of the Accelerated BSN Pathway follow the same promotion/progression policies as the students in the traditionally-taught BSN.

Students having difficulty maintaining the pace of the program may request a transfer to the traditional program if they are in good academic

standing. At the end of the 12-months of study, students are awarded the BSN degree and are prepared for the RN licensure (NCLEX) examination.

Students who have completed the pre-nursing requirements, may apply for admission to the Professional Component of the Accelerated BSN Pathway.

### Admission Criteria for Accelerated BSN Pathway

1. Graduate of a regionally accredited baccalaureate program with a minimum prerequisite GPA of 2.75 on a 4.0 scale.
2. A minimum grade of "C" in following prerequisite courses: Biology with Lab, Anatomy and Physiology I with Lab, Anatomy and Physiology II with Lab, Microbiology with Lab, Chemistry with Lab, Statistics, and General Psychology.

### Pilot Program

A limited number of students admitted to the Traditional BSN program may be offered a seat in the accelerated BSN program. Selection is highly competitive.

### Application Procedures Accelerated Pathway

Applicants must submit an application for admission to the Professional Component of the BSN degree program. The application form is available on the College of Nursing's website. Applications are reviewed carefully to determine that students have satisfied all pre-nursing requirements of conduct, health, scholastic achievement, and aptitude for nursing. The College of Nursing Admissions Committee and the Dean of the College of Nursing reserve the right to select the applicants best qualified for and most likely to succeed in the study of nursing. Failure to comply with legal, moral, and legislative standards for licensure to practice as a registered nurse in the State of Alabama merits immediate dismissal from the nursing program.

### Application Procedures

1. Submission of a completed application to the College of Nursing via Accelerated BSN Online Application ([https://secure.touchnet.net/C21704\\_ustores/web/store\\_main.jsp?STOREID=44&SINGLESTORE=true](https://secure.touchnet.net/C21704_ustores/web/store_main.jsp?STOREID=44&SINGLESTORE=true)).
2. Payment of \$50 non-refundable application fee via debit or credit card. There is a \$20.00 fee for non-sufficient fund.
3. Transfer credit must comply with College of Nursing policies.

### Contingency for Admission and Initial Registration

Admission and initial registration is contingent on completion of the following requirements:

1. Acceptance Packet
2. Negative Drug Screen
3. Acceptable Background Check
4. All Health Requirements as outlined in the Medical Documents Manager

Notification of missing documents will be sent to your JagMail email account. Only students who have successfully completed the Acceptance packet in its entirety, have a negative drug screen and acceptable

background check, and completed all required portions of the Medical Documents Manager will be permitted to register for classes.

## Application Deadlines

- Fall Semester Deadline is March 15
- Spring Semester Deadline is August 1

In keeping with the dynamic changes in the nursing and health field, the baccalaureate curriculum may undergo change. Changes in curricula and/or admission requirements will be published as far in advance as possible. Advisors are available to assist students in adapting to those changes and planning their course of study accordingly. Applicants must meet with their advisor before applying to the Professional Component.

## Veteran's Policy For College of Nursing

The College of Nursing commits to accept students from the Veteran population into the Bachelor of Science programs. The CON will accept five Veteran students into the traditional program and two Veteran students into the accelerated program each semester. Veteran students must apply for the program and meet the general admission requirements. Veteran Students must also provide documentation verifying veteran status. If there are no veteran students available to take these seats, the seats will go to the general population of student applicants.

## Academic Partnership Between The University of South Alabama Department of Military Science And Leadership (Army ROTC) And Department of Nursing

1. Both the Department of Nursing and Army ROTC will actively recruit qualified nursing candidates for joint enrollment. Both programs will actively supervise and mentor enrolled ROTC will actively supervise and mentor enrolled ROTC Nurse Cadets and will keep each other informed of candidate's progress.
2. The Department of Nursing will accept two Army ROTC Nurse Cadets annually into the BSN programs, if they meet the Department of Nursing's academic acceptance requirements.
3. The Department of Nursing will provide a dedicated nursing academic advisor for all ROTC Nurse Cadets. This academic advisor will act as faculty liaison between the departments.
4. All Army ROTC Nursing Cadets will be required to participate in the nursing department's clinical training throughout the nursing nursing program with no resistance from the ROTC department.
5. Army ROTC will provide opportunities per academic year in the Army's Nurse Summer Training Program (NSTP), a summer internship/preceptorship offered at Army hospitals in the U.S. and overseas, typically between junior and senior years.

## Academic Progression Policy for Accelerated BSN

The University of South Alabama College of Nursing will recommend for promotion only those students who, in the judgment of the faculty, satisfy the requirements of emotional and physical health, conduct, scholastic achievement, and aptitude for nursing. Students continually in adjustment difficulties may be dropped from the nursing program.

1. A grade of "C" or higher is required for all nursing courses. A student may only repeat on failed nursing course.

2. Student receiving a failing grade in either a didactic course or a clinical course that are co-requisites must repeat both courses the following semester to progress in the program.
3. Students at risk of failing a didactic course or clinical course at midterm (course average 68% or below) must make an appointment and meet with an academic advisor.
4. Accelerated students earning a first grade of "D", "F", or "U" are advised regarding the benefit of moving to the traditional BSN program.
5. A second "D", "F", or "U" will result in an academic dismissal from the College of Nursing. Students who are academically dismissed may apply one time for readmission to the Traditional BSN program only.
6. A minimum cumulative GPA of 2.0 at USA is required to continue in the nursing program. Students with a GPA below 2.0 may not register for nursing courses.
7. A dosage calculation test is required prior to promotion to NU 300/NU 301, MCN 352/MCN 353, MCN 354/MCN 355, AHN 447/AHN 448, and NU 460. A score of 100% on one of three attempts or successful completion of standards based grading opportunities must be achieved to pass.
8. After completion of the ATI Capstone course embedded into NU 412, all students are required to complete the ATI RN Comprehensive Predictor. The ATI Capstone course will be a component of NU 412. If the student does not score at least 72% on the ATI RN Comprehensive Predictor, the student will be required to complete the Virtual ATI review course. Upon successful completion of a prescribed number of modules in Virtual ATI, a grade of Satisfactory (S) will be given for the course. If the required Virtual ATI is not completed by the end of the semester, a grade of Incomplete (I) will be given. Once the student has completed required Virtual ATI, the grade will be changed to Satisfactory (S) for the course. Failure to complete the virtual ATI requirements as stated in the syllabus by the end of the following semester will result in a grade of Unsatisfactory (U) for the course.
9. Failure to show good ethical and moral character including but not limited to any of the following may result in dismissal from the program:
  - a. conviction of a crime,
  - b. disciplinary action against a nursing license in Alabama or any other state,
  - c. positive drug test,
  - d. adverse background check, or
  - e. disruptive behavior including online behavior.  
All students must notify the Associate Dean for Academic Affairs or the Dean of the College of Nursing immediately or no later than 48 hours of any of the above stated incidents.
10. All students must notify the Associate Dean for Academic Affairs or the Dean of the College of Nursing immediately or no later than 48 hours following an arrest. Failure to report an arrest may result in removal of the program.

11. All students are subject to testing for controlled substances and must submit to random drug testing as requested. A positive test or refusal to submit to testing will result in removal from the program.
12. All students are subject to a background check and must submit to additional background checks as requested. An adverse finding or refusal to submit to a background check may result in removal from the program.
13. Once students are admitted to the professional component of the BSN curriculum, the program must be completed within 5 years. If a student's progression is interrupted for any reason, it is the student's responsibility to contact the Office of Student Services and apply for readmission. Students are readmitted on a space-available basis. Any alteration in usual progression may lengthen the student's program. In keeping with dynamic changes in health care and nursing, the curriculum may undergo change. Changes in curricula and/or admission requirements will be published as far in advance as possible. Advisors are available to assist students in adapting to those changes and planning their course of study accordingly.

## Readmission Policy

Students who are academically dismissed from the Accelerated BSN program may apply for readmission one time. Students may only apply to the Traditional BSN program after an academic dismissal from the program. If selected for readmission after dismissal, students may only be readmitted one time. One additional failure after readmission will be cause for final dismissal from the College of Nursing.

## Uniform Policy

The Uniform policy is provided to students at the time of admission.

## Clinical Attendance

Students will be expected to attend clinical as scheduled. Some courses may require more than 20 hours per week of clinical attendance. Clinical orientation is mandatory.

## Graduation Requirements

Accelerated BSN students who will complete all degree requirements are required to apply for graduation by the application deadline established by the Registrar's Office. Deadlines for each semester application are located on the Registrar's Graduation Website (<https://www.southalabama.edu/departments/registrar/commencement/>).

## Eligibility For National Licensure

Graduates are eligible and prepared to complete the National Council Licensure Examination (NCLEX-RN exam) (<https://www.ncsbn.org/membership/us-members/contact-bon.page>) and apply for licensure to practice as a Registered Nurse and to continue with graduate study. The program meets state educational requirements for licensure in Alabama and all other states in the U.S. and its territory.

# Nursing (BSN) - RN-BSN

## Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 682)		59
<b>Major Requirements</b>		

### Nursing RN to BSN Major Core

A. Complete the following:

NU 450	Lead/Mang Roles Prof Nsg Pra-W	4
NU 451	Current Issues/Trends Prof Nsg	4
NU 452	Clinical Preven & Pop Health	4
NU 453	Infor Manag & Tech in Hlthcare	4
NU 454	Research & EBP Practicum-W	4
NU 455	Concept Interprofessional Care	4

### RN Nursing Credit Hours Awarded

Courses awarded for RN Education and Experience upon completion of degree requirements

AHN 447	Adult Gerontological Nursing	4
AHN 448	Adult Gerontological Nsg Clin	4
CMN 350	Psy-Mental Health Nsg	2
CMN 351	Psy-Mental Health Nsg Clin	2
MCN 352	OB & GYN Nursing Care	2
MCN 353	OB & GYN Nsg Care Clinical	2
MCN 354	Pediatric Nursing Care	2
MCN 355	Pediatric Nsg Care Clinical	2
NU 300	Foundations of Prof Nsg	5
NU 301	Foundations of Prof Nsg Clin	3
NU 332	Clinical Nutrition	2
NU 325B	Health Assessment	3
NU 327B	Patho Basis of Nursing	3
HSC 343B	Clinical Pharmacology	3

### Minor Requirements

A minor is not required for this degree program	0
<b>Total Hours</b>	<b>122</b>

## General Education Requirements

**Gen Ed Formatting Note: Graduate of an Associate Degree in Nursing**

Code	Title	Hours
<b>Area I – Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
EH 102	English Composition II	3
<b>Area II – Humanities &amp; Fine Arts</b>		
A. Select one of the following Literature Electives:		3
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
B. Select one of the following Fine Arts (Music, Drama, or Art) Courses:		3
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	

C. Select six hours from the following Humanities Electives (Literature for sequence, Philosophy, Foreign Language, Music, Art, Drama, Public Speaking, or Religion): 6

AFR 101	Intro to African Amer Studies
ARH 100	Survey of Art
ARH 103	Art History I
ARH 123	Art History II
ARH 203	Survey of Non-Western Art
ARS 101	Art Appreciation
CA 110	Public Speaking
CLA 110	Intro Anc Greek Roman Culture
DRA 110	Introduction to Theatre
EH 215	Brit Lit before 1785
EH 216	Brit Lit after 1785
EH 225	Am Lit before 1865
EH 226	Am Lit after 1865
EH 235	World Lit before 1650
EH 236	World Lit after 1650
LG 101	Introductory Latin I
LG 102	Introductory Latin II
LG 111	Introductory French I
LG 112	Introductory French II
LG 121	Introductory Chinese I
LG 122	Introductory Chinese II
LG 131	Introductory Spanish I
LG 132	Introductory Spanish II
LG 141	Intro Classical Greek I
LG 142	Intro Classical Greek II
LG 151	Introductory German I
LG 152	Introductory German II
LG 153	Accelerated Intro German
LG 171	Introductory Russian I
LG 172	Introductory Russian II
LG 173	Accelerated Intro Russian
LG 201	Intermediate Latin I
LG 202	Intermediate Latin II
LG 211	Intermediate French I
LG 212	Intermediate French II
LG 213	Accelerated Inter French - H
LG 221	Intermediate Chinese I
LG 222	Intermediate Chinese II
LG 231	Intermediate Spanish I
LG 232	Intermediate Spanish II
LG 234	Inter Spanish Accel -H
LG 241	Interm Classical Greek I
LG 242	Interm Classical Greek II
LG 251	Intermediate German I
LG 252	Intermediate German II
LG 271	Intermediate Russian I
LG 272	Intermediate Russian II
LG 273	Intensive Second Year Russian
LGS 101	Introductory Japanese I

LGS 102	Introductory Japanese II
LGS 106	Introductory Arabic I
LGS 107	Introductory Arabic II
LGS 110	Intro American Sign Language I
LGS 111	Intro American Sign Lang II
LGS 171	Introductory Korean I
LGS 172	Introductory Korean II
LGS 201	Intermediate Japanese I
LGS 202	Intermediate Japanese II
LGS 206	Intermediate Arabic I
LGS 207	Intermediate Arabic II
LGS 210	Intermediate ASL I
LGS 211	Intermediate ASL II
MUL 101	Introduction to Music
PHL 110	Introduction to Philosophy
PHL 120	Critical Thinking
PHL 121	Introduction to Logic
PHL 131	Introduction to Ethics
PHL 231	Social Ethics
PHL 240	Western Philosophy: Classical
REL 100	Intro to the Study of Religion
REL 200	Old Testament/Hebrew Bible
REL 201	Survey of the New Testament

### Area III – Natural Sciences & Mathematics

A. Select one of the following (College Algebra, Finite Math, or Pre-Calculus): 3

MA 110	Finite Mathematics
MA 112	Precalculus Algebra
MA 113	Precalculus Trigonometry
MA 115	Precal Algebra-Trigonometry
MA 120	Calculus and Its Applications
MA 125	Calculus I
MA 126	Calculus II
MA 227	Calculus III
MA 237	Linear Algebra I
MA 238	Differential Equations I

B. Select either Chemistry with Lab or Biology with a Lab: 4

BLY 101 & 101L	Life Science I and Life Science I Laboratory
BLY 121 & 121L	General Biology I and General Biology I Lab
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab
CH 131 & 131L	General Chemistry I and General Chemistry I Lab
CH 132 & 132L	General Chemistry II and General Chemistry II Lab

C. Select a Second Natural Science with a Lab (Biology, Chemistry, Geology, Physics, or Astronomy): 4

AN 121 & 121L	Biological Anthropology and Biological Anthropology Lab
BLY 102 & 102L	Life Science II and Life Science II Lab

or BLY 122 & 122L	General Biology II and General Biology II Laboratory	
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	
GY 111 & 111L	Physical Geology and Physical Geology Lab	
GY 112 & 112L	Earth History and Earth History Lab	
MAS 134 & 134L	Ocean Science and Ocean Science Lab	
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab	
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory	
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab	
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab	
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	

**Area IV – History, Social & Behavioral Sciences**

A. Select one of the following Psychology Courses:		
PSY 120 or PSY 250	Introduction to Psychology Life Span Development	3
B. Select one of the following History Electives:		
HY 101	HY of Western Civilization I	3
HY 102	HY of Western Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
C. Select two of the following History/Social/Behavioral Science Electives:		
AN 100	Intro to Cultural Anthropology	6
AN 101	Intro Archaeology-Bio Anthro	
CA 100	Intro to Communication	
CA 211	Interpersonal Comm	
CJ 105	Introduction to Criminal Justice	
ECO 215	Prin of Microeconomics	
ECO 216	Prin of Macroeconomics	
GEO 114	People, Places, Environment	
GEO 115	World Regional Geography	
GS 101	Intro to Gender Studies	
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
IS 100	Global Issues	
IST 201	Seasons of Life	
NAS 101	Intro Native American Studies	
PSC 130	Intro to US Government	
PSY 120	Introduction to Psychology	

PSY 250	Life Span Development	
SY 109	Introductory Sociology	
SY 112	Social Problems	
<b>Area V</b>		
A. Select one of the following Microbiology Courses:		4
BLY 213 & BLY 214	Microbiology and Lab Studies Microbiology	
BMD 210 & 210L	Microbiology in Healthcare and Microbiology in Healthcare Lab	
B. Complete the following Human Anatomy & Physiology Courses:		
BMD 251	Human Anatomy & Physiology I	4
BMD 252	Human Anatomy & Physiology II	4
C. Select one of the following Statistics Courses:		3
ST 210	Stat Reason and Application	
BUS 245	Data Analytics I	
PSY 220 ST 305	Res Design and Analysis I Applied Stat Health Sciences	
D. Select one of the following Computer Courses:		
CIS 140 or CIS 150 or CIS 010	Intro to Tech for Healthcare (see footnote table below (p. 684)) Intro to Computer Applications Computer Proficiency Exam	3
<b>Total Hours</b>		<b>59</b>

**Footnote**

<sup>1</sup> Students who complete CIS 010 Computer Proficiency Exam, must replace the credit hours with a 3 credit hour computer course.

**Notes:**

All undergraduates must complete two designated writing credit (W) courses, at least one of which must be in the student's major or minor.

**Additional Information****RN to BSN Pathway for Associate Degree and Diploma Nurses**

The College of Nursing has a Pathway designed especially for registered nurses pursuing the Bachelor of Science in Nursing Degree. The RN to BSN Prerequisites consist of eighteen (18) courses, totaling 59 semester credit hours. These general education courses may be completed at any regionally accredited institution. They must be successfully completed before admission to the Professional Component. It is the policy of the College of Nursing to average grades for all coursework repeated.

**Online RN to BSN Professional Component**

- The Professional Component consists of six (6) fully online nursing courses for a total of 24 Credit hours.
- These courses must be completed at the University of South Alabama.
- Upper division nursing courses taken at another institution will not transfer or apply toward the 24 Credit hours required to earn the BSN degree at USA.

4. Students proceed through the six online nursing courses at their desired pace.
5. The Professional Component may be completed in a minimum of two (2) semesters.
6. The Professional Component must be completed within five (5) years of beginning the BSN curriculum.
7. Thirty credit hours of nursing credit are awarded the semester students graduate.
8. Nine credit hours are applied as residential credit during the final semester of the pathway.

### Admission Criteria for RN-BSN Pathways

1. Citizen or Permanent Resident of the United States of America.
2. Current registered nurse licensure with no restrictions. Nurses with any restrictions on their license, including participation in a voluntary disciplinary alternative program, cannot be admitted.
3. Completion of an accredited diploma or associate degree in nursing. Degrees must be from a regionally accredited institution
4. Complete all eighteen (18) required pre-requisite courses at a regionally accredited school. These 59 Credit hours of general education courses are in addition to the nursing courses completed to become a Registered Nurse.
5. Minimum grade of "C" in all pre-requisite courses.
6. Minimum GPA of 2.5 on all prerequisite courses.
7. Minimum University GPA of 2.0 and be in good standing within the University or previous college.

### Application Procedures

RN to BSN applicants are required to complete a Primary Application in NursingCAS, as well as a supplemental application available on the College of Nursing's website. Students who drop out of the program for two or more consecutive semesters must apply for readmission through the Office of the Admission. Readmission is not automatic.

### Admission Procedures For RN-BSN Pathway

Completion of Primary and Supplemental Applications are required for admission.

1. Admission to the University of South Alabama requires the submission of a completed application to the University of South Alabama (<https://www.southalabama.edu/departments/admissions/applytousa.html>) along with official transcripts from all colleges and schools you have attended.
2. Supplemental Application ([https://secure.touchnet.net/C21704\\_ustores/web/store\\_main.jsp?STOREID=48&SINGLESTORE=true](https://secure.touchnet.net/C21704_ustores/web/store_main.jsp?STOREID=48&SINGLESTORE=true)) submitted online. This application requires a non-refundable processing fee of \$50.00, by the deadline. Application can be submitted via credit or debit card. There is a \$20.00 fee for non-sufficient funds.

### Contingency for Admission and Initial Registration

Admission and initial registration is contingent on completion of the following requirements:

1. Acceptance Packet
2. Negative Drug Screen
3. Acceptable Background Check
4. All Health Requirements as outlined in the Medical Documents Manager.

Notification of missing documents will be sent to your JagMail email account. Only students who have successfully completed the Acceptance Packet in its entirety, have a negative drug screen and acceptable background check, and completed all required portions of the Medical Documents Manager will be permitted to register for classes.

### Application Deadline

- Fall Semester Deadline is March 15
- Spring Semester Deadline is July 15
- Summer Semester Deadline is March 1

The deadlines for admission to RN-BSN program are rolling. Applications will be accepted past the stated deadline for the RN-BSN pathway.

### Academic Progression Policy for RN-BSN

The University of South Alabama College of Nursing will recommend for promotion only those students who, in the judgment of the faculty, satisfy the requirements of emotional and physical health, conduct, scholastic achievement, and aptitude for nursing.

1. In accordance with University policy, students may not use the Grade Replacement Policy to replace professional nursing courses.
2. A grade of "C" or higher is required for all professional nursing courses. A student may repeat only one nursing course in the curriculum. A second "D", "F", or "U" will result in an academic dismissal from the nursing program. Students who are academically dismissed may not return to the RN-BSN program.
3. A minimum GPA of 2.0 at the University of South Alabama is required to continue in the program and for graduation.
4. Students in the RN-BSN program must maintain a minimum cumulative GPA of 3.0 on all work attempted in the program at USA.
5. Failure to show good ethical and moral character including but not limited to any of the following may result in dismissal from the program:

conviction of a crime,

disciplinary action against a nursing license in Alabama or any other state,

positive drug screen,

adverse background check, or

disruptive behavior including online behavior.

6. All students must notify the Associate Dean for Academic Affairs or the Dean of the College of Nursing immediately or no later than 48 hours of any of the above stated incidents.

7. All students must notify the Associate Dean for Academic Affairs or the Dean of the College of Nursing immediately or no later than 48 hours following an arrest. Failure to report an arrest may result in removal from the program.

8. All students are subject to testing for controlled substances and must submit to random drug testing as requested. A positive test or refusal to submit to testing will result in removal from the program.

9. All students are subject to a background check and must submit to additional background checks as requested. An adverse finding or refusal to submit to testing will result in removal from the program.

10. Students must complete the RN-BSN program with 5 years. If a student's progression is interrupted for any reason, it is the student's responsibility to contact the Office of Student Services.

Revised May 10, 2023

## Readmission Policy

Students who are academically dismissed from the RN-BSN program may apply for readmission. If selected for readmission after dismissal, students may only be readmitted one time. Students readmitted to the online pathway will be required to repeat courses in which they were not successful. Students who make one D grade or lower will be dismissed and be ineligible to reapply to the program. One additional failure after readmission will be cause for final dismissal from the College of Nursing.

## Graduation

RN-BSN students who will complete all BSN degree requirements are required to apply for graduation by the application deadline established by the Registrar's Office. Deadlines for each semester application are located on the Registrar's Graduation Website (<https://www.southalabama.edu/departments/registrar/commencement/>).

# Nursing (BSN) - Traditional Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 686)		62
<b>Major Requirements</b>		
<i>Nursing (BS) Major Core</i>		
A. Complete the following:		
HSC 342	Administration of Medication	1
HSC 343	Clinical Pharmacology	3
NU 300	Foundations of Prof Nsg	5
NU 301	Foundations of Prof Nsg Clin	3
NU 304	Evidence Based Practice NU- W	3
NU 325	Health Assessment	3
NU 327	Patho Basis of Nursing	3
NU 311	Clinical Nursing Skills	3
NU 332	Clinical Nutrition	2
AHN 447	Adult Gerontological Nursing	4
AHN 448	Adult Gerontological Nsg Clin	4

CMN 350	Psy-Mental Health Nsg	2
CMN 351	Psy-Mental Health Nsg Clin	2
CMN 420	Community Health Nursing	3
CMN 421	Community Health Nurs Clinical	1
MCN 352	OB & GYN Nursing Care	2
MCN 353	OB & GYN Nsg Care Clinical	2
MCN 354	Pediatric Nursing Care	2
MCN 355	Pediatric Nsg Care Clinical	2
NU 412	Dec Making Prof Nsg Practice	3
NU 414	Issues & Trends Healthcare -W	3
NU 460	Practicum	6
<b>Minor Requirements</b>		
A minor is not required for this degree program		0
<b>Total Hours</b>		<b>124</b>

## General Education Requirements

Code	Title	Hours
<b>Area I – Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II – Humanities &amp; Fine Arts</b>		
A. Complete the following:		
CA 110	Public Speaking	3
B. Select one of the following Literature Courses: ( <a href="http://bulletin.southalabama.edu/programs-az/nursing/nursing/footnote1/">http://bulletin.southalabama.edu/programs-az/nursing/nursing/footnote1/</a> ) <sup>1</sup>		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
C. Select one of the following Fine Arts Courses:		
ARH 100	Survey of Art	3
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	
D. Select one of the following Humanities Electives:		
AFR 101	Intro to African Amer Studies	3
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARH 203	Survey of Non-Western Art	
ARS 101	Art Appreciation	
CLA 110	Intro Anc Greek Roman Culture	
DRA 110	Introduction to Theatre	
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	



BLY 213 & BLY 214 or BMD 210 & 210L	Microbiology and Lab Studies Microbiology Microbiology in Healthcare and Microbiology in Healthcare Lab	4
B. Complete the following Human Anatomy & Physiology Courses:		
BMD 251	Human Anatomy & Physiology I	4
BMD 252	Human Anatomy & Physiology II	4
C. Select one of the following Statistic Courses:		
ST 210	Stat Reason and Application	3
BUS 245	Data Analytics I	
PSY 220	Res Design and Analysis I	
ST 305	Applied Stat Health Sciences	
D. Select one of the following Computer Courses:		
CIS 140 or CIS 150	Intro to Tech for Healthcare <sup>3</sup> Intro to Computer Applications	3
E. Select one of the following Economics Courses:		
ECO 215 or ECO 216	Prin of Microeconomics Prin of Macroeconomics	3
<b>Total Hours</b>		<b>62</b>

### Footnote

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 135 & HY 136)

<sup>2</sup> PSY 120 is required

All undergraduates must complete two designated writing credit (W) courses, at least one of which must be in the student's major or minor.

## Additional Information

### Bachelor of Science in Nursing Program (BSN)

The BSN program prepares graduates for professional nursing practice. Upon completion of the program graduates are eligible to apply for the National Council Licensure Examination (NCLEX) to become licensed as a Registered Nurse.

The BSN program is offered in a traditional four-year format with nursing courses concentrated in the junior and senior years. The BSN program is also offered in an accelerated format for Associate Degree and diploma-prepared nurses.

### BSN Program Learning Outcomes

Upon completion of the Baccalaureate Program, graduates should be able to:

1. Deliver professional nursing care for diverse populations across the lifespan to optimize health care outcomes.
2. Demonstrate the application of theory and evidence from contemporary nursing science and related disciplines as a basis for clinical reasoning, management, and evaluation of professional nursing care through the use of professional writing and clinical judgment.
3. Model responsibility and accountability for one's personal and delegated nursing care and lifelong learning to ensure excellence in nursing practice.

4. Translate evidence into professional nursing practice to individualize patient care designed to improve care outcomes.
5. Select principles of leadership and management that guide nursing, influence health policy, and transform health care delivery systems.
6. Collaborate with inter-professional health care teams and consumers in delivering and advocating for safe and effective use of health care resources.
7. Integrate professional nursing values in meeting current and emerging health needs in a dynamic, global society.
8. Evaluate effective use of technology and information management to provide patient-centered care across the lifespan in a variety of environments.

### Bachelor of Science in Nursing – Traditional Pathway

Students wishing to complete the Bachelor of Science in Nursing degree who have not completed a prior bachelor degree, may apply to the University of South Alabama as a pre-nursing student. Upon completion of the pre-nursing requirements, students may apply for admission to the Professional Component of the Traditional BSN Pathway.

### Admission Criteria

1. A minimum prerequisite GPA of 2.75 on all prerequisite courses for the Traditional Pathway.
2. A minimum prerequisite GPA of 2.9 on all Math and Science courses.
3. A minimum grade of "C" in all prerequisite courses.
4. A minimum University of South Alabama GPA of 2.5 and be in good standing within the University.
5. Students dismissed from a previous nursing program may be considered as follows:
  - a. Admission will only be considered for the Traditional BSN program.
  - b. Students will compete for a seat among all other applicants to the program.
  - c. All previous nursing courses will be evaluated and accepted based on college and University requirements.

### Application Procedures

Applicants must submit an application for admission to the Professional Component of the BSN degree program. The application form is available on the College of Nursing's website. Applications are reviewed carefully to determine that students have satisfied all pre-nursing requirements, and satisfy the requirements of emotional and physical health, conduct, scholastic achievement, and aptitude for nursing. The College of Nursing Admissions Committee and the Dean of the College of Nursing reserve the right to select the applicants best qualified for and most likely to succeed in the study of nursing. Failure to comply with legal, moral, and legislative standards for licensure to practice as a registered nurse in the State of Alabama merits immediate dismissal from the nursing program.

1. Admission to the University of South Alabama requires the submission of a completed application to the University of South Alabama (<https://www.southalabama.edu/departments/admissions/>)

applytousa.html) along with official transcripts from all colleges and schools you have attended, if you are not a current student at South.

2. Online submission of Traditional BSN Application ([https://secure.touchnet.net/C21704\\_ustores/web/store\\_main.jsp?STOREID=47&SINGLESTORE=true](https://secure.touchnet.net/C21704_ustores/web/store_main.jsp?STOREID=47&SINGLESTORE=true)) to the College of Nursing is required.
3. Payment of \$50 non-refundable application fee via debit or credit card. There is a \$20.00 fee for non-sufficient funds.
4. Transfer credit must comply with College of Nursing policies.
5. Submit unofficial transcripts from other universities to the College of Nursing via email (conbsn@southalabama.edu (<http://bulletin.southalabama.edu/programs-az/nursing/nursing/nursing-bsn-traditional/conbsn@southalabama.edu>)) for review of prerequisite courses.
6. Students who have attended a Nursing program at another school are required to provide the following to the College of Nursing email at conbsn@southalabama.edu (<http://bulletin.southalabama.edu/programs-az/nursing/nursing/nursing-bsn-traditional/conbsn@southalabama.edu>)
  - a. Letter of Good Standing (verifying student was in good moral, ethical, and legal standing with no previous disciplinary action) from the Nursing Program, signed by the Nursing Administrator of the program
  - b. Transcript of all nursing courses taken with the grades earned
  - c. Transfer credit will be considered upon review of course syllabi

## Contingency for Admission and Initial Registration

Admission and initial registration is contingent on completion of the following requirements.

1. Acceptance Packet
2. Negative Drug Screen
3. Acceptable Background Check
4. All Health Requirements as outlined in the Medical Documents Manager.

Notification of missing documents will be sent to your JagMail email account. Only students who have successfully completed the Acceptance Packet in its entirety, have a negative drug screen and acceptable background check, and completed all required portions of the Medical Documents Manager will be permitted to register for classes.

## Application Deadlines

- Fall Semester Deadline is March 15
- Spring Semester Deadline is July 15
- Summer Semester Deadline is March 1

In keeping with the dynamic changes in nursing and healthcare field, the baccalaureate curriculum may undergo change. Changes in curricula and/or admission requirements will be published as far in advance as possible. Advisors are available to assist students in adapting to those changes and planning their course of study accordingly.

## College of Nursing Early Acceptance Program (CONEAP) High School Early Acceptance

The College of Nursing has an early acceptance program for highly qualified high school seniors who demonstrate leadership qualities and motivation toward the study of nursing. Students participating in the early acceptance program are guaranteed admission to the upper division professional component of the nursing curriculum when they meet the following requirements. Students who meet early acceptance requirements must also submit a Traditional BSN Application to the Professional Component by the deadline on the Traditional BSN webpage that corresponds to the semester you wish to begin the Professional Component.

### Academic Requirements

1. Have a minimum high school GPA of 3.5 based on 4.0 scale as computed by USA Office of Admissions
2. Submit an ACT score of at least 22 composite (or 1100 SAT).
3. Apply for admission to USA.
4. Apply for admission to the Professional Component of the BSN program.

### Upon Admission to USA - Student Requirements

1. USA students must maintain a minimum GPA of 3.2 on all coursework, as computed by the USA Office of Admissions, before entering the professional component.
2. Students are encouraged to complete all pre-professional nursing courses at USA.
3. Make a grade of C or better on all final grades.
4. Must be continuously enrolled in a minimum of 12 credit hours each semester (No minimal credit hour requirement for summer semesters).
5. Be approved by the Associate Dean for Academic Affairs for the College of Nursing.

The College of Nursing priority deadline for the High School Early Acceptance Program is February 15th. Early admission is determined upon receipt of an application to the University of South Alabama for admission to the pre-nursing program. Applications received at other times will be considered on a space available basis. For questions and applications, contact:

USA Admissions  
2500 Meisler Hall  
Mobile, Alabama 36688-0002  
or call (800) 872-5247 or (251) 460-6141

### Freshman Early Acceptance

A second opportunity for participation in the CONEAP is available to students who have completed their freshman year of pre-nursing prerequisite courses at USA and have achieved an overall GPA of 3.2 or above (as computed by the USA Registrar's Office). Students who meet early acceptance requirements must also submit a Traditional BSN Application to the Professional Component by the deadline on the Traditional BSN webpage that corresponds to the semester you wish to begin the Professional Component.

### Academic Requirements

Applicants must:

1. Have a minimum GPA of 3.2 on all coursework completed at USA, as computed by the USA Office of Admissions
2. Complete the freshman year of college

3. Complete the following courses: BLY 101 with Lab, MA 110 or 112, and CH 101 with Lab
4. Maintain a 3.2 GPA throughout all coursework.
5. Make a grade of C or better on all final grades.
6. Apply for admission to the Professional Component of the BSN program.
7. Be approved by the Associate Dean for Academic Affairs for the College of Nursing

Freshman Early Admission Application Form ([https://docs.google.com/forms/d/e/1FAIpQLSedUCjTFFLH3UfmoOfQOV0D8wakD9C8EFew8N4LD4\\_q2YPLA/viewform/](https://docs.google.com/forms/d/e/1FAIpQLSedUCjTFFLH3UfmoOfQOV0D8wakD9C8EFew8N4LD4_q2YPLA/viewform/)) - Return by August 1st.

## Veteran's Policy for College of Nursing

The College of Nursing commits to accept students from the Veteran population into the Bachelor of Science programs. The CON will accept five Veteran students into the traditional program and two Veteran students into the accelerated program each semester. Veteran students must apply for the program and meet the general admission requirements. Veteran students must also provide documentation verifying veteran status. If there are no veteran students available to take these seats, the seats will go to the general population of student applicants.

## Academic Partnership Between The University Of South Alabama Department Of Military Science And Leadership (Army ROTC) And Department Of Nursing

1. Both the Department of Nursing and Army ROTC will actively recruit qualified nursing candidates for joint enrollment. Both programs will actively supervise and mentor enrolled ROTC Nurse Cadets and will keep each other informed of candidate's progress.
2. The Department of Nursing will accept two Army ROTC Nurse Cadets annually into the BSN nursing programs, if they meet the Department of Nursing's academic acceptance requirements.
3. The Department of Nursing will provide a dedicated nursing academic advisor for all ROTC Nurse Cadets. This academic advisor will act as faculty liaison between the departments.
4. All Army ROTC Nursing Cadets will be required to participate in the nursing department's clinical training throughout the nursing program with no resistance from the ROTC department.
5. Army ROTC will provide opportunities per academic year in the Army's Nurse Summer Training Program (NSTP), a summer internship/preceptorship offered at Army hospitals in the U.S. and overseas, typically between junior and senior years.

## Nursing Honors

The College of Nursing has two paths to attaining honors designation upon graduation: 1) University Honors in Nursing and 2) Departmental Honors in Nursing. Students admitted to the Honors College at any time prior to beginning the nursing program are automatically accepted into Nursing Honors. University Honors students must maintain all requirements set forth by the Honors College for graduation with the honors designation. University Honors students are required to complete additional upper division courses. Students are encouraged to meet with an Honors College advisor and a Nursing advisor to ensure attainment of requirements needed to receive the Honors designation.

For students with strong academic backgrounds who desire to participate in honors research, Departmental Honors is offered for

students who desire to add honors coursework after starting the Nursing professional component.

Honors students are required to complete additional upper division courses. Students are not allowed to take nursing honors courses until the second semester of nursing. Departmental Honors students may apply for honors during or after the first semester of nursing; however, the student must have enough time left in the program to complete two full-term semesters of honors courses.

## Academic Progression Policy

The University of South Alabama College of Nursing will recommend for promotion only those students who, in the judgment of the faculty, satisfy the requirements of emotional and physical health, conduct, scholastic achievement, and aptitude for nursing. Students continually in adjustment difficulties may be dropped from the nursing program.

1. A grade of "C" or higher is required for all nursing courses. A student may only repeat one nursing course. Students retaking a course must take NU 302 Essentials of Professional Nursing at the same time.
2. Students receiving a failing grade in either a didactic course or a clinical course that are co-requisites must repeat both courses the following semester to progress in the program.
3. Students at risk of failing a didactic course or clinical course at midterm (course average 68% or below) must make an appointment and meet with an academic advisor.
4. A second "D", "F", or "U" will result in an academic dismissal from the College of Nursing. Students who are dismissed may apply one time for readmission to the Traditional BSN program only.
5. A minimum cumulative GPA of 2.0 at USA is required to continue in the nursing program. Students with a GPA below 2.0 may not register for nursing courses.
6. A dosage calculation test is required in NU 300/301, MCN 352/353, MCN 352/353/354/355, and AHN 447/448 and NU 460. A score of 100% on one of three attempts or successful completion of standards-based grading opportunities must be achieved to pass.
7. After completion of the ATI Capstone course embedded into NU 412, all students are required to complete the ATI RN Comprehensive Predictor. If the student is unsuccessful on the ATI RN Comprehensive Predictor, the faculty-selected NCLEX remediation questions will be assigned with completion necessary to pass the course. All students, regardless of ATI RN Comprehensive Predictor performance, are also required to attend the 3-day ATI Live Review given on campus each semester. Failure to complete the ATI Capstone course, ATI RN Comprehensive Predictor and/or remediation, other course requirements as stated in the syllabus, and attend the ATI Live Review will result in a grade of Unsatisfactory (U) for the NU 412 course. If a grade of U is earned, the student must repeat NU 412 the next term. If the student does not score at least 72% on the ATI RN Comprehensive Predictor, the student will be required to purchase the Virtual ATI review course. Upon successful completion of a prescribed number of modules in Virtual ATI, a grade of Satisfactory (S) will be given for the course. If the required Virtual ATI is not completed by the end of the semester, a grade of Incomplete (I) will be given. Once the student has completed the required Virtual ATI, the grade will be changed to Satisfactory (S) for the course. Failure to complete virtual ATI requirements as stated in the syllabus by the end of the following semester will result in a grade of Unsatisfactory (U) for the course.

8. Failure to show good ethical and moral character including but not limited to any of the following may result in dismissal from the program:
  - a. conviction of a crime,
  - b. disciplinary action against a nursing license in Alabama or any other state,
  - c. positive drug test,
  - d. adverse background check, or
  - e. disruptive behavior including online behavior. All students must notify the Associate Dean for Academic Affairs or the Dean of the College of Nursing immediately or no later than 48 hours of any of the above stated incidents.
9. All students must notify the Associate Dean for Academic Affairs or the Dean of the College of Nursing immediately or no later than 48 hours following an arrest. Failure to report an arrest may result in removal from the program.
10. All students are subject to testing for controlled substances and must submit to random drug testing as requested. A positive test or refusal to submit to testing will result in removal from the program.
11. All students are subject to a background check and must submit to additional background checks as requested. An adverse finding or refusal to submit to a background check may result in removal from the program.
12. Once students are admitted to the professional component of the curriculum the program must be completed within 5 years. If a student's progression is interrupted for any reason, it is the student's responsibility to contact the Office of Student Services and apply for readmission. Students are readmitted on a space-available basis. Any alteration in usual progression may lengthen the student's program. In keeping with dynamic changes in healthcare and nursing, the curriculum may undergo change. Changes in curricula and/or admission requirements will be published as far in advance as possible.

#### Readmission Policy

Students who are academically dismissed from the Traditional BSN program may apply for readmission one time. Students may only apply to the Traditional BSN program after an academic dismissal from the program. If selected for readmission after dismissal, students may only be readmitted one time. One additional failure after readmission will be cause for final dismissal from the College of Nursing.

### Uniform Policy

The Uniform policy is provided to students at the time of admission.

### Clinical Attendance

Students will be expected to attend clinical as scheduled. Some courses may require more than 20 hours per week of clinical attendance. Clinical orientation is mandatory.

### Graduation Requirements

Traditional BSN students who will complete all degree requirements are required to apply for graduation by the application deadline established by the Registrar's Office. Deadlines for each semester application are located on the Registrar's Graduation Website (<https://www.southalabama.edu/departments/registrar/commencement/>).

### Eligibility for National Licensure

Graduates are eligible and prepared to complete the National Council Licensure Examination (NCLEX-RN® exam) (<https://www.ncsbn.org/membership/us-members/contact-bon.page>) and apply for licensure to practice as a Registered Nurse and to continue with graduate study. The program meets state educational requirements for licensure in Alabama and all other states in the U.S. and its territory.

### Graduation Plan

Multiple Degree Plans Available. Select To View Option:

#### Nursing (BSN): Traditional for History Sequence

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I	3
MA 110 or MA 112	Finite Mathematics or Precalculus Algebra	3
BLY 101 & 101L	Life Science I and Life Science I Laboratory	4
HY 101 or HY 135	HY of Western Civilization I or US History to 1877	3
HSC 101 or NU 101	Interprofessional Freshman Sem or Freshman Seminar in Nursing	2
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab	4
EH 102	English Composition II	3
Area II, C	Fine Arts Elective <sup>1</sup>	3
PSY 120	Introduction to Psychology (Area IV, B) <sup>1,2</sup>	3
CA 110	Public Speaking	3
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
BMD 251	Human Anatomy & Physiology I	4
BLY 213 & BLY 214 or BMD 210 <i>and</i> BMD 210L	Microbiology or Microbiology in Healthcare <i>and</i> Microbiology in Healthcare Lab	4
Select one of the following:		3
EH 215	Brit Lit before 1785	
EH 225	Am Lit before 1865	
EH 235	World Lit before 1650	
Area II, D	Humanities Elective <sup>1</sup>	3
Select one of the following:		3
ST 210	Stat Reason and Application	
BUS 245	Data Analytics I	
PSY 220	Res Design and Analysis I	
ST 305	Applied Stat Health Sciences	
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
BMD 252	Human Anatomy & Physiology II	4
ECO 215 or ECO 216	Prin of Microeconomics or Prin of Macroeconomics	3
HY 102 or HY 136	HY of Western Civilization II or US History since 1877	3
CIS 140 or CIS 150	Intro to Tech for Healthcare or Intro to Computer Applications	3
Area IV, B	History, Social & Behavioral Sciences Elective <sup>1</sup>	3
<b>Hours</b>		<b>16</b>

Third Year		
<b>Fall</b>		
NU 325	Health Assessment	3
NU 327	Patho Basis of Nursing	3
HSC 343	Clinical Pharmacology	3
NU 311	Clinical Nursing Skills	3
NU 312		1
HSC 342	Administration of Medication	1
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
NU 300	Foundations of Prof Nsg	5
NU 301	Foundations of Prof Nsg Clin	3
CMN 350	Psy-Mental Health Nsg	2
CMN 351	Psy-Mental Health Nsg Clin	2
NU 304	Evidence Based Practice NU- W	3
<b>Hours</b>		<b>15</b>
<b>Summer</b>		
MCN 352	OB & GYN Nursing Care	2
MCN 353	OB & GYN Nsg Care Clinical	2
MCN 354	Pediatric Nursing Care	2
MCN 355	Pediatric Nsg Care Clinical	2
<b>Hours</b>		<b>8</b>
<b>Fourth Year</b>		
<b>Fall</b>		
AHN 447	Adult Gerontological Nursing	4
AHN 448	Adult Gerontological Nsg Clin	4
CMN 420	Community Health Nursing	3
CMN 421	Community Health Nurs Clinical	1
<b>Hours</b>		<b>12</b>
<b>Spring</b>		
NU 332	Clinical Nutrition	2
NU 412	Dec Making Prof Nsg Practice	3
NU 414	Issues & Trends Healthcare -W	3
NU 460	Practicum	5
<b>Hours</b>		<b>13</b>
<b>Total Hours</b>		<b>126</b>

<sup>1</sup> See General Education Requirements

<sup>2</sup> Recommended Course

## Nursing (BSN) : Traditional for Literature Sequence

120 Total Hours

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I	3
MA 110 or MA 112	Finite Mathematics or Precalculus Algebra	3
BLY 101 & 101L	Life Science I and Life Science I Laboratory	4
HY 101 or HY 135	HY of Western Civilization I or US History to 1877	3
HSC 101 or NU 101	Interprofessional Freshman Sem or Freshman Seminar in Nursing	2
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab	4
EH 102	English Composition II	3
Area II, C	Fine Arts Elective <sup>1</sup>	3
PSY 120	Introduction to Psychology (Area IV, B) <sup>1,2</sup>	3

CA 110	Public Speaking	3
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
BMD 251	Human Anatomy & Physiology I	4
BLY 213 & BLY 214 or BMD 210 <i>and</i> BMD 210L	Microbiology or Microbiology in Healthcare <i>and</i> Microbiology in Healthcare Lab	4
Select one of the following:		3
EH 215	Brit Lit before 1785	
EH 225	Am Lit before 1865	
EH 235	World Lit before 1650	
Area IV, B	History, Social & Behavioral Sciences Elective <sup>1</sup>	3
Select one of the following:		3
ST 210	Stat Reason and Application	
BUS 245	Data Analytics I	
PSY 220	Res Design and Analysis I	
ST 305	Applied Stat Health Sciences	
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
BMD 252	Human Anatomy & Physiology II	4
ECO 215 or ECO 216	Prin of Microeconomics or Prin of Macroeconomics	3
Select one of the following:		3
EH 216	Brit Lit after 1785	
EH 226	Am Lit after 1865	
EH 236	World Lit after 1650	
CIS 140 or CIS 150	Intro to Tech for Healthcare or Intro to Computer Applications	3
Area IV, B	History, Social & Behavioral Sciences Elective <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
NU 325	Health Assessment	3
NU 327	Patho Basis of Nursing	3
HSC 343	Clinical Pharmacology	3
NU 311	Clinical Nursing Skills	3
NU 312		1
HSC 342	Administration of Medication	1
<b>Hours</b>		<b>14</b>
<b>Spring</b>		
NU 300	Foundations of Prof Nsg	5
NU 301	Foundations of Prof Nsg Clin	3
CMN 350	Psy-Mental Health Nsg	2
CMN 351	Psy-Mental Health Nsg Clin	2
NU 304	Evidence Based Practice NU- W	3
<b>Hours</b>		<b>15</b>
<b>Summer</b>		
MCN 352	OB & GYN Nursing Care	2
MCN 353	OB & GYN Nsg Care Clinical	2
MCN 354	Pediatric Nursing Care	2
MCN 355	Pediatric Nsg Care Clinical	2
<b>Hours</b>		<b>8</b>
<b>Fourth Year</b>		
<b>Fall</b>		
AHN 447	Adult Gerontological Nursing	4
AHN 448	Adult Gerontological Nsg Clin	4
CMN 420	Community Health Nursing	3
CMN 421	Community Health Nurs Clinical	1
<b>Hours</b>		<b>12</b>

Spring		
NU 332	Clinical Nutrition	2
NU 412	Dec Making Prof Nsg Practice	3
NU 414	Issues & Trends Healthcare -W	3
NU 460	Practicum	5
<b>Hours</b>		<b>13</b>
<b>Total Hours</b>		<b>126</b>

<sup>1</sup> See General Education Requirements

<sup>2</sup> Recommended Course

## Nursing (MSN) - BSN-Prepared RNs

### Degree Requirements

#### BSN-MSN Pathway

##### MSN with Clinical Concentration Course Requirements

Code	Title	Hours
<b>Support Courses</b>		
NU 518	Adv Nursing Assessment	3
NU 545	Physio-Patho Basis of Adv Nsg	3
NU 578	Pharm Adv Practice Nurses	3
<b>MSN/DNP Core Courses</b>		
NU 607	Scientif Underpinnings Adv Nsg	3
NU 608	EBP & Quality Improvement HCS	3
NU 610	Healthcare Policy & Finance	3
NU 613	Organizational & Sys Leadrshp	3
<b>Clinical Concentrations</b>		
Select one of the following concentrations:		15-36
<i>Adult-Gerontological Acute Care Nurse Practitioner</i>		
AHN 568	Intro to Adult-Geron Acute NP	
AHN 571	HPDP Adult-Geron Acute Care NP	
AHN 572	Adult-Geron Acute NP I	
AHN 573	Adult-Geron Acute NP Pract I	
AHN 574	Adult-Geron Acute NP II	
AHN 575	Adult-Geron Acute NP Pract II	
AHN 576	Adult Geron Acute NP Pract III	
AHN 577	Adult Geron Acute NP III	
<i>Adult-Gerontological Primary Care Nurse Practitioner</i>		
AHN 581	HP/DP Adlt-Geron Prim Care NP	
AHN 588	Intro to Adult-Geron Prim NP	
AHN 591	Adult-Geron Prim NP I	
AHN 592	Adlt-Geron Primary NP Pract I	
AHN 593	Adult-Gero Prim NP II	
AHN 594	Adult-Geron Prim NP Pract II	
AHN 595	Adult-Gero Primary Care NP III	
AHN 596	Adult-Geron Prim NP Pract III	
<i>Adult-Gerontological Clinical Nurse Specialist</i>		
NU 515	Clinical Concepts/CNS Role I	
NU 516	Clinical Concepts/CNS Role II	
NU 517	Clinical Concepts/CNS Role III	
AHN 516	CNS Adult Geron Pract I	
AHN 517	CNS Adult Geron Pract II	
AHN 518	CNS Adult Geron Pract III	

AHN 519 Diagnostic Reasoning and Advanced Patient Management for the Clinical Nurse Specialist (Elective)

#### *Clinical Nurse Leader*

NU 535 Clin Ldr Role & Competencies

NU 536 Clin Nurse Ldr Pract I

NU 537 Clin Nurse Leader Synthesis

NU 538 Clinical Nrse Ldr Pract II

#### *Family NP/Adult-Gerontological Acute Care*

AHN 538 HPDP Dual Role (FNP/AGACNP)

AHN 548 Family Prim Care NP I

AHN 549 Family Prim Care NP Pract I

AHN 550 Family Prim Care NP II

AHN 551 Family Prim Care NP Pract II

AHN 552 Adult-Geron Acute Care NP I

AHN 553 Adult-Ger Acute Care NP Pract I

AHN 554 Adult-Geron Acute Care NP II

AHN 555 Adlt-Ger Acute Care NP Pract II

#### *Dual Role (Family NP/Emergency NP)*

NU 580 Hlth Promo & Ds Prev/FNP/ENP

NU 581 Family/Emergency NP I

NU 582 Family/Emerg NP Practicum I

NU 583 Family/Emergency NP II

NU 584 Family/ Emerg NP Practicum II

NU 585 Family/Emergency NP III

NU 586 Family/Emerg NP Practicum III

NU 587 Family/Emergency NP IV

NU 588 Family/Emerg NP Practicum IV

#### *Family Nurse Practitioner*

CMN 568 Intro to Family NP

CMN 571 HPDP in Family NP

CMN 572 Family NP I

CMN 573 Family NP Pract I

CMN 574 Family NP II

CMN 575 Family NP Pract II

CMN 576 Family NP Pract III

CMN 577 Family NP III

#### *Neonatal Nurse Practitioner*

MCN 568 Intro to Neonatal NP

MCN 571 HPDP NNP/Peds Acute NP

MCN 572 Neonatal NP I

MCN 573 Neonatal NP Pract I

MCN 574 Neonatal NP II

MCN 575 Neonatal NP Pract II

MCN 576 Neonatal NP Pract III

MCN 577 Neonatal NP III

#### *Pediatric Acute Nurse Practitioner*

MCN 558 Intro Pediatric Acute Care NP

MCN 562 Pediatric Acute Care NP I

MCN 563 Ped Acute Care NP Pract I

MCN 564 Pediatric Acute Care NP II

MCN 565 Ped Acute Care NP Pract II

MCN 566	Ped Acute Care NP Pract III
MCN 567	Pediatric Acute Care NP III
MCN 571	HPDP NNP/Peds Acute NP
<i>Pediatric Primary Care Nurse Practitioner</i>	
MCN 548	Intro to Ped Primary Care NP
MCN 551	HPDP Pediatric Primary Care NP
MCN 552	Pediatric Prim Care NP I
MCN 553	Ped Prim Care NP Prac I
MCN 554	Pediatric Primary Care NP II
MCN 555	Ped Prim Care NP Prac II
MCN 556	Ped Prim Care NP Pract III
MCN 557	Pediatric Primary Care NP III
<i>Psychiatric Mental Health Nurse Practitioner</i>	
CMN 548	Introduction to PMHNP
CMN 551	HPDP & Issues for the PMHNP
CMN 552	PMHNP I
CMN 553	PMHNP Practicum I
CMN 554	PMHNP II
CMN 555	PMHNP Practicum II
CMN 556	PMHNP Practicum III
CMN 557	PMHNP III
<i>Women's Health Nurse Practitioner</i>	
MCN 538	Intro to Women's Health NP
MCN 541	HPDP Women's Health NP
MCN 542	Women's Health NP I
MCN 543	Women's Health NP Pract I
MCN 544	Women's Health NP II
MCN 545	Women's Health NP Pract II
MCN 546	Women's Health NP Prac III
MCN 547	Women's Health NP III

**Total Hours** 36-57

### MSN with Non-clinical Concentrations Course Requirements

Code	Title	Hours
<b>MSN/DNP Core Courses</b>		
NU 607	Scientif Underpinnings Adv Nsg	3
NU 608	EBP & Quality Improvement HCS	3
NU 610	Healthcare Policy & Finance	3
NU 613	Organizational & Sys Leadshp	3

#### Non-Clinical Concentrations

Select one of the following concentrations: 25

<i>Executive Nursing Administration</i>		
HSC 571	Managing Healthcare Personnel	
NU 539	Intro to Nursing Informatics	
NU 553	Administrative Concepts	
NU 554	Resource Manag Field Study	
NU 561	Nursing Admin Concepts-Theory	
NU 565	Nursing Administration Finance	
NU 566	Nursing Admin Field Study	
NU 567	Nursing Admin Internship	
NU 568	Nursing Admin Seminar	
<i>Nursing Informatics</i>		
ISC 550	Health Data Security & Comp	

ISC 555	Health Data Mgt/Decision Supp
NU 539	Intro to Nursing Informatics
NU 553	Administrative Concepts
NU 554	Resource Manag Field Study
NU 556	Informatics & Qual Care Improv
NU 557	Clinical Informatics Pract I
NU 558	Seminar in Nursing Informatics
NU 559	Clinical Informatics Pract II
NU 565	Nursing Administration Finance

**Total Hours** 37

## Subspecialties

Students can earn a Post-Graduate Certificate Subspecialty when adding the requirements for any of the following subspecialties to their degree program curriculum.

### Addictions Nursing

May be added to any concentration.

Code	Title	Hours
HSC 580	ODU/SUD Prevention/Screening	2
HSC 581	ODU/SUD Assessment/Treatment	2
HSC 582	ODU/SUD Recovery/Sys Practice	2
NU 510	Addictions Practicum I	1
NU 511	Addictions Practicum II	2
NU 512	Addictions Practicum III	2
NU 513	Addictions Practicum IV (Elective)	4

**Total Hours** 15

### Advanced Forensic Nursing

May be added to any concentration.

Code	Title	Hours
NU 500	Explore Culture Sexual Assault	2
NU 502	Sexual Assault Vic Practicum	1
NU 503	Trauma Care Sexual Assault Vic	2
NU 504	Adv Pharm Care Post Assault	2
NU 505	Sup Care Comorbid Post Assault	2

**Total Hours** 9

### Cardiovascular

May be added to Adult-Gerontological Acute NP, Adult-Gerontological Primary Care NP, Dual Role (Family NP/Adult-Gerontological Acute Care NP), and Dual Role (Family NP/Emergency NP), Family NP, Women's Health NP, Post-Graduate Certificate Emergency NP, and any Adult-Gerontological CNS student with a strong background in cardiovascular and/or acute care nursing.

Code	Title	Hours
AHN 630	Dysrhythmias and the Heart	2
AHN 631	Foundations of Cardiac Care	2
AHN 632	Diag & Mgmt of Acute CVD	2
AHN 633	Dig/Mgmt Complex CV Disorders	2

**Total Hours** 8

## Clinical Lipidology

May be added to Adult-Gerontological Primary Care NP, Adult-Gerontological Acute NP, Adult-Gerontological CNS, Family NP, Dual Role (Family NP/Adult-Gerontological Acute NP), Dual Role (Family NP/Emergency NP), Women's Health NP, and Post-Graduate Certificate Emergency NP.

Code	Title	Hours
HSC 595	Evidence Based Lipid Practice	2
HSC 596	Adv Vascular Biology	2
HSC 597	Adv Pharm Complex Dyslipidemia	2
HSC 598	Diag/Mgt C-plex Dyslipidemia	2
<b>Total Hours</b>		<b>8</b>

## Diversity, Equity, and Inclusion in Healthcare

May be added to any concentration.

Code	Title	Hours
HSC 501	Found of Diversity Healthcare	2
HSC 502	Diversity Equity & Inclusion	2
HSC 503	Curr Issues & Trends Diversity	2
HSC 504	Lead&Change Mang Adv Diversity	2
<b>Total Hours</b>		<b>8</b>

## Emergency Nurse Practitioner

May be added to Family NP, Dual Role (Family NP/Adult-Gerontological Acute Care NP), or taken as a Post Graduate Certificate if already Family NP certified.

Code	Title	Hours
NU 570	Emergency NP I	2
NU 571	Emergency NP Practicum I	1-3
NU 572	Emergency NP II	2
NU 573	Emergency NP Practicum II	1-3
NU 574	Emergency NP III	2
NU 575	Emergency NP Practicum III	1-3
NU 576	Emergency NP IV	2
NU 577	Emergency NP Practicum IV	1-3
<b>Total Hours</b>		<b>12-20</b>

## Nurse Educator

May be added to any concentration.

Code	Title	Hours
NU 620	Prin Teach/Learn/Assess Nu Ed	3
NU 621	Curr Design/Outcome Eval Nu Ed	3
NU 622	Current Topics in Nu Education	2
NU 623	Nsg Educ Synthesis Practicum	3
<b>Total Hours</b>		<b>11</b>

## Palliative Care

May be added to any concentration.

Code	Title	Hours
AHN 530	Found Palliative Care/Adv Role	2
AHN 531	Adv Palliative Cr/End of Life	2

AHN 532	Adv Chronic Illness Care	2
AHN 533	Adv Palliative Care Practicum	3
<b>Total Hours</b>		<b>9</b>

## Trauma-Informed Integrated Behavioral Healthcare

May be added to any concentration

Code	Title	Hours
HSC 510	IPT for TI-IBH Primary Care	1
HSC 511	IPT Telehealth Deliv TI-IBH	1
HSC 512	TI-MI in IBH Seminar	1
NU 526	Trauma-Informed Integrated Behavioral Healthcare Practicum I	1
NU 527	Trauma-Informed Integrated Behavioral Healthcare Practicum II	2
NU 528	Trauma-Informed Integrated Behavioral Healthcare Practicum III	2
<b>Total Hours</b>		<b>8</b>

## Elective Courses

Code	Title	Hours
NU 509	Bioethics Advan Practice Nsg	1
NU 597	Intro to Scholarly Writing	3
HSC 500	Address Gender Discrimination	3
HSC 573	Resp Prescrib Common Used Drug	1

## Additional Information

### Master of Science in Nursing (MSN)

Organized within the graduate school at the University, the College of Nursing has several pathways, specialization, and sub-specialization options within the MSN program. In addition to admitting baccalaureate-prepared registered nurses, the college offers a special pathway for highly qualified associate degree and diploma nurses who do not hold a baccalaureate degree, and tracks for MSN-prepared nurses who are interested in certification in a new specialty area.

### Master of Science in Nursing Program Learning Outcomes

Upon completion of the Master of Science in Nursing Program, graduates should be able to:

1. Integrate advanced knowledge, evidence, and theories from nursing and related disciplines into a specialized area of advanced nursing practice through the use of scholarly writing.
2. Demonstrate competence in advanced nursing roles to meet current and emerging health needs of a global changing society.
3. Use scientific inquiry to identify problems and individualize patient care designed to improve care outcomes.
4. Apply advanced knowledge of leadership and management to influence health policy to transform care delivery systems.
5. Contribute to the focus and direction of the nursing profession.

## Areas of Specialization

Several concentration areas are offered to meet the career goals of students. Students may prepare as a clinical nurse leader or for advanced nursing practice in one of the nurse practitioner roles or the clinical nurse specialist role. Available NP include Adult-Gerontological Acute Care Nursing, Adult-Gerontological Primary Care Nursing, Dual Role (Family Nursing/Adult-Gerontological Acute Care Nursing), Dual Role (Family Nursing/Emergency Nursing), Family Nursing, Neonatal Nursing, Pediatric Acute Care Nursing, Pediatric Primary Care Nursing, Psychiatric Mental Health Nursing, Women's Health Nursing. Clinical Nurse Specialist is available in Adult-Gerontological Nursing. Concentrations are also available for students pursuing careers in Clinical Nurse Leader, Executive Nursing Administration and Nursing Informatics. Sub-specializations are available in Addictions Nursing, Advanced Forensic Nursing Care, Cardiovascular, Clinical Lipidology, Diversity, Equity, and Inclusion in Healthcare, Nurse Educator, Palliative Care, and Trauma-Informed Integrated Behavioral Healthcare. Emergency Nurse Practitioner is offered only as a post graduate certificate. See the MSN section for additional course listings.

## Graduate Assistantships

A limited number of graduate assistantships are available to students in full-time status. Additional information and an application can be obtained by contacting the College of Nursing graduate office.

## BSN-Prepared RN'S

### Regular Admission Criteria

1. Citizen or Permanent Resident of the United States of America.
2. Current registered nurse licensure with no restrictions. Nurses with any restrictions on their license, including participation in a voluntary disciplinary alternative program, cannot be admitted.
3. Graduate of an approved regionally accredited bachelors program with a major in nursing.
4. A minimal grade-point average of 2.75 on all BSN work (A=4.00).
5. Submission of a résumé which documents clinical experience.
6. Prior to enrolling in nurse practitioner clinical course, students are required to have at least 2 years of experience in an area appropriate to the specialty track.
7. Students are admitted to a specialty track and may not change their track without permission.
8. Students must be in good standing with all academic institutions/nursing programs that they have attended in order to be admitted to the MSN program.

### Non-Degree Admission Criteria

1. Citizen or Permanent Resident of the United States of America.
2. Current registered nurse licensure with no restrictions. Nurses with any restrictions on their license, including participation in a voluntary disciplinary alternative program, cannot be admitted.
3. Hold a bachelor's degree from an approved regionally accredited institution.
4. A minimal grade-point average of 2.75 on all BSN work (A=4.00).

5. Students must be in good standing with all academic institutions/nursing programs that they have attended in order to be admitted
6. Enrollment in selective courses may not be available to non-degree students due to class size or required prerequisite.

## Contingency for Admission and Initial Registration

Admission and initial registration is contingent on completion of the following requirements:

1. Acceptance Packet
2. Negative Drug Screen
3. Acceptable Background Check
4. All Health Requirements as outlined in the Medical Documents Manager.
5. Letter of Clinical Commitment.

Notification of missing documents will be sent to your JagMail email account. Only students who have successfully completed the Acceptance Packet in its entirety, have a negative drug screen and acceptable background check, and completed all required portions of the Medical Documents Manager will be permitted to register for classes.

## Application Procedures

Admission to the program is limited and selective. Application forms and other information may be obtained from the College of Nursing's Website (<https://www.southalabama.edu/colleges/con/msn/msnadmiss.html>) or by contacting the college directly at:

College of Nursing  
University of South Alabama  
Mobile, Alabama 36688  
congradapp@southalabama.edu  
Telephone: (251) 445-9400

To be considered for admission to the MSN program, the applicant must submit the following requirements:

1. Completion of the Primary Application:
  - a. Primary Application (<http://bulletin.southalabama.edu/programs-az/nursing/nursing/nursing-msn-bsn-prepared-rns/www.NursingCAS.org>) submitted through Nursing Centralized Application System (NursingCAS).
  - b. Official transcripts of all college and university studies, regardless of the outcome of enrollment, must be sent directly from the home institution to the NursingCAS. These documents become the property of the NursingCAS and will not be returned to the applicant. Applicants are responsible for any fees required by NursingCAS for their services.
  - c. Personal Goal Statement is required. The Personal Goal Statement is a description of the applicant's purpose for completing the graduate degree. This essay serves as a writing sample to be reviewed by the Graduate Admissions Committee to determine the applicant's scholarly writing skills.
  - d. Submission of a résumé which documents clinical experience.

## 2. Completion of the Supplemental Application:

- a. The Supplemental Application (<https://explore.southalabama.edu/account/register/?r=https%3a%2f%2fexplore.southalabama.edu%2fapply%2f%3d870af7f1-de34-492d-b275-be6ef1c6297a>) is submitted electronically directly to the MSN Office at the USA College of Nursing. Under Academic Information please select the appropriate semester for admission. Select "graduate" under both student type and academic level of interest. A new option will appear asking if you are applying for a graduate nursing program, select "yes" and this will take you into the nursing application.
- b. Please note that the Supplemental Application should be completed **AFTER** you have completed your NursingCAS application and it has moved through the following stages: received, complete then **VERIFIED**. Once it is verified you may complete the Supplemental Application.
- c. Applicants are responsible for ensuring that their completed Supplemental Application is submitted by the deadline for the semester for which they are applying. Incomplete applications will not be processed.
- d. This application requires a non-refundable processing fee of \$100.00.

6. Failure to show good ethical and moral character including but not limited to any of the following may result in dismissal from the program:
  - a. conviction of a crime,
  - b. disciplinary action against a nursing license in Alabama or any other state,
  - c. positive drug test,
  - d. adverse background check, or
  - e. disruptive behavior, including online behavior.  
All student must notify the Associate Dean for Academic Affairs or the Dean of the College of Nursing immediately or no later than 48 hours of any of the above stated incidents.
7. All students must notify the Associate Dean for Academic Affairs or the Dean of the College of Nursing immediately or no later than 48 hours following an arrest. Failure to report an arrest may result in removal from the program.
8. All students are subject to testing for controlled substances and must submit to random drug testing as requested. A positive test or refusal to submit to testing will result in removal from the program.
9. All students are subject to a background check and must submit to additional background checks as requested. An adverse finding or refusal to submit to a background check may result in removal from the program.
10. A student who has been academically dismissed is not eligible for readmission to the MSN program.

## Application Deadlines

Applications are accepted year round, and must adhere to the following application deadlines:

- Fall Semester Deadline is March 1
- Spring Semester Deadline is September 1
- Summer Semester Deadline is February 1

## Academic Progression Policy

Students in the BSN-MSN program must meet the following requirements to progress in the program:

1. Maintain an overall GPA of 3.0. Any term in which a graduate student drops below a 3.0 Program GPA, the student is placed on probationary status and has a period of two terms to attain a 3.0 Program GPA or be dismissed.
2. Students in this program can have a maximum of two Cs.
3. A maximum of two (2) courses with a grade of "C" can be counted towards a degree; however, only one (1) "C" is permitted in support or specialization courses. If a second "C" or lower is earned in a support (NU 518, NU 545, NU 578) or specialization course, the course in which the second "C" or lower is obtained must be repeated before a student may move forward with a specialty course. All corresponding specialty clinical and didactic courses must be taken in sequence.
4. A student earning a third "C" or lower will be academically dismissed from the program.
5. A student earning two grades of "F" in the program will be academically dismissed.

## Policy for Students Who are Dismissed from a Clinical Setting for Unprofessional Behavior or Refused Approval by the Setting due to Previous Experience with the Student

Professional behavior is expected of all USA CON students within the clinical setting. Students who are asked to leave a clinical setting (by an administrator or preceptor) due to unprofessional behavior will be removed from the clinical site with no approval of return to the same site.

Should a clinical agency refuse to allow a student to obtain clinical hours in their facility for any reason, the agency's request will be honored by the college.

Students dismissed from a clinical site or refused by a clinical agency will be assisted to find an appropriate clinical placement at an affiliated clinical site at the college's discretion. Students who decline the placement provided will be delayed in completing the program.

Depending on the nature of the unprofessional behavior, action taken by the college may include dismissal from the academic program.

## Graduation Requirements for BSN-prepared RN'S

The MSN program must be completed within 5 years of matriculation. MSN students who will complete all degree requirements are required to apply for graduation by the application deadline established by the Registrar's Office. Deadlines for each semester application are located on the Registrar's Graduation Website (<https://www.southalabama.edu/departments/registrar/commencement/>).

# Nursing (MSN) - RN-MSN with Non-Nursing Baccalaureate

## Degree Requirements

### RN to MSN Pathway

#### Master of Science with Clinical Concentrations Course Requirements

Code	Title	Hours
<b>RN-MSN Bridge Courses</b>		
NU 506	EBP & Informatics Prof Nurses	4
NU 507	Leadership & Management Roles	4
NU 508	Clinical Prevention & Pop Hlth	4
<b>Support Courses</b>		
NU 518	Adv Nursing Assessment	3
NU 545	Physio-Patho Basis of Adv Nsg	3
NU 578	Pharm Adv Practice Nurses	3
<b>MSN/DNP Core Courses</b>		
NU 607	Scientif Underpinnings Adv Nsg	3
NU 608	EBP & Quality Improvement HCS	3
NU 610	Healthcare Policy & Finance	3
NU 613	Organizational & Sys Leadrshp	3
<b>Clinical Concentrations</b>		
Select one of the following concentrations:		15-36
<i>Adult-Gerontological Acute Care Nurse Practitioner</i>		
AHN 568	Intro to Adult-Geron Acute NP	
AHN 571	HPDP Adult-Geron Acute Care NP	
AHN 572	Adult-Geron Acute NP I	
AHN 573	Adult-Geron Acute NP Prac I	
AHN 574	Adult-Geron Acute NP II	
AHN 575	Adult-Geron Acute NP Prac II	
AHN 576	Adult Geron Acute NP Prac III	
AHN 577	Adult Geron Acute NP III	
<i>Adult-Gerontological Primary Care Nurse Practitioner</i>		
AHN 581	HP/DP Adlt-Geron Prim Care NP	
AHN 588	Intro to Adult-Geron Prim NP	
AHN 591	Adult-Geron Prim NP I	
AHN 592	Adlt-Geron Primary NP Pract I	
AHN 593	Adult-Gero Prim NP II	
AHN 594	Adult-Geron Prim NP Prac II	
AHN 595	Adult-Gero Primary Care NP III	
AHN 596	Adult-Geron Prim NP Prac III	
<i>Adult-Gerontological Clinical Nurse Specialist</i>		
NU 515	Clinical Concepts/CNS Role I	
NU 516	Clinical Concepts/CNS Role II	
NU 517	Clinical Concepts/CNS Role III	
AHN 516	CNS Adult Geron Pract I	
AHN 517	CNS Adult Geron Pract II	
AHN 518	CNS Adult Geron Pract III	
AHN 519	Diagnostic Reasoning and Advanced Patient Management for the Clinical Nurse Specialist (Elective)	
<i>Clinical Nurse Leader</i>		

NU 535	Clin Ldr Role & Competencies
NU 536	Clin Nurse Ldr Pract I
NU 537	Clin Nurse Leader Synthesis
NU 538	Clinical Nrse Ldr Prac II
<i>Dual Role (Family NP/Adult-Gerontological Acute Care)</i>	
AHN 538	HPDP Dual Role (FNP/AGACNP)
AHN 548	Family Prim Care NP I
AHN 549	Family Prim Care NP Prac I
AHN 550	Family Prim Care NP II
AHN 551	Family Prim Care NP Pract II
AHN 552	Adult-Geron Acute Care NP I
AHN 553	Adult-Ger Acute Care NP Prac I
AHN 554	Adult-Geron Acute Care NP II
AHN 555	Adlt-Ger Acute Care NP Prac II
<i>Dual Role (Family NP/Emergency NP)</i>	
NU 580	Hlth Promo & Ds Prev/FNP/ENP
NU 581	Family/Emergency NP I
NU 582	Family/Emerg NP Practicum I
NU 583	Family/Emergency NP II
NU 584	Family/ Emerg NP Practicum II
NU 585	Family/Emergency NP III
NU 586	Family/Emerg NP Practicum III
NU 587	Family/Emergency NP IV
NU 588	Family/Emerg NP Practicum IV
<i>Family Nurse Practitioner</i>	
CMN 568	Intro to Family NP
CMN 571	HPDP in Family NP
CMN 572	Family NP I
CMN 573	Family NP Pract I
CMN 574	Family NP II
CMN 575	Family NP Prac II
CMN 576	Family NP Pract III
CMN 577	Family NP III
<i>Neonatal Nurse Practitioner</i>	
MCN 568	Intro to Neonatal NP
MCN 571	HPDP NNP/Peds Acute NP
MCN 572	Neonatal NP I
MCN 573	Neonatal NP Pract I
MCN 574	Neonatal NP II
MCN 575	Neonatal NP Prac II
MCN 576	Neonatal NP Pract III
MCN 577	Neonatal NP III
<i>Pediatric Acute Nurse Practitioner</i>	
MCN 558	Intro Pediatric Acute Care NP
MCN 562	Pediatric Acute Care NP I
MCN 563	Ped Acute Care NP Prac I
MCN 564	Pediatric Acute Care NP II
MCN 565	Ped Acute Care NP Prac II
MCN 566	Ped Acute Care NP Pract III
MCN 567	Pediatric Acute Care NP III
MCN 571	HPDP NNP/Peds Acute NP
<i>Pediatric Primary Care Nurse Practitioner</i>	

MCN 548	Intro to Ped Primary Care NP
MCN 551	HPDP Pediatric Primary Care NP
MCN 552	Pediatric Prim Care NP I
MCN 553	Ped Prim Care NP Prac I
MCN 554	Pediatric Primary Care NP II
MCN 555	Ped Prim Care NP Prac II
MCN 556	Ped Prim Care NP Pract III
MCN 557	Pediatric Primary Care NP III
<i>Psychiatric Mental Health Nurse Practitioner</i>	
CMN 548	Introduction to PMHNP
CMN 551	HPDP & Issues for the PMHNP
CMN 552	PMHNP I
CMN 553	PMHNP Practicum I
CMN 554	PMHNP II
CMN 555	PMHNP Practicum II
CMN 556	PMHNP Practicum III
CMN 557	PMHNP III
<i>Women's Health Nurse Practitioner</i>	
MCN 538	Intro to Women's Health NP
MCN 541	HPDP Women's Health NP
MCN 542	Women's Health NP I
MCN 543	Women's Health NP Pract I
MCN 544	Women's Health NP II
MCN 545	Women's Health NP Pract II
MCN 546	Women's Health NP Pract III
MCN 547	Women's Health NP III
<b>Total Hours</b>	<b>48-69</b>

### Master of Science in Nursing with Non-Clinical Concentrations Course Requirements

Code	Title	Hours
<b>RN-MSN Bridge Courses</b>		
NU 506	EBP & Informatics Prof Nurses	4
NU 507	Leadership & Management Roles	4
NU 508	Clinical Prevention & Pop Hlth	4
<b>MSN/DNP Core Courses</b>		
NU 607	Scientif Underpinnings Adv Nsg	3
NU 608	EBP & Quality Improvement HCS	3
NU 610	Healthcare Policy & Finance	3
NU 613	Organizational & Sys Leadrshp	3

### Non-Clinical Concentrations

Select one of the following concentrations: 25

<i>Executive Nursing Administration</i>		
HSC 571	Managing Healthcare Personnel	
NU 539	Intro to Nursing Informatics	
NU 553	Administrative Concepts	
NU 554	Resource Manag Field Study	
NU 561	Nursing Admin Concepts-Theory	
NU 565	Nursing Administration Finance	
NU 566	Nursing Admin Field Study	
NU 567	Nursing Admin Internship	
NU 568	Nursing Admin Seminar	
<i>Nursing Informatics</i>		

ISC 550	Health Data Security & Comp
ISC 555	Health Data Mgt/Decision Supp
NU 539	Intro to Nursing Informatics
NU 553	Administrative Concepts
NU 554	Resource Manag Field Study
NU 556	Informatics & Qual Care Improv
NU 557	Clinical Informatics Pract I
NU 558	Seminar in Nursing Informatics
NU 559	Clinical Informatics Pract II
NU 565	Nursing Administration Finance

**Total Hours 49**

## Subspecialties

Students can earn a Post-Graduate Certificate Subspecialty when adding the requirements for any of the following subspecialties to their degree program curriculum.

### Addictions Nursing

May be added to any concentration.

Code	Title	Hours
HSC 580	OUD/SUD Prevention/Screening	2
HSC 581	OUD/SUD Assessment/Treatment	2
HSC 582	OUD/SUD Recovery/Sys Practice	2
NU 510	Addictions Practicum I	1
NU 511	Addictions Practicum II	2
NU 512	Addictions Practicum III	2
NU 513	Addictions Practicum IV (Elective)	4

**Total Hours 15**

### Advanced Forensic Nursing

May be added to any concentration

Code	Title	Hours
NU 500	Explore Culture Sexual Assault	2
NU 502	Sexual Assault Vic Practicum	1
NU 503	Trauma Care Sexual Assault Vic	2
NU 504	Adv Pharm Care Post Assault	2
NU 505	Sup Care Comorbid Post Assault	2

**Total Hours 9**

### Cardiovascular

May be added to Adult-Gerontological Acute NP, Adult-Gerontological Primary Care NP, Dual Role (Family NP/Adult-Gerontological Acute Care NP), and Dual Role (Family NP/Emergency NP), Family NP, Women's Health NP, Post-Graduate Certificate Emergency NP, and any Adult-Gerontological CNS student with a strong background in cardiovascular and/or acute care nursing.

Code	Title	Hours
AHN 630	Dysrhythmias and the Heart	2
AHN 631	Foundations of Cardiac Care	2
AHN 632	Diag & Mgmnt of Acute CVD	2

AHN 633	Dig/Mgmt Complex CV Disorders	2
<b>Total Hours</b>		<b>8</b>

### Clinical Lipidology

May be added to Adult-Gerontological Primary Care NP, Adult-Gerontological Acute NP, Adult-Gerontological CNS, Family NP, Dual Role (Family NP/Adult-Gerontological Acute NP), Dual Role (Family NP/Emergency NP), Women's Health NP, and Post-Graduate Certificate Emergency NP.

Code	Title	Hours
HSC 595	Evidence Basd Lipid Practice	2
HSC 596	Adv Vascular Biology	2
HSC 597	Adv Pharm Complex Dyslipidemia	2
HSC 598	Diag/Mgt C-plex Dyslipidemia	2
<b>Total Hours</b>		<b>8</b>

### Diversity, Equity, and Inclusion in Healthcare

May be added to any concentration.

Code	Title	Hours
HSC 501	Found of Diversity Healthcare	2
HSC 502	Diversity Equity & Inclusion	2
HSC 503	Curr Issues & Trends Diversity	2
HSC 504	Lead&Change Mang Adv Diversity	2
<b>Total Hours</b>		<b>8</b>

### Emergency Nurse Practitioner

May be added to Family NP, Dual Role (Family NP/Adult-Gerontological Acute Care NP), or taken as a Post Graduate Certificate if already Family NP certified.

Code	Title	Hours
NU 570	Emergency NP I	2
NU 571	Emergency NP Practicum I	1-3
NU 572	Emergency NP II	2
NU 573	Emergency NP Practicum II	1-3
NU 574	Emergency NP III	2
NU 575	Emergency NP Practicum III	1-3
NU 576	Emergency NP IV	2
NU 577	Emergency NP Practicum IV	1-3
<b>Total Hours</b>		<b>12-20</b>

### Nurse Educator

May be added to any concentration

Code	Title	Hours
NU 620	Prin Teach/Learn/Assess Nu Ed	3
NU 621	Curr Design/Outcome Eval Nu Ed	3
NU 622	Current Topics in Nu Education	2
NU 623	Nsg Educ Synthesis Practicum	3
<b>Total Hours</b>		<b>11</b>

### Palliative Care

May be added to any concentration.

Code	Title	Hours
AHN 530	Found Palliative Care/Adv Role	2
AHN 531	Adv Palliative Cr/End of Life	2
AHN 532	Adv Chronic Illness Care	2
AHN 533	Adv Palliative Care Practicum	1-9
<b>Total Hours</b>		<b>7-15</b>

### Trauma-Informed Integrated Behavioral Healthcare

May be added to any concentration

Code	Title	Hours
HSC 510	IPT for TI-IBH Primary Care	1
HSC 511	IPT Telehealth Deliv TI-IBH	1
HSC 512	TI-MI in IBH Seminar	1
NU 526	Trauma-Informed Integrated Behavioral Healthcare Practicum I	1
NU 527	Trauma-Informed Integrated Behavioral Healthcare Practicum II	2
NU 528	Trauma-Informed Integrated Behavioral Healthcare Practicum III	2
<b>Total Hours</b>		<b>8</b>

### Elective Courses

Code	Title	Hours
NU 509	Bioethics Advan Practice Nsg	1
NU 597	Intro to Scholarly Writing	3
HSC 500	Address Gender Discrimination	3
HSC 573	Resp Prescrib Common Used Drug	1

### Additional Information

#### RN - MSN Pathway for RN's with a Non-Nursing Baccalaureate Degree

This pathway is available to persons who are registered nurses and have a baccalaureate degree from a regionally accredited institution in a discipline other than nursing.

#### Admission Criteria

1. Citizen or Permanent Resident of the United States of America.
2. Current registered nurse licensure with no restrictions. Nurses with any restrictions on their license, including participation in a voluntary disciplinary alternative program, cannot be admitted.
3. Graduate of an approved regionally accredited Associate Degree program with a major in nursing.
4. A minimal grade-point average of 2.75 on all BSN work (A=4.00).
5. Submission of a résumé which documents clinical experience.
6. Prior to enrolling in nurse practitioner clinical course, students are required to have at least 2 years of experience in an area appropriate to the specialty track.
7. Students are admitted to a specialty track and may not change their track without permission.
8. Students must be in good standing with all academic institutions/nursing programs that they have attended in order to be admitted to the MSN program.

## Contingency for Admission and Initial Registration

Admission and initial registration is contingent on completion of the following requirements:

1. Acceptance Packet
2. Negative Drug Screen
3. Acceptable Background Check
4. All Health Requirements as outlined in the Medical Documents Manager.
5. Letter of Clinical Commitment.

Notification of missing documents will be sent to your JagMail email account. Only students who have successfully completed the Acceptance Packet in its entirety, have a negative drug screen and acceptable background check, and completed all required portions of the Medical Documents Manager will be permitted to register for classes.

## Application Procedures

Admission to the program is limited and selective. Application forms and other information may be obtained from the College of Nursing's Website (<https://www.southalabama.edu/colleges/con/msn/msnadmhtml>) or by contacting the college directly at:

College of Nursing  
University of South Alabama  
Mobile, Alabama 36688  
congradapp@southalabama.edu  
Telephone: (251) 445-9400

To be considered for admission to the RN-MSN program, the applicant must submit the following:

## Application Deadlines

1. Completion of the Primary Application:
  - a. Primary Application (<http://bulletin.southalabama.edu/programs-az/nursing/nursing/nursing-msn-rn-nonnursing-baccalaureate/www.NursingCAS.org>) submitted through Nursing Centralized Application System (NursingCAS).
  - b. Official transcripts of all college and university studies, regardless of the outcome of enrollment, must be sent directly from the home institution to the NursingCAS. These documents become the property of the NursingCAS and will not be returned to the applicant. Applicants are responsible for any fees required by NursingCAS for their services.
  - c. Personal Goal Statement is required. The Personal Goal Statement is a description of the applicant's purpose for completing the graduate degree. This essay serves as a writing sample to be reviewed by the Graduate Admissions Committee to determine the applicant's scholarly writing skills.
  - d. Submission of a résumé which documents clinical experience.
2. Completion of the Supplemental Application:
  - a. The Supplemental Application (<https://explore.southalabama.edu/account/register/?r=https%3a%2f%2fexplore.southalabama.edu%2fapply%2f%3f%3d870af7f1-de34-492d-b275-be6ef1c6297a>) is submitted electronically directly to the MSN Office at the USA College of Nursing. Under

Academic Information please select the appropriate semester for admission. Select "graduate" under both student type and academic level of interest. A new option will appear asking if you are applying for a graduate nursing program, select "yes" and this will take you into the nursing application.

- b. Please note that the Supplemental Application should be completed **AFTER** you have completed your NursingCAS application and it has moved through the following stages: received, complete then **VERIFIED**. Once it is verified you may complete the Supplemental Application.
- c. Applicants are responsible for ensuring that their completed Supplemental Application is submitted by the deadline for the semester for which they are applying. Incomplete applications will not be processed.
- d. This application requires a non-refundable processing fee of \$100.00.

## Application Deadlines

Applications are accepted year round, and must adhere to the following application deadlines:

- Fall Semester Deadline is March 1
- Spring Semester Deadline is September 1
- Summer Semester Deadline is February 1

## Academic Progression Policy

Students in the RN-MSN program must meet the following requirements to progress in the program:

1. Maintain an overall GPA of 3.0. Any term in which a graduate student drops below a 3.0 Program GPA, the student is placed on probationary status and has a period of two terms to attain a 3.0 Program GPA or be dismissed.
2. Students in these programs can have a maximum of two "C"s.
3. A maximum of two (2) courses with a grade of "C" can be counted towards a degree; however, only one (1) "C" is permitted in support or specialization courses. If a second "C" or lower is earned in a support or specialization course, the course in which the second "C" or lower is obtained must be repeated before a student may move forward with a specialty course. All corresponding specialty clinical and didactic courses must be taken in sequence.
4. A student earning a third "C" or lower will be academically dismissed from the program.
5. A student earning two grades of "F" in the program will be academically dismissed.
6. Failure to show good ethical and moral character including but not limited to any of the following may result in dismissal from the program:
  - a. conviction of a crime,
  - b. disciplinary action against a nursing license in Alabama or any other state,
  - c. positive drug test,
  - d. adverse background check, or
  - e. disruptive behavior, including online behavior.

All student must notify the Associate Dean for Academic Affairs or the Dean of the College of Nursing immediately or no later than 48 hours of any of the above stated incidents.

7. All students must notify the Associate Dean for Academic Affairs or the Dean of the College of Nursing immediately or no later than 48 hours following an arrest. Failure to report an arrest may result in removal from the program.
8. All students are subject to testing for controlled substances and must submit to random drug testing as requested. A positive test or refusal to submit to testing will result in removal from the program.
9. All students are subject to a background check and must submit to additional background checks as requested. An adverse finding or refusal to submit to a background check may result in removal from the program.
10. A student who has been academically dismissed is not eligible for readmission to the MSN program.

### Policy for Students Who are Dismissed from a Clinical Setting for Unprofessional Behavior or Refused Approval by the Setting due to Previous Experience with the Student

Professional behavior is expected of all USA CON students within the clinical setting. Students who are asked to leave a clinical setting (by an administrator or preceptor) due to unprofessional behavior will be removed from the clinical site with no approval of return to the same site.

Should a clinical agency refuse to allow a student to obtain clinical hours in their facility for any reason, the agency's request will be honored by the college.

Students dismissed from a clinical site or refused by a clinical agency will be assisted to find an appropriate clinical placement at an affiliated clinical site at the college's discretion. Students who decline the placement provided will be delayed in completing the program.

Depending on the nature of the unprofessional behavior, action taken by the college may include dismissal from the academic program.

### Graduation Requirements

The MSN program must be completed within 5 years of matriculation. MSN students who will complete all degree requirements are required to apply for graduation by the application deadline established by the Registrar's Office. Deadlines for each semester application are located on the Registrar's Graduation Website (<https://www.southalabama.edu/departments/registrar/commencement/>).

## Nursing Post-Graduate Certificate

### Degree Requirements

#### Clinical Concentrations

Code	Title	Hours
<b>Clinical Concentrations</b>		
Select one of the following concentrations:		15-36
<i>Adult-Gerontological Acute Care Nurse Practitioner</i>		
AHN 568	Intro to Adult-Geron Acute NP	
AHN 571	HPDP Adult-Geron Acute Care NP	
AHN 572	Adult-Geron Acute NP I	
AHN 573	Adult-Geron Acute NP Prac I	
AHN 574	Adult-Geron Acute NP II	
AHN 575	Adult-Geron Acute NP Prac II	
AHN 576	Adult Geron Acute NP Prac III	

AHN 577	Adult Geron Acute NP III
<i>Adult-Gerontological Primary Care Nurse Practitioner</i>	
AHN 581	HP/DP Adlt-Geron Prim Care NP
AHN 588	Intro to Adult-Geron Prim NP
AHN 591	Adult-Geron Prim NP I
AHN 592	Adlt-Geron Primary NP Pract I
AHN 593	Adult-Gero Prim NP II
AHN 594	Adult-Geron Prim NP Prac II
AHN 595	Adult-Gero Primary Care NP III
AHN 596	Adult-Geron Prim NP Prac III
<i>Adult-Gerontological Clinical Nurse Specialist</i>	
NU 515	Clinical Concepts/CNS Role I
NU 516	Clinical Concepts/CNS Role II
NU 517	Clinical Concepts/CNS Role III
AHN 516	CNS Adult Geron Pract I
AHN 517	CNS Adult Geron Pract II
AHN 518	CNS Adult Geron Pract III
AHN 519	Diagnostic Reasoning and Advanced Patient Management for the Clinical Nurse Specialist (Elective)
<i>Clinical Nurse Leader</i>	
NU 535	Clin Ldr Role & Competencies
NU 536	Clin Nurse Ldr Pract I
NU 537	Clin Nurse Leader Synthesis
NU 538	Clinical Nurse Ldr Prac II
<i>Dual Role (Family NP/Adult-Gerontological Acute Care)</i>	
AHN 538	HPDP Dual Role (FNP/AGACNP)
AHN 548	Family Prim Care NP I
AHN 549	Family Prim Care NP Prac I
AHN 550	Family Prim Care NP II
AHN 551	Family Prim Care NP Pract II
AHN 552	Adult-Geron Acute Care NP I
AHN 553	Adult-Ger Acute Care NP Prac I
AHN 554	Adult-Geron Acute Care NP II
AHN 555	Adlt-Ger Acute Care NP Prac II
<i>Dual Role (Family NP/Emergency NP)</i>	
NU 580	Hlth Promo & Ds Prev/FNP/ENP
NU 581	Family/Emergency NP I
NU 582	Family/Emerg NP Practicum I
NU 583	Family/Emergency NP II
NU 584	Family/ Emerg NP Practicum II
NU 585	Family/Emergency NP III
NU 586	Family/Emerg NP Practicum III
NU 587	Family/Emergency NP IV
NU 588	Family/Emerg NP Practicum IV
Emergency Nurse Practitioner ( <a href="http://bulletin.southalabama.edu/programs-az/nursing/nursing/footnote1/">http://bulletin.southalabama.edu/programs-az/nursing/nursing/footnote1/</a> ) <sup>7</sup>	
NU 570	Emergency NP I
NU 571	Emergency NP Practicum I
NU 572	Emergency NP II
NU 573	Emergency NP Practicum II
NU 574	Emergency NP III
NU 575	Emergency NP Practicum III

NU 576	Emergency NP IV
NU 577	Emergency NP Practicum IV
<i>Family Nurse Practitioner</i>	
CMN 568	Intro to Family NP
CMN 571	HPDP in Family NP
CMN 572	Family NP I
CMN 573	Family NP Pract I
CMN 574	Family NP II
CMN 575	Family NP Prac II
CMN 576	Family NP Pract III
CMN 577	Family NP III
<i>Neonatal Nurse Practitioner</i>	
MCN 568	Intro to Neonatal NP
MCN 571	HPDP NNP/Peds Acute NP
MCN 572	Neonatal NP I
MCN 573	Neonatal NP Pract I
MCN 574	Neonatal NP II
MCN 575	Neonatal NP Prac II
MCN 576	Neonatal NP Pract III
MCN 577	Neonatal NP III
<i>Pediatric Acute Nurse Practitioner</i>	
MCN 558	Intro Pediatric Acute Care NP
MCN 562	Pediatric Acute Care NP I
MCN 563	Ped Acute Care NP Prac I
MCN 564	Pediatric Acute Care NP II
MCN 565	Ped Acute Care NP Prac II
MCN 566	Ped Acute Care NP Pract III
MCN 567	Pediatric Acute Care NP III
MCN 571	HPDP NNP/Peds Acute NP
<i>Pediatric Primary Care Nurse Practitioner</i>	
MCN 548	Intro to Ped Primary Care NP
MCN 551	HPDP Pediatric Primary Care NP
MCN 552	Pediatric Prim Care NP I
MCN 553	Ped Prim Care NP Prac I
MCN 554	Pediatric Primary Care NP II
MCN 555	Ped Prim Care NP Prac II
MCN 556	Ped Prim Care NP Pract III
MCN 557	Pediatric Primary Care NP III
<i>Psychiatric Mental Health Nurse Practitioner</i>	
CMN 548	Introduction to PMHNP
CMN 551	HPDP & Issues for the PMHNP
CMN 552	PMHNP I
CMN 553	PMHNP Practicum I
CMN 554	PMHNP II
CMN 555	PMHNP Practicum II
CMN 556	PMHNP Practicum III
CMN 557	PMHNP III
<i>Women's Health Nurse Practitioner</i>	
MCN 538	Intro to Women's Health NP
MCN 541	HPDP Women's Health NP
MCN 542	Women's Health NP I
MCN 543	Women's Health NP Pract I

MCN 544	Women's Health NP II
MCN 545	Women's Health NP Pract II
MCN 546	Women's Health NP Prac III
MCN 547	Women's Health NP III
<b>Total Hours</b>	<b>15-36</b>

## Footnote

May be added to Family NP, Dual Role (Family NP/Adult-Gerontological Acute Care NP), or taken as a Post Graduate Certificate if already Family NP certified.

## Non-Clinical Concentrations

Code	Title	Hours
<b>Non-Clinical Concentrations</b>		
Select one of the following concentrations:		25
<i>Executive Nursing Administration</i>		
HSC 571	Managing Healthcare Personnel	
NU 539	Intro to Nursing Informatics	
NU 553	Administrative Concepts	
NU 554	Resource Manag Field Study	
NU 561	Nursing Admin Concepts-Theory	
NU 565	Nursing Administration Finance	
NU 566	Nursing Admin Field Study	
NU 567	Nursing Admin Internship	
NU 568	Nursing Admin Seminar	
<i>Nursing Informatics</i>		
ISC 550	Health Data Security & Comp	
ISC 555	Health Data Mgt/Decision Supp	
NU 539	Intro to Nursing Informatics	
NU 553	Administrative Concepts	
NU 554	Resource Manag Field Study	
NU 556	Informatics & Qual Care Improv	
NU 557	Clinical Informatics Pract I	
NU 558	Seminar in Nursing Informatics	
NU 559	Clinical Informatics Pract II	
NU 565	Nursing Administration Finance	
<b>Total Hours</b>		<b>25</b>

## Nursing Post-Graduate Certificate Program

The Nursing Post-Graduate Certificate Program is designed for registered nurses with a graduate degree in nursing who seek academic preparation in a new specialty or subspecialty area of advanced practice nursing. Nursing Post-graduate certificate students can select any of the specialty options offered by the program. Each certificate program is designed to be in compliance with national certification requirements including required support courses, didactic specialty courses, and clinical hours.

### Nursing Post-Graduate Certificate Program Learning Outcomes

Upon completion of the Nursing Post-Graduate Certificate Program, graduates should be able to:

1. Integrate advanced knowledge and theories from nursing and related disciplines into a specialized area of advanced nursing practice.

2. Demonstrate competence in advanced nursing roles to meet current and emerging health needs of a specific population or system.
3. Use scientific inquiry to identify problems within an organization or specific patient population to improve care outcomes.
4. Apply advanced knowledge of leadership and management to transform care delivery systems in a specialized area of advanced nursing practice.
5. Contribute to the focus and direction of the nursing profession within a specialized area of advanced nursing practice.
6. Demonstrate professional skills through collecting, organizing, and communicating information in professional writing and presentations.

## Admission Criteria

1. Citizen or Permanent Resident of the United States of America.
2. Current registered nurse licensure with no restrictions. Nurses with any restrictions on their license, including participation in a voluntary disciplinary alternative program, cannot be admitted.
3. Graduate of an approved regionally accredited master's or doctoral program with a major in nursing.
4. A minimal grade-point average of 2.75 on all graduate work (A=4.00).
5. Submission of a résumé which documents clinical experience.
6. Prior to enrolling in nurse practitioner clinical course, students are required to have at least 2 years of experience in an area appropriate to the specialty track.
7. Students are admitted to a specialty track and may not change their track without permission.
8. Students must be in good standing with all academic institutions/ nursing programs that they have attended in order to be admitted to the Post-Graduate Certificate program.
9. Enrollment in selective courses may not be available to non-degree students due to class size or required prerequisite.

## Contingency for Admission and Initial Registration

Admission and initial registration is contingent on completion of the following requirements:

1. Acceptance Packet
2. Negative Drug Screen
3. Acceptable Background Check
4. All Health Requirements as outlined in the Medical Documents Manager.
5. Letter of Clinical Commitment.

Notification of missing documents will be sent to your JagMail email account. Only students who have successfully completed the Acceptance Packet in its entirety, have a negative drug screen and acceptable background check, and completed all required portions of the Medical Documents Manager will be permitted to register for classes.

## Application Procedures

Admission to the program is limited and selective. Application forms and other information may be obtained from the College of Nursing's website (<https://www.southalabama.edu/colleges/con/dnp/dnpapplic.html>) or by contacting the college directly at:

College of Nursing  
University of South Alabama  
Mobile, Alabama 36688

condnpadmit@southalabama.edu  
Telephone: (251) 445-9400

To be considered for admission to the Post Graduate Certificate program, the applicant must submit the following requirements:

1. Completion of the Primary Application:
  - a. Primary Application (<http://bulletin.southalabama.edu/programs-az/nursing/nursing/nursing-post-graduate-certificate/www.NursingCAS.org>) submitted through Nursing Centralized Application System (NursingCAS).
  - b. Official transcripts of all college and university studies, regardless of the outcome of enrollment, must be sent directly from the home institution to the NursingCAS. These documents become the property of the NursingCAS and will not be returned to the applicant. Applicants are responsible for any fees required by NursingCAS for their services.
  - c. Personal Goal Statement is required. The Personal Goal Statement is a description of the applicant's purpose for completing the graduate degree. This essay serves as a writing sample to be reviewed by the Graduate Admissions Committee to determine the applicant's scholarly writing skills.
  - d. Submission of a résumé which documents clinical experience.
2. Completion of the Supplemental Application:
  - a. The Supplemental Application (<https://explore.southalabama.edu/account/register/?r=https%3a%2f%2fexplore.southalabama.edu%2fapply%2f%3f%3d870af7f1-de34-492d-b275-be6ef1c6297a>) is submitted electronically directly to the MSN Office at the USA College of Nursing. Under Academic Information please select the appropriate semester for admission. Select "graduate" under both student type and academic level of interest. A new option will appear asking if you are applying for a graduate nursing program, select "yes" and this will take you into the nursing application.
  - b. Please note that the Supplemental Application should be completed **AFTER** you have completed your NursingCAS application and it has moved through the following stages: received, complete then **VERIFIED**. Once it is verified you may complete the Supplemental Application.
  - c. Applicants are responsible for ensuring that their completed Supplemental Application is submitted by the deadline for the semester for which they are applying. Incomplete applications will not be processed.
  - d. This application requires a non-refundable processing fee of \$100.00.

## Application Deadlines

Applications are accepted year round, and must adhere to the following application deadlines:

- Fall Semester Deadline is March 1
- Spring Semester Deadline is September 1
- Summer Semester Deadline is February 1

## Academic Progression Requirements for the Nursing Post-Graduate Certificate

Students in the Nursing Post-Graduate Certificate program must meet the following requirements to progress in the program:

1. Maintain an overall GPA of 3.0. Any term in which a graduate student drops below a 3.0 Program GPA, the student is placed on probationary status and has a period of two terms to attain a 3.0 Program GPA or be dismissed.
2. Students in these programs can have a maximum of two "C"s.
3. A maximum of two (2) courses with a grade of "C" can be counted towards a degree; however, only one (1) "C" is permitted in support or specialization courses. If a second "C" or lower is earned in a support or specialization course, the course in which the second "C" or lower is obtained must be repeated before a student may move forward with a specialty course. All corresponding specialty clinical and didactic courses must be taken in sequence.
4. A student earning a third "C" or lower will be academically dismissed from the program.
5. A student earning two grades of "F" in the program will be academically dismissed.
6. Failure to show good ethical and moral character including but not limited to any of the following may result in dismissal from the program:
  - a. conviction of a crime,
  - b. disciplinary action against a nursing license in Alabama or any other state,
  - c. positive drug test,
  - d. adverse background check, or
  - e. disruptive behavior, including online behavior.

All student must notify the Associate Dean for Academic Affairs or the Dean of the College of Nursing immediately or no later than 48 hours of any of the above stated incidents.
7. All students must notify the Associate Dean for Academic Affairs or the Dean of the College of Nursing immediately or no later than 48 hours following an arrest. Failure to report an arrest may result in removal from the program.
8. All students are subject to testing for controlled substances and must submit to random drug testing as requested. A positive test or refusal to submit to testing will result in removal from the program.
9. All students are subject to a background check and must submit to additional background checks as requested. An adverse finding or refusal to submit to a background check may result in removal from the program.
10. A student who has been academically dismissed is not eligible for readmission to the College of Nursing Graduate programs.

## Policy for Students Who are Dismissed from a Clinical Setting for Unprofessional Behavior or Refused Approval by the Setting due to Previous Experience with the Student

Professional behavior is expected of all USA CON students within the clinical setting. Students who are asked to leave a clinical setting (by an administrator or preceptor) due to unprofessional behavior will be removed from the clinical site with no approval of return to the same site.

Should a clinical agency refuse to allow a student to obtain clinical hours in their facility for any reason, the agency's request will be honored by the college.

Students dismissed from a clinical site or refused by a clinical agency will be assisted to find an appropriate clinical placement at an affiliated clinical site at the college's discretion. Students who decline the placement provided will be delayed in completing the program.

Depending on the nature of the unprofessional behavior, action taken by the college may include dismissal from the academic program.

## Program Completion

Students in the Nursing Post Graduate Certificate Pathway are required to complete all specialty courses and any support courses not previously completed. Nursing Post-Graduate certificate students are not required to complete graduate core or research courses (see the previous section on MSN Curriculum for the BSN-prepared RN for a listing of courses for each specialty area). The Nursing Post-Graduate Certificates Program must be completed within 2 years from the semester the specialty option coursework begins.

## Nursing Practice (DNP) - BSN to DNP Degree Requirements

### Master of Science in Nursing Degree Requirements

#### MSN With Clinical Concentrations Course Requirements

Code	Title	Hours
<b>Support Courses</b>		
NU 518	Adv Nursing Assessment	3
NU 545	Physio-Patho Basis of Adv Nsg	3
NU 578	Pharm Adv Practice Nurses	3
<b>Core Courses</b>		
NU 607	Scientif Underpinnings Adv Nsg	3
NU 608	EBP & Quality Improvement HCS	3
NU 610	Healthcare Policy & Finance	3
NU 613	Organizational & Sys Leadrshp	3
<b>Clinical Concentrations</b>		
Select one of the following concentrations:		15-36
<i>Adult-Gerontological Acute Care Nurse Practitioner</i>		
AHN 568	Intro to Adult-Geron Acute NP	
AHN 571	HPDP Adult-Geron Acute Care NP	
AHN 572	Adult-Geron Acute NP I	
AHN 573	Adult-Geron Acute NP Prac I	
AHN 574	Adult-Geron Acute NP II	
AHN 575	Adult-Geron Acute NP Prac II	
AHN 576	Adult Geron Acute NP Prac III	
AHN 577	Adult Geron Acute NP III	
<i>Adult-Gerontological Primary Care Nurse Practitioner</i>		
AHN 581	HP/DP Adlt-Geron Prim Care NP	
AHN 588	Intro to Adult-Geron Prim NP	
AHN 591	Adult-Geron Prim NP I	
AHN 592	Adlt-Geron Primary NP Pract I	
AHN 593	Adult-Gero Prim NP II	
AHN 594	Adult-Geron Prim NP Prac II	
AHN 595	Adult-Gero Primary Care NP III	

AHN 596	Adult-Geron Prim NP Prac III	MCN 563	Ped Acute Care NP Prac I
<i>Adult-Gerontological Clinical Nurse Specialist</i>		MCN 564	Pediatric Acute Care NP II
NU 515	Clinical Concepts/CNS Role I	MCN 565	Ped Acute Care NP Prac II
NU 516	Clinical Concepts/CNS Role II	MCN 566	Ped Acute Care NP Pract III
NU 517	Clinical Concepts/CNS Role III	MCN 567	Pediatric Acute Care NP III
AHN 516	CNS Adult Geron Pract I	MCN 571	HPDP NNP/Peds Acute NP
AHN 517	CNS Adult Geron Pract II	<i>Pediatric Primary Care Nurse Practitioner</i>	
AHN 518	CNS Adult Geron Pract III	MCN 548	Intro to Ped Primary Care NP
AHN 519	Diagnostic Reasoning and Advanced Patient Management for the Clinical Nurse Specialist (Elective)	MCN 551	HPDP Pediatric Primary Care NP
<i>Dual Role (Family NP/Adult-Gerontological Acute Care NP)</i>		MCN 552	Pediatric Prim Care NP I
AHN 538	HPDP Dual Role (FNP/AGACNP)	MCN 553	Ped Prim Care NP Prac I
AHN 548	Family Prim Care NP I	MCN 554	Pediatric Primary Care NP II
AHN 549	Family Prim Care NP Prac I	MCN 555	Ped Prim Care NP Prac II
AHN 550	Family Prim Care NP II	MCN 556	Ped Prim Care NP Pract III
AHN 551	Family Prim Care NP Pract II	MCN 557	Pediatric Primary Care NP III
AHN 552	Adult-Geron Acute Care NP I	<i>Psychiatric Mental Health Nurse Practitioner</i>	
AHN 553	Adult-Ger Acute Care NP Prac I	CMN 548	Introduction to PMHNP
AHN 554	Adult-Geron Acute Care NP II	CMN 551	HPDP & Issues for the PMHNP
AHN 555	Adlt-Ger Acute Care NP Prac II	CMN 552	PMHNP I
<i>Dual Role (Family NP/Emergency NP)</i>		CMN 553	PMHNP Practicum I
NU 580	Hlth Promo & Ds Prev/FNP/ENP	CMN 554	PMHNP II
NU 581	Family/Emergency NP I	CMN 555	PMHNP Practicum II
NU 582	Family/Emerg NP Practicum I	CMN 556	PMHNP Practicum III
NU 583	Family/Emergency NP II	CMN 557	PMHNP III
NU 584	Family/ Emerg NP Practicum II	<i>Women's Health Nurse Practitioner</i>	
NU 585	Family/Emergency NP III	MCN 538	Intro to Women's Health NP
NU 586	Family/Emerg NP Practicum III	MCN 541	HPDP Women's Health NP
NU 587	Family/Emergency NP IV	MCN 542	Women's Health NP I
NU 588	Family/Emerg NP Practicum IV	MCN 543	Women's Health NP Pract I
<i>Family Nurse Practitioner</i>		MCN 544	Women's Health NP II
CMN 568	Intro to Family NP	MCN 545	Women's Health NP Pract II
CMN 571	HPDP in Family NP	MCN 546	Women's Health NP Prac III
CMN 572	Family NP I	MCN 547	Women's Health NP III
CMN 573	Family NP Pract I	<b>Total Hours</b>	<b>36-57</b>
CMN 574	Family NP II	<b>MSN with Non-Clinical Concentrations Course Requirements</b>	
CMN 575	Family NP Prac II	<b>Code</b>	<b>Title</b>
CMN 576	Family NP Pract III	<b>Core Courses</b>	<b>Hours</b>
CMN 577	Family NP III	NU 607	Scientif Underpinnings Adv Nsg
<i>Neonatal Nurse Practitioner</i>		NU 608	EBP & Quality Improvement HCS
MCN 568	Intro to Neonatal NP	NU 610	Healthcare Policy & Finance
MCN 571	HPDP NNP/Peds Acute NP	NU 613	Organizational & Sys Leadrshp
MCN 572	Neonatal NP I	<b>Non-Clinical Concentrations</b>	
MCN 573	Neonatal NP Pract I	Select one of the following concentrations:	25
MCN 574	Neonatal NP II	<i>Executive Nursing Administration</i>	
MCN 575	Neonatal NP Prac II	HSC 571	Managing Healthcare Personnel
MCN 576	Neonatal NP Pract III	NU 539	Intro to Nursing Informatics
MCN 577	Neonatal NP III	NU 553	Administrative Concepts
<i>Pediatric Acute Care Nurse Practitioner</i>		NU 554	Resource Manag Field Study
MCN 558	Intro Pediatric Acute Care NP	NU 561	Nursing Admin Concepts-Theory
MCN 562	Pediatric Acute Care NP I	NU 565	Nursing Administration Finance
		NU 566	Nursing Admin Field Study
		NU 567	Nursing Admin Internship

NU 568	Nursing Admin Seminar
<i>Nursing Informatics</i>	
ISC 550	Health Data Security & Comp
ISC 555	Health Data Mgt/Decision Supp
NU 539	Intro to Nursing Informatics
NU 553	Administrative Concepts
NU 554	Resource Manag Field Study
NU 556	Informatics & Qual Care Improv
NU 557	Clinical Informatics Pract I
NU 558	Seminar in Nursing Informatics
NU 559	Clinical Informatics Pract II
NU 565	Nursing Administration Finance

**Total Hours** 37

## Doctor of Nursing Practice Degree Requirements

24 Credit Hours Remaining after Completion of NU 607, NU 608, NU 610, and NU 613

Code	Title	Hours
<b>Core Courses</b>		
NU 611	Translat Evidence Practice Sys	3
NU 612	Clinical Prev Population Hlth	3
NU 615	Qual Improv & Outcomes Assmnt	3
NU 616	Data & Dec Mking Healthcare Sys	3

### DNP Residency Courses

Select one of the following: 12

<i>Adult-Gerontological Acute Care Nurse Practitioner</i>	
AHN 604	Adult-Geron Acute Care NP PP&D
AHN 617	AG ACNP Residency I
AHN 618	AG ACNP Residency II
AHN 619	AG ACNP Residency III
<i>Adult-Gerontological Primary Care Nurse Practitioner</i>	
AHN 693	Adult-Geron Primary NP PP&D
AHN 694	Adult-Gero Primary Cr NP Res I
AHN 695	Adlt-Gero Primary Cr NP Res II
AHN 696	Adlt-Gero Prim Care NP Res III
<i>Adult-Gerontological Clinical Nurse Specialist</i>	
AHN 634	Adult-Geron CNS PP&D
AHN 635	Adult-Geron CNS Residency I
AHN 636	Adult-Geron CNS Residency II
AHN 637	Adult-Geron CNS Residency III
<i>Dual Role (Family NP/Adult-Gerontological Acute Care NP) Option A Family NP</i>	
AHN 680	Family NP (DR) PP&D
AHN 681	Family NP (DR) Residency I
AHN 682	FNP (DR) Residency II
AHN 683	FNP (DR) Residency III
<i>Dual Role (Family NP/Adult-Gerontological Acute Care NP) Option B Adult-Gerontological Acute Care NP</i>	
AHN 670	AG-ACNP(DR) PP&D
AHN 671	AG/ACNP (DR) Residency I
AHN 672	AG-ACNP (DR) Residency II
AHN 673	AG-ACNP(DR) Residency III

### Dual Role (Family NP/Emergency NP

NU 680	Family/Emergency NP PP&D
NU 681	Family/Emerg NP Residency I
NU 682	Family/Emerg NP Residency II
NU 683	Family/Emerg NP Residency III

### Executive Nursing Administration

NU 661	Executive Nsg Admin PP&D
NU 662	Nurse Exec Admin Res I
NU 663	Nurse Exec Admin Res II
NU 664	Nurse Exec Admin Res III

### Family Nurse Practitioner

CMN 680	Family NP PP&D
CMN 681	Family NP Residency I
CMN 682	Family NP Residency II
CMN 683	Family NP Residency III

### Neonatal Nurse Practitioner

MCN 674	Neonatal NP PP&D
MCN 675	NNP Residency I
MCN 676	NNP Residency II
MCN 677	NNP Residency III

### Nursing Informatics

NU 656	Nursing Informatics PP&D
NU 657	Nursing Informatic Residency I
NU 658	NU Informatics Residency II
NU 659	NU Informatics Residency III

### Pediatric Acute Care Nurse Practitioner

MCN 604	Pediatric Acute Care NP PP&D
MCN 617	Pediatric Acute Care NP Res I
MCN 618	Pediatric Acute Care NP Res II
MCN 619	Pediatric Acute Cre NP Res III

### Pediatric Primary Care Nurse Practitioner

MCN 654	Pediatric Primary Care NP PP&D
MCN 655	Ped Prim Care NP Residency I
MCN 656	Ped Primary Care NP Res II
MCN 657	Ped Primary Care NP Res III

### Psychiatric Mental Health Nurse Practitioner

CMN 604	PMHNP PP&D
CMN 617	PMHNP Residency I
CMN 618	PMHNP Residency II
CMN 619	PMHNP Residency III

### Women's Health Nurse Practitioner

MCN 644	Women's Health NP PP&D
MCN 645	Women's Health NP Residency I
MCN 646	Women's Health NP Residency II
MCN 647	Women's Health NP Res III

**Total Hours** 24

## Subspecialties

Students can earn a Post-Graduate Certificate Subspecialty when adding the requirements for any of the following subspecialties to their degree program curriculum.

## Addictions Nursing

May be added to any concentration.

Code	Title	Hours
HSC 580	OUD/SUD Prevention/Screening	2
HSC 581	OUD/SUD Assessment/Treatment	2
HSC 582	OUD/SUD Recovery/Sys Practice	2
NU 510	Addictions Practicum I	1
NU 511	Addictions Practicum II	2
NU 512	Addictions Practicum III	2
NU 513	Addictions Practicum IV (Elective)	4
<b>Total Hours</b>		<b>15</b>

## Advanced Forensic Nursing

May be added to any concentration.

Code	Title	Hours
NU 500	Explore Culture Sexual Assault	2
NU 502	Sexual Assault Vic Practicum	1
NU 503	Trauma Care Sexual Assault Vic	2
NU 504	Adv Pharm Care Post Assault	2
NU 505	Sup Care Comorbid Post Assault	2
<b>Total Hours</b>		<b>9</b>

## Cardiovascular

May be added to Adult-Gerontological Acute NP, Adult-Gerontological Primary Care NP, Dual Role (Family NP/Adult-Gerontological Acute Care NP), and Dual Role (Family NP/Emergency NP), Family NP, Women's Health NP, Post-Graduate Certificate Emergency NP, and any Adult-Gerontological CNS student with a strong background in cardiovascular and/or acute care nursing.

Code	Title	Hours
AHN 630	Dysrhythmias and the Heart	2
AHN 631	Foundations of Cardiac Care	2
AHN 632	Diag & Mgmt of Acute CVD	2
AHN 633	Dig/Mgmt Complex CV Disorders	2
<b>Total Hours</b>		<b>8</b>

## Clinical Lipidology

May be added to Adult-Gerontological Primary Care NP, Adult-Gerontological Acute NP, Adult-Gerontological CNS, Family NP, Dual Role (Family NP/Adult-Gerontological Acute NP), Dual Role (Family NP/Emergency NP), Women's Health NP, and Post-Graduate Certificate Emergency NP.

Code	Title	Hours
HSC 595	Evidence Basd Lipid Practice	2
HSC 596	Adv Vascular Biology	2
HSC 597	Adv Pharm Complex Dyslipidemia	2
HSC 598	Diag/Mgt C-plex Dyslipidemia	2
<b>Total Hours</b>		<b>8</b>

## Diversity, Equity, and Inclusion in Healthcare

May be added to any concentration.

Code	Title	Hours
HSC 501	Found of Diversity Healthcare	2
HSC 502	Diversity Equity & Inclusion	2
HSC 503	Curr Issues & Trends Diversity	2
HSC 504	Lead&Change Mang Adv Diversity	2
Total Hours		
<b>Total Hours</b>		<b>8</b>

## Emergency Nurse Practitioner

May be added to Family NP, Dual Role (Family NP/Adult-Gerontological Acute Care NP), or taken as a Post Graduate Certificate if already Family NP certified.

Code	Title	Hours
NU 570	Emergency NP I	2
NU 571	Emergency NP Practicum I	1-3
NU 572	Emergency NP II	2
NU 573	Emergency NP Practicum II	1-3
NU 574	Emergency NP III	2
NU 575	Emergency NP Practicum III	1-3
NU 576	Emergency NP IV	2
NU 577	Emergency NP Practicum IV	1-3
<b>Total Hours</b>		<b>12-20</b>

## Nurse Educator

May be added to any concentration.

Code	Title	Hours
NU 620	Prin Teach/Learn/Assess Nu Ed	3
NU 621	Curr Design/Outcome Eval Nu Ed	3
NU 622	Current Topics in Nu Education	2
NU 623	Nsg Educ Synthesis Practicum	3
<b>Total Hours</b>		<b>11</b>

## Palliative Care

May be added to any concentration.

Code	Title	Hours
AHN 530	Found Palliative Care/Adv Role	2
AHN 531	Adv Palliative Cr/End of Life	2
AHN 532	Adv Chronic Illness Care	2
AHN 533	Adv Palliative Care Practicum	3
<b>Total Hours</b>		<b>9</b>

## Trauma-Informed Integrated Behavioral Healthcare

May be added to any concentration.

Code	Title	Hours
HSC 510	IPT for TI-IBH Primary Care	1
HSC 511	IPT Telehealth Deliv TI-IBH	1
HSC 512	TI-MI in IBH Seminar	1
NU 526	Trauma-Informed Integrated Behavioral Healthcare Practicum I	1
NU 527	Trauma-Informed Integrated Behavioral Healthcare Practicum II	2

NU 528	Trauma-Informed Integrated Behavioral Healthcare Practicum III	2
<b>Total Hours</b>		<b>8</b>

## Elective Courses

Code	Title	Hours
NU 509	Bioethics Advan Practice Nsg	1
NU 597	Intro to Scholarly Writing	3
HSC 500	Address Gender Discrimination	3
HSC 573	Resp Prescrib Common Used Drug	1

## Additional Information

### BSN to DNP Pathway

The BSN to DNP curriculum consist of 69 to 87 credit hours. The program can be completed in ten semesters of full-time study or in sixteen semesters of part-time study. Full-time study is defined as six or more credit hours per semester. Permission to take more than twelve credit hours per semester must be obtained from the Associate Dean for Academic Affairs prior to the student enrolling. The program must be completed within 7 years of matriculation.

Course work is offered on-line and students are required to come to campus at least one time when they begin the clinical portion of their specialty program for an intensive classroom, clinical skills, and evaluation sessions. Specialty tracks within the College of Nursing's graduate program require a practice component. Faculty assist students in locating a site and preceptor if it is indicated. Students who are unsuccessful in being accepted by an agency in their home community may have to travel to another area to complete practice requirements.

The program does not require a thesis or dissertation; however, students are required to complete a major synthesis project that results in a quality improvement change and has a substantial effect on health care outcomes. Residency requirements for the synthesis project can be completed in the student's home region with an approved mentor.

### Admission Criteria

To be considered for admission to the DNP program, the applicant must meet the following requirements:

1. Citizen or Permanent Resident of the United States of America.
2. Current registered nurse licensure with no restrictions. Nurses with any restrictions on their license, including participation in a voluntary disciplinary alternative program, cannot be admitted.
3. Graduate of an approved regionally accredited bachelors program with a major in nursing.
4. Applicants to the BSN to DNP pathway must have a minimal grade-point average of 3.0 on all BSN work (A=4.00).
5. Submission of a résumé which documents clinical experience.
6. Prior to enrolling in nurse practitioner clinical course, students are required to have at least 2 years of experience in an area appropriate to the specialty track.
7. Students are admitted to a specialty track and may not change their track without permission.

8. Students must be in good standing with all academic institutions/ nursing programs that they have attended in order to be admitted to the DNP program.

## Contingency for Admission and Initial Registration

Admission and initial registration is contingent on completion of the following requirements:

1. Acceptance Packet
2. Negative Drug Screen
3. Acceptable Background Check
4. All Health Requirements as outlined in the Medical Documents Manager.
5. Letter of Clinical Commitment.

Notification of missing documents will be sent to your JagMail email account. Only students who have successfully completed the Acceptance Packet in its entirety, have a negative drug screen and acceptable background check, and completed all required portions of the Medical Documents Manager will be permitted to register for classes.

## Application Procedures

Admission to the program is limited and selective. Application forms and other information may be obtained from the College of Nursing's website (<https://www.southalabama.edu/colleges/con/dnp/dnpapplic.html>) or by contacting the college directly at:

College of Nursing  
University of South Alabama  
Mobile, Alabama 36688  
condnpadmit@southalabama.edu  
Telephone: (251) 445-9400.

1. Completion of the Primary Application:
  - a. Primary Application (<http://bulletin.southalabama.edu/programs-az/nursing/nursing/nursing-practice-dnp-bsn/www.NursingCAS.org>) submitted through Nursing Centralized Application System (NursingCAS).
  - b. Official transcripts of all college and university studies, regardless of the outcome of enrollment, must be sent directly from the home institution to the NursingCAS. These documents become the property of the NursingCAS and will not be returned to the applicant. Applicants are responsible for any fees required by NursingCAS for their services.
  - c. Personal Goal Statement is required. The Personal Goal Statement is a description of the applicant's purpose for completing the graduate degree. This essay serves as a writing sample to be reviewed by the Graduate Admissions Committee to determine the applicant's scholarly writing skills.
  - d. Submission of a résumé which documents clinical experience.
2. Completion of the Supplemental Application:
  - a. The Supplemental Application (<https://explore.southalabama.edu/account/register/?r=https%3a%2f%2fexplore.southalabama.edu%2fapply%2f%3f%3d870af7f1->

de34-492d-b275-be6ef1c6297a) is submitted electronically directly to the DNP Office at the USA College of Nursing. Under Academic Information please select the appropriate semester for admission. Select "graduate" under both student type and academic level of interest. A new option will appear asking if you are applying for a graduate nursing program, select "yes" and this will take you into the nursing application.

- b. Please note that the Supplemental Application should be completed **AFTER** you have completed your NursingCAS application and it has moved through the following stages: received, complete then **VERIFIED**. Once it is verified you may complete the Supplemental Application.
- c. Applicants are responsible for ensuring that their completed Supplemental Application is submitted by the deadline for the semester for which they are applying. Incomplete applications will not be processed.
- d. This application requires a non-refundable processing fee of \$100.00.

## Application Deadlines

Applications are accepted three times a year, and must adhere to the following application deadlines:

- Fall Semester Deadline is March 1
- Spring Semester Deadline is September 1
- Summer Semester Deadline is February 1

## Academic Progression Policy

Students in the BSN-DNP program must meet the following requirements to progress in the program:

1. Maintain an overall GPA of 3.0. Any term in which a graduate student drops below a 3.0 Program GPA, the student is placed on probationary status and has a period of two terms to attain a 3.0 Program GPA or be dismissed.
2. Students in these programs can have a maximum of two "C"s.
3. A maximum of two (2) courses with a grade of "C" can be counted towards a degree; however, only one (1) "C" is permitted in support or specialization courses. If a second "C" or lower is earned in a support (NU 518, NU 545, NU 578) or specialization course, the course in which the second "C" or lower is obtained must be repeated before a student may move forward with a specialty course. All corresponding specialty clinical and didactic courses must be taken in sequence.
4. A student earning a third "C" or lower will be academically dismissed from the program.
5. A student earning two grades of "F" in the program will be academically dismissed.
6. The final outcome of the DNP Project Planning and Development course and the DNP Incomplete Extension course is "Successful/ Unsuccessful." Students receiving two grades of "U" in these courses will be academically dismissed.
7. Failure to show good ethical and moral character including but not limited to any of the following may result in dismissal from the program:

- a. conviction of a crime,
  - b. disciplinary action against a nursing license in Alabama or any other state,
  - c. positive drug test,
  - d. adverse background check, or
  - e. disruptive behavior, including online behavior.  
All students must notify the Associate Dean for Academic Affairs or the Dean of the College of Nursing immediately or no later than 48 hours of any of the above stated incidents.
8. All students must notify the Associate Dean for Academic Affairs or the Dean of the College of Nursing immediately or no later than 48 hours following an arrest. Failure to report an arrest may result in removal from the program.
  9. All students are subject to testing for controlled substances and must submit to random drug testing as requested. A positive test or refusal to submit to testing will result in removal from the program.
  10. All students are subject to a background check and must submit to additional background checks as requested. An adverse finding or refusal to submit to a background check may result in removal from the program.
  11. A student who has been academically dismissed is not eligible for readmission to the DNP program and is not eligible for admission to the MSN program.

## Policy for Students Who are Dismissed from a Clinical Setting for Unprofessional Behavior or Refused Approval by the Setting due to Previous Experience with the Student

Professional behavior is expected of all USA CON students within the clinical setting. Students who are asked to leave a clinical setting (by an administrator or preceptor) due to unprofessional behavior will be removed from the clinical site with no approval of return to the same site.

Should a clinical agency refuse to allow a student to obtain clinical hours in their facility for any reason, the agency's request will be honored by the college.

Students dismissed from a clinical site or refused by a clinical agency will be assisted to find an appropriate clinical placement at an affiliated clinical site at the college's discretion. Students who decline the placement provided will be delayed in completing the program.

Depending on the nature of the unprofessional behavior, action taken by the college may include dismissal from the academic program.

## DNP Residency Coursework Policy

The DNP Residency Coursework includes the DNP Project Planning and Development, Residency I, Residency II, and Residency III. Students who do not meet all requirements in a course must complete a DNP Incomplete Extension Course prior to moving forward with the next course in the DNP Residency progression.

## Scientific Review Committee Policy

The DNP project will be reviewed by the USA College of Nursing DNP Scientific Review Committee to evaluate rigor and feasibility. The review

process will occur during Project Planning and Development. The DNP project must be reviewed by the Scientific Review Committee before enrolling in Residency I.

## Graduation Information

Students in the BSN-DNP program will apply for two separate graduations. Applications should be submitted to the Registrar's Office the semester before the anticipated graduation. Each candidate must submit an application for the Master of Science in Nursing degree upon completion of the degree requirements. Upon completion of requirements for the Doctor of Nursing Practice degree, each candidate must submit an application for that degree. The student's curriculum schedule indicates the semester in which each degree should be awarded. See the Registrar's Graduation Website (<https://www.southalabama.edu/departments/registrar/commencement/>) for specific application deadlines.

# Nursing Practice (DNP) - MSN Clinical Nurse Leader Bridge to DNP Executive Nursing Administration Pathway

## Degree Requirements

### Degree: Doctor of Nursing Practice (DNP)

#### MSN Clinical Nurse Leader Bridge to DNP Executive Nursing Administration Pathway

A. MSN Clinical Nurse Leader (Completed before admission)

Code	Title	Hours
<b>Bridge Courses</b>		
NU 560	Adm & Mgt for Adv Nsg Practice	3
NU 565	Nursing Administration Finance	3
<b>DNP Core Courses</b>		
NU 607	Scientif Underpinnings Adv Nsg	3
NU 608	EBP & Quality Improvement HCS	3
NU 610	Healthcare Policy & Finance	3
NU 611	Translat Evidence Practice Sys	3
NU 612	Clinical Prev Population Hlth	3
NU 613	Organizational & Sys Leadrshp	3
NU 615	Qual Improv & Outcomes Assmnt	3
NU 616	Data & Dec Mkng Healthcare Sys	3
<b>DNP Residency Courses</b>		
<i>Executive Nursing Administration</i>		
NU 661	Executive Nsg Admin PP&D	3
NU 662	Nurse Exec Admin Res I	3
NU 663	Nurse Exec Admin Res II	3
NU 664	Nurse Exec Admin Res III	3
<b>Total Hours</b>		<b>42</b>

## Subspecialties

Students can earn a Post-Graduate Certificate Subspecialty when adding the requirements for any of the following subspecialties to their degree program curriculum.

## Addictions Nursing

May be added to any concentration.

Code	Title	Hours
HSC 580	OUD/SUD Prevention/Screening	2
HSC 581	OUD/SUD Assessment/Treatment	2
HSC 582	OUD/SUD Recovery/Sys Practice	2
NU 510	Addictions Practicum I	1
NU 511	Addictions Practicum II	2
NU 512	Addictions Practicum III	2
NU 513	Addictions Practicum IV (Elective)	4
<b>Total Hours</b>		<b>15</b>

## Advanced Forensic Nursing

May be added to any concentration.

Code	Title	Hours
NU 500	Explore Culture Sexual Assault	2
NU 502	Sexual Assault Vic Practicum	1
NU 503	Trauma Care Sexual Assault Vic	2
NU 504	Adv Pharm Care Post Assault	2
NU 505	Sup Care Comorbid Post Assault	2
<b>Total Hours</b>		<b>9</b>

## Diversity, Equity, and Inclusion in Healthcare

May be added to any concentration.

Code	Title	Hours
HSC 501	Found of Diversity Healthcare	2
HSC 502	Diversity Equity & Inclusion	2
HSC 503	Curr Issues & Trends Diversity	2
HSC 504	Lead&Change Mang Adv Diversity	2
<b>Total Hours</b>		<b>8</b>

## Nurse Educator

May be added to any concentration.

Code	Title	Hours
NU 620	Prin Teach/Learn/Assess Nu Ed	3
NU 621	Curr Design/Outcome Eval Nu Ed	3
NU 622	Current Topics in Nu Education	2
NU 623	Nsg Educ Synthesis Practicum	3
<b>Total Hours</b>		<b>11</b>

## Palliative Care

May be added to any concentration.

Code	Title	Hours
AHN 530	Found Palliative Care/Adv Role	2
AHN 531	Adv Palliative Cr/End of Life	2
AHN 532	Adv Chronic Illness Care	2
AHN 533	Adv Palliative Care Practicum	1-9
<b>Total Hours</b>		<b>7-15</b>

## Trauma-Informed Integrated Behavioral Healthcare

May be added to any concentration

Code	Title	Hours
HSC 510	IPT for TI-BH Primary Care	1
HSC 511	IPT Telehealth Deliv TI-BH	1
HSC 512	TI-MI in IBH Seminar	1
NU 526	Trauma-Informed Integrated Behavioral Healthcare Practicum I	1
NU 527	Trauma-Informed Integrated Behavioral Healthcare Practicum II	2
NU 528	Trauma-Informed Integrated Behavioral Healthcare Practicum III	2
<b>Total Hours</b>		<b>8</b>

## Elective Courses

Code	Title	Hours
NU 509	Bioethics Advan Practice Nsg	1
NU 597	Intro to Scholarly Writing	3
HSC 500	Address Gender Discrimination	3
Addressing Gender Discrimination and Disparities in Healthcare		
HSC 573	Resp Prescrib Common Used Drug	1

## Additional Information

### MSN in Clinical Nurse Leader Bridge to DNP Executive Nursing Administration

MSN to DNP Clinical Nurse Leader with Advanced Concentration in Leadership Bridge to Executive Nursing Administration Pathway is for students who completed their MSN in the area of Clinical Nurse Leader with Advanced Concentration in Leadership and want to complete their DNP in the specialty area of Executive Nursing Administration.

Students may pursue a DNP in the specialty area of Nursing Executive Administration after receiving an MSN degree with Advanced Concentration in Leadership.

Students would be required to complete 36 credit hours of the DNP program and two bridge courses to matriculate from the Clinical Nurse Leader with Advanced Concentration in Leadership to the Nursing Executive Administration specialty. Graduates of this program would complete a total of 42 credit hours.

### Admission Criteria

To be considered for admission to the DNP program, the applicant must meet the following requirements:

1. Citizen or Permanent Resident of the United States of America.
2. Current registered nurse licensure with no restrictions. Nurses with any restrictions on their license, including participation in a voluntary disciplinary alternative program, cannot be admitted.
3. Graduate of an approved regionally accredited master's program with a major in nursing.
4. Applicants to the MSN to DNP pathway must have a minimal GPA of 3.0 on all MSN work (A=4.00).
5. Submission of a résumé which documents clinical experience.

6. Prior to enrolling in nurse practitioner clinical course, students are required to have at least 2 years of experience in an area appropriate to the specialty track.
7. Students are admitted to a specialty track and may not change their track without permission.
8. Students must be in good standing with all academic institutions/nursing programs that they have attended in order to be admitted to the MSN program.

## Contingency for Admission and Initial Registration

Admission and initial registration is contingent on completion of the following requirements:

1. Acceptance Packet
2. Negative Drug Screen
3. Acceptable Background Check
4. All Health Requirements as outlined in the Medical Documents Manager.
5. Letter of Clinical Commitment.

Notification of missing documents will be sent to your JagMail email account. Only students who have successfully completed the Acceptance Packet in its entirety, have a negative drug screen and acceptable background check, and completed all required portions of the Medical Documents Manager will be permitted to register for classes.

## Application Procedures

Admission to the program is limited and selective. Application forms and other information may be obtained from the College of Nursing's website (<https://www.southalabama.edu/colleges/con/dnp/dnpapplic.html>) or by contacting the college directly at:

College of Nursing  
University of South Alabama  
Mobile, Alabama 36688  
condnpadmit@southalabama.edu  
Telephone: (251) 445-9400.

1. Completion of the Primary Application:
  - a. Primary Application (<http://bulletin.southalabama.edu/programs-az/nursing/nursing/nursing-practice-dnp-msn-clinical-leader-bridge-executive-administration-pathway/www.NursingCAS.org>) submitted through Nursing Centralized Application System (NursingCAS).
  - b. Official transcripts of all college and university studies, regardless of the outcome of enrollment, must be sent directly from the home institution to the NursingCAS. These documents become the property of the NursingCAS and will not be returned to the applicant. Applicants are responsible for any fees required by NursingCAS for their services.
  - c. Personal Goal Statement is required. The Personal Goal Statement is a description of the applicant's purpose for completing the graduate degree. This essay serves as a writing

sample to be reviewed by the Graduate Admissions Committee to determine the applicant's scholarly writing skills.

- d. Submission of a résumé which documents clinical experience.
2. Completion of the Supplemental Application:
    - a. The Supplemental Application (<https://explore.southalabama.edu/account/register/?r=https%3a%2f%2fexplore.southalabama.edu%2fapply%2f%3fsr%3d870af7f1-de34-492d-b275-be6ef1c6297a>) is submitted electronically directly to the MSN Office at the USA College of Nursing. Under Academic Information please select the appropriate semester for admission. Select "graduate" under both student type and academic level of interest. A new option will appear asking if you are applying for a graduate nursing program, select "yes" and this will take you into the nursing application.
    - b. Please note that the Supplemental Application should be completed **AFTER** you have completed your NursingCAS application and it has moved through the following stages: received, complete then **VERIFIED**. Once it is verified you may complete the Supplemental Application.
    - c. Applicants are responsible for ensuring that their completed Supplemental Application is submitted by the deadline for the semester for which they are applying. Incomplete applications will not be processed.
    - d. This application requires a non-refundable processing fee of \$100.00.

## Application Deadlines

Applications are accepted three times a year, and must adhere to the following application deadlines:

- Fall Semester Deadline is March 1
- Spring Semester Deadline is September 1
- Summer Semester Deadline is February 1

## Academic Progression Policy

Students in the MSN Clinical Nurse Leader Bridge to DNP Executive Nursing Administration Pathway program must meet the following requirements to progress in the program:

1. Maintain an overall GPA of 3.0. Any term in which a graduate student drops below a 3.0 Program GPA, the student is placed on probationary status and has a period of two terms to attain a 3.0 Program GPA or be dismissed.
2. Students in these programs can have a maximum of one "C". A student earning a second "C" or lower will be academically dismissed from the program.
3. A student earning one grade of "F" in the program will be academically dismissed.
4. The final outcome of the DNP Project Planning and Development course and the DNP Incomplete Extension course is "Successful/Unsuccessful." Students receiving two grades of "U" in these courses will be academically dismissed. Failure to show good ethical and

moral character including but not limited to any of the following may result in dismissal from the program:

- a. conviction of a crime,
  - b. disciplinary action against a nursing license in Alabama or any other state,
  - c. positive drug test,
  - d. adverse background check, or
  - e. disruptive behavior, including online behavior.
 

All students must notify the Associate Dean for Academic Affairs or the Dean of the College of Nursing immediately or no later than 48 hours of any of the above stated incidents.
5. All students must notify the Associate Dean for Academic Affairs or the Dean of the College of Nursing immediately or no later than 48 hours following an arrest. Failure to report an arrest may result in removal from the program.
  6. All students are subject to testing for controlled substances and must submit to random drug testing as requested. A positive test or refusal to submit to testing will result in removal from the program.
  7. All students are subject to a background check and must submit to additional background checks as requested. An adverse finding or refusal to submit to a background check may result in removal from the program.
  8. A student who has been academically dismissed is not eligible for readmission to the DNP program and is not eligible for admission to the MSN program.

## Policy for Students Who are Dismissed from a Clinical Setting for Unprofessional Behavior or Refused Approval by the Setting due to Previous Experience with the Student

Professional behavior is expected of all USA CON students within the clinical setting. Students who are asked to leave a clinical setting (by an administrator or preceptor) due to unprofessional behavior will be removed from the clinical site with no approval of return to the same site.

Should a clinical agency refuse to allow a student to obtain clinical hours in their facility for any reason, the agency's request will be honored by the college.

Students dismissed from a clinical site or refused by a clinical agency will be assisted to find an appropriate clinical placement at an affiliated clinical site at the college's discretion. Students who decline the placement provided will be delayed in completing the program.

Depending on the nature of the unprofessional behavior, action taken by the college may include dismissal from the academic program.

## DNP Residency Coursework Policy

The DNP Residency Coursework includes the DNP Project Planning and Development, Residency I, Residency II, and Residency III. Students who do not meet all requirements in a course must complete a DNP Incomplete Extension Course prior to moving forward with the next course in the DNP Residency progression.

## Scientific Review Committee Policy

The DNP project will be reviewed by the USA College of Nursing DNP Scientific Review Committee to evaluate rigor and feasibility. The review process will occur during Project Planning and Development. The DNP project must be reviewed by the Scientific Review Committee before enrolling in Residency I.

## Graduation Information

The program must be completed in five years of matriculation for the MSN Clinical Nurse Leader Bridge to DNP Executive Nursing Administration Pathway. Each candidate for the Doctor of Nursing practice degree must submit an application for the degree the semester preceding their anticipated graduation through the Registrar's Office. See the University Calendar for specific deadlines. Deadlines for each semester application are located on the Registrar's Graduation Website (<https://www.southalabama.edu/departments/registrar/commencement/>).

# Nursing Practice (DNP) - MSN to DNP Adding a New Concentration Area

## Degree Requirements

### Doctor of Nursing Practice (DNP)

### MSN to DNP Adding a New Concentration Pathway

### DNP Adding Clinical Concentration

Code	Title	Hours
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#### Support Courses

NU 518	Adv Nursing Assessment	3
NU 545	Physio-Patho Basis of Adv Nsg	3
NU 578	Pharm Adv Practice Nurses	3

#### Post Graduate Clinical Concentrations

Select one of the following Post-Graduate Clinical Concentrations: 17-36

##### *Adult-Gerontological Acute Care Nurse Practitioner*

AHN 568	Intro to Adult-Geron Acute NP	
AHN 571	HPDP Adult-Geron Acute Care NP	
AHN 572	Adult-Geron Acute NP I	
AHN 573	Adult-Geron Acute NP Prac I	
AHN 574	Adult-Geron Acute NP II	
AHN 575	Adult-Geron Acute NP Prac II	
AHN 576	Adult Geron Acute NP Prac III	
AHN 577	Adult Geron Acute NP III	

##### *Adult-Gerontological Primary Care Nurse Practitioner*

AHN 581	HP/DP Adlt-Geron Prim Care NP	
AHN 588	Intro to Adult-Geron Prim NP	
AHN 591	Adult-Geron Prim NP I	
AHN 592	Adlt-Geron Primary NP Pract I	
AHN 593	Adult-Gero Prim NP II	
AHN 594	Adult-Geron Prim NP Prac II	
AHN 595	Adult-Gero Primary Care NP III	
AHN 596	Adult-Geron Prim NP Prac III	

##### *Adult-Gerontological Clinical Nurse Specialist*

NU 515	Clinical Concepts/CNS Role I	
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NU 516	Clinical Concepts/CNS Role II
NU 517	Clinical Concepts/CNS Role III
AHN 516	CNS Adult Geron Pract I
AHN 517	CNS Adult Geron Pract II
AHN 518	CNS Adult Geron Pract III
AHN 519	Diagnostic Reasoning and Advanced Patient Management for the Clinical Nurse Specialist (Elective)

##### *Dual Role (Family NP/Adult-Gerontological Acute Care NP)*

AHN 538	HPDP Dual Role (FNP/AGACNP)
AHN 548	Family Prim Care NP I
AHN 549	Family Prim Care NP Prac I
AHN 550	Family Prim Care NP II
AHN 551	Family Prim Care NP Pract II
AHN 552	Adult-Geron Acute Care NP I
AHN 553	Adult-Ger Acute Care NP Prac I
AHN 554	Adult-Geron Acute Care NP II
AHN 555	Adlt-Ger Acute Care NP Prac II

##### *Dual Role (Family NP/Emergency NP)*

NU 580	Hlth Promo & Ds Prev/FNP/ENP
NU 581	Family/Emergency NP I
NU 582	Family/Emerg NP Practicum I
NU 583	Family/Emergency NP II
NU 584	Family/ Emerg NP Practicum II
NU 585	Family/Emergency NP III
NU 586	Family/Emerg NP Practicum III
NU 587	Family/Emergency NP IV
NU 588	Family/Emerg NP Practicum IV

##### *Family Nurse Practitioner*

CMN 568	Intro to Family NP
CMN 571	HPDP in Family NP
CMN 572	Family NP I
CMN 573	Family NP Pract I
CMN 574	Family NP II
CMN 575	Family NP Prac II
CMN 576	Family NP Pract III
CMN 577	Family NP III

##### *Neonatal Nurse Practitioner*

MCN 568	Intro to Neonatal NP
MCN 571	HPDP NNP/Peds Acute NP
MCN 572	Neonatal NP I
MCN 573	Neonatal NP Pract I
MCN 574	Neonatal NP II
MCN 575	Neonatal NP Prac II
MCN 576	Neonatal NP Pract III
MCN 577	Neonatal NP III

##### *Pediatric Acute Care Nurse Practitioner*

MCN 558	Intro Pediatric Acute Care NP
MCN 562	Pediatric Acute Care NP I
MCN 563	Ped Acute Care NP Prac I
MCN 564	Pediatric Acute Care NP II
MCN 565	Ped Acute Care NP Prac II

MCN 566	Ped Acute Care NP Pract III	
MCN 567	Pediatric Acute Care NP III	
MCN 571	HPDP NNP/Peds Acute NP	
<i>Pediatric Primary Care Nurse Practitioner</i>		
MCN 548	Intro to Ped Primary Care NP	
MCN 551	HPDP Pediatric Primary Care NP	
MCN 552	Pediatric Prim Care NP I	
MCN 553	Ped Prim Care NP Prac I	
MCN 554	Pediatric Primary Care NP II	
MCN 555	Ped Prim Care NP Prac II	
MCN 556	Ped Prim Care NP Pract III	
MCN 557	Pediatric Primary Care NP III	
<i>Psychiatric Mental Health Nurse Practitioner</i>		
CMN 548	Introduction to PMHNP	
CMN 551	HPDP & Issues for the PMHNP	
CMN 552	PMHNP I	
CMN 553	PMHNP Practicum I	
CMN 554	PMHNP II	
CMN 555	PMHNP Practicum II	
CMN 556	PMHNP Practicum III	
CMN 557	PMHNP III	
<i>Women's Health Nurse Practitioner</i>		
MCN 538	Intro to Women's Health NP	
MCN 541	HPDP Women's Health NP	
MCN 542	Women's Health NP I	
MCN 543	Women's Health NP Pract I	
MCN 544	Women's Health NP II	
MCN 545	Women's Health NP Pract II	
MCN 546	Women's Health NP Prac III	
MCN 547	Women's Health NP III	
<b>DNP Core Courses</b>		
NU 607	Scientif Underpinnings Adv Nsg	3
NU 608	EBP & Quality Improvement HCS	3
NU 610	Healthcare Policy & Finance	3
NU 611	Translat Evidence Practice Sys	3
NU 612	Clinical Prev Population Hlth	3
NU 613	Organizational & Sys Leadrshp	3
NU 615	Qual Improv & Outcomes Assmnt	3
NU 616	Data & Dec Mknng Healthcare Sys	3
<b>DNP Residency Courses</b>		
Select the DNP courses which match the Post-Graduate Clinical Concentration completed:		12
<i>Adult-Gerontological Acute Care Nurse Practitioner</i>		
AHN 604	Adult-Geron Acute Care NP PP&D	
AHN 617	AG ACNP Residency I	
AHN 618	AG ACNP Residency II	
AHN 619	AG ACNP Residency III	
<i>Adult-Gerontological Primary Care Nurse</i>		
AHN 693	Adult-Geron Primary NP PP&D	
AHN 694	Adult-Gero Primary Cr NP Res I	
AHN 695	Adlt-Gero Primary Cr NP Res II	
AHN 696	Adlt-Gero Prim Care NP Res III	

<i>Adult-Gerontological Clinical Nurse Specialist</i>	
AHN 634	Adult-Geron CNS PP&D
AHN 635	Adult-Geron CNS Residency I
AHN 636	Adult-Geron CNS Residency II
AHN 637	Adult-Geron CNS Residency III
<i>Dual Role (Family NP/Adult-Gerontological Acute Care NP) Option: A.) Family NP</i>	
AHN 680	Family NP (DR) PP&D
AHN 681	Family NP (DR) Residency I
AHN 682	FNP (DR) Residency II
AHN 683	FNP (DR) Residency III
<i>Dual Role (Family NP/Adult-Gerontological Acute Care NP) Option B.) Adult-Gerontological Acute Care NP</i>	
AHN 670	AG-ACNP(DR) PP&D
AHN 671	AG/ACNP (DR) Residency I
AHN 672	AG-ACNP (DR) Residency II
AHN 673	AG-ACNP(DR) Residency III
<i>Dual Role (Family NP/Emergency NP)</i>	
NU 680	Family/Emergency NP PP&D
NU 681	Family/Emerg NP Residency I
NU 682	Family/Emerg NP Residency II
NU 683	Family/Emerg NP Residency III
<i>Family Nurse Practitioner</i>	
CMN 680	Family NP PP&D
CMN 681	Family NP Residency I
CMN 682	Family NP Residency II
CMN 683	Family NP Residency III
<i>Neonatal Nurse Practitioner</i>	
MCN 674	Neonatal NP PP&D
MCN 675	NNP Residency I
MCN 676	NNP Residency II
MCN 677	NNP Residency III
<i>Pediatric Acute Care Nurse Practitioner</i>	
MCN 604	Pediatric Acute Care NP PP&D
MCN 617	Pediatric Acute Care NP Res I
MCN 618	Pediatric Acute Care NP Res II
MCN 619	Pediatric Acute Cre NP Res III
<i>Pediatric Primary Care Nurse Practitioner</i>	
MCN 654	Pediatric Primary Care NP PP&D
MCN 655	Ped Prim Care NP Residency I
MCN 656	Ped Primary Care NP Res II
MCN 657	Ped Primary Care NP Res III
<i>Psychiatric Mental Health Nurse Practitioner</i>	
CMN 604	PMHNP PP&D
CMN 617	PMHNP Residency I
CMN 618	PMHNP Residency II
CMN 619	PMHNP Residency III
<i>Women's Health Nurse Practitioner</i>	
MCN 644	Women's Health NP PP&D
MCN 645	Women's Health NP Residency I
MCN 646	Women's Health NP Residency II

MCN 647	Women's Health NP Res III	
<b>Total Hours</b>		<b>62-81</b>
<b>DNP Adding Non-Clinical Concentrations</b>		
<b>Code</b>	<b>Title</b>	<b>Hours</b>
<b>Post Graduate Non-Clinical Concentrations</b>		
Select one of the following Post-Graduate Non-Clinical Concentrations:		25
<i>Executive Nursing Administration</i>		
HSC 571	Managing Healthcare Personnel	
NU 539	Intro to Nursing Informatics	
NU 553	Administrative Concepts	
NU 554	Resource Manag Field Study	
NU 561	Nursing Admin Concepts-Theory	
NU 565	Nursing Administration Finance	
NU 566	Nursing Admin Field Study	
NU 567	Nursing Admin Internship	
NU 568	Nursing Admin Seminar	
<i>Nursing Informatics</i>		
ISC 550	Health Data Security & Comp	
ISC 555	Health Data Mgt/Decision Supp	
NU 539	Intro to Nursing Informatics	
NU 553	Administrative Concepts	
NU 554	Resource Manag Field Study	
NU 556	Informatics & Qual Care Improv	
NU 557	Clinical Informatics Pract I	
NU 558	Seminar in Nursing Informatics	
NU 559	Clinical Informatics Pract II	
NU 565	Nursing Administration Finance	
<b>DNP Core Courses</b>		
NU 607	Scientif Underpinnings Adv Nsg	3
NU 608	EBP & Quality Improvement HCS	3
NU 610	Healthcare Policy & Finance	3
NU 611	Translat Evidence Practice Sys	3
NU 612	Clinical Prev Population Hlth	3
NU 613	Organizational & Sys Leadrshp	3
NU 615	Qual Improv & Outcomes Assmnt	3
NU 616	Data & Dec Mknng Healthcare Sys	3
<b>DNP Residency Courses</b>		
Select the DNP courses which match the Post-Graduate Non-Clinical Concentration completed:		12
<i>Executive Nursing Administration</i>		
NU 661	Executive Nsg Admin PP&D	
NU 662	Nurse Exec Admin Res I	
NU 663	Nurse Exec Admin Res II	
NU 664	Nurse Exec Admin Res III	
<i>Nursing Informatics</i>		
NU 656	Nursing Informatics PP&D	
NU 657	Nursing Informatic Residency I	
NU 658	NU Informatics Residency II	
NU 659	NU Informatics Residency III	
<b>Total Hours</b>		<b>61</b>

## Subspecialties

Students can earn a Post-Graduate Certificate Subspecialty when adding the requirements for any of the following subspecialties to their degree program curriculum.

### Addictions Nursing

May be added to any concentration.

Code	Title	Hours
HSC 580	OUD/SUD Prevention/Screening	2
HSC 581	OUD/SUD Assessment/Treatment	2
HSC 582	OUD/SUD Recovery/Sys Practice	2
NU 510	Addictions Practicum I	1
NU 511	Addictions Practicum II	2
NU 512	Addictions Practicum III	2
NU 513	Addictions Practicum IV (Elective)	4
<b>Total Hours</b>		<b>15</b>

### Advanced Forensic Nursing

May be added to any concentration.

Code	Title	Hours
NU 500	Explore Culture Sexual Assault	2
NU 502	Sexual Assault Vic Practicum	1
NU 503	Trauma Care Sexual Assault Vic	2
NU 504	Adv Pharm Care Post Assault	2
NU 505	Sup Care Comorbid Post Assault	2
<b>Total Hours</b>		<b>9</b>

### Cardiovascular

May be added to Adult-Gerontological Acute NP, Adult-Gerontological Primary Care NP, Dual Role (Family NP/Adult Gerontological Acute Care NP), Dual Role (Family NP/Emergency NP), Family NP, Women's Health NP, Post-Graduate Certificate Emergency NP, and any Adult-Gerontological CNS student with a strong background in cardiovascular and/or acute care nursing.

Code	Title	Hours
AHN 630	Dysrhythmias and the Heart	2
AHN 631	Foundations of Cardiac Care	2
AHN 632	Diag & Mgmt of Acute CVD	2
AHN 633	Dig/Mgmt Complex CV Disorders	2
<b>Total Hours</b>		<b>8</b>

### Clinical Lipidology

May be added to Adult-Geron Primary Care NP, Adult-Geron Acute NP, Adult-Geron CNS, Family NP, Dual Role (Family NP/Adult-Geron Acute NP), Dual Role (Family NP/Emergency NP), and Women's Health NP.

Code	Title	Hours
HSC 595	Evidence Basd Lipid Practice	2
HSC 596	Adv Vascular Biology	2
HSC 597	Adv Pharm Complex Dyslipidemia	2
HSC 598	Diag/Mgt C-plex Dyslipidemia	2
<b>Total Hours</b>		<b>8</b>

## Diversity, Equity, and Inclusion in Healthcare

May be added to any concentration.

Code	Title	Hours
HSC 501	Found of Diversity Healthcare	2
HSC 502	Diversity Equity & Inclusion	2
HSC 503	Curr Issues & Trends Diversity	2
HSC 504	Lead&Change Mang Adv Diversity	2
<b>Total Hours</b>		<b>8</b>

## Emergency Nurse Practitioner

May be added to Family NP, Dual Role (Family NP/Adult-Geron Acute Care NP), Dual Role (Family NP/Emergency NP), or taken as a Post Graduate Certificate if already certified.

Code	Title	Hours
NU 570	Emergency NP I	2
NU 571	Emergency NP Practicum I	1-3
NU 572	Emergency NP II	2
NU 573	Emergency NP Practicum II	1-3
NU 574	Emergency NP III	2
NU 575	Emergency NP Practicum III	1-3
NU 576	Emergency NP IV	2
NU 577	Emergency NP Practicum IV	1-3
<b>Total Hours</b>		<b>12-20</b>

## Nurse Educator

May be added to any concentration.

Code	Title	Hours
NU 620	Prin Teach/Learn/Assess Nu Ed	3
NU 621	Curr Design/Outcome Eval Nu Ed	3
NU 622	Current Topics in Nu Education	2
NU 623	Nsg Educ Synthesis Practicum	3
<b>Total Hours</b>		<b>11</b>

## Palliative Care

May be added to any concentration

Code	Title	Hours
AHN 530	Found Palliative Care/Adv Role	2
AHN 531	Adv Palliative Cr/End of Life	2
AHN 532	Adv Chronic Illness Care	2
AHN 533	Adv Palliative Care Practicum	3
<b>Total Hours</b>		<b>9</b>

## Trauma-Informed Integrated Behavioral Healthcare

May be added to any concentration.

Code	Title	Hours
HSC 510	IPT for TI-BH Primary Care	1
HSC 511	IPT Telehealth Deliv TI-IBH	1
HSC 512	TI-MI in IBH Seminar	1
NU 526	Trauma-Informed Integrated Behavioral Healthcare Practicum I	1

NU 527	Trauma-Informed Integrated Behavioral Healthcare Practicum II	2
NU 528	Trauma-Informed Integrated Behavioral Healthcare Practicum III	2
<b>Total Hours</b>		<b>8</b>

## Elective Courses

Code	Title	Hours
NU 509	Bioethics Advan Practice Nsg	1
NU 597	Intro to Scholarly Writing	3
HSC 500	Address Gender Discrimination (Addressing Gender Discrimination and Disparities in Healthcare)	3
HSC 573	Resp Prescrib Common Used Drug	1

## Additional Information

### Doctor of Nursing Practice Degree Program

The Doctor of Nursing Practice (DNP) is a professional degree and prepares graduates to provide the most advanced level of nursing care for individuals and communities. This includes the direct care of individual patients, management of care for individuals and populations, administration of health care and nursing systems, and the development and implementation of health policy. The program is designed to be in compliance with The Essentials of Doctoral Education for Advanced Nursing Practice as put forth by the American Association of Colleges of Nursing.

The College of Nursing has several pathways, specialization, and sub-specialization options within the DNP program. The pathways include the MSN to DNP for Advanced Nursing Practice roles, MSN to DNP adding a new advanced practice certification area, MSN to DNP Clinical Nurse Leader Bridge to Executive Nursing Administration, and the BSN to DNP.

### Areas of Specialization

Several concentration areas are offered to meet the career goals of students. Available Nurse Practitioner options include Adult-Gerontological Acute Care Nursing, Adult-Gerontological Primary Care Nursing, Dual Role (Family Nursing/Adult-Gerontological Acute Care Nursing), Dual Role (Family Nursing/Emergency Nursing), Family Nursing, Psychiatric Mental Health Nursing, Neonatal Nursing, Pediatric Acute Care Nursing, Pediatric Primary Care Nursing, Women's Health Nursing. Clinical Nurse Specialist is available in Adult-Gerontological Nursing. Concentrations are also available for students pursuing careers in Executive Nursing Administration, Nursing Informatics, and Clinical Nurse Leader Bridge to DNP Executive Nursing Administration. Emergency Nursing is offered only as a post-graduate certificate. Sub-specializations are available in Addictions Nursing, Advanced Forensic Nursing Care, Cardiovascular, Clinical Lipidology, Diversity, Equity, and Inclusion in Healthcare, Nursing Education, Palliative Care and Trauma-Informed Integrated Behavioral Healthcare Subspecialty.

### Doctor of Nursing Practice Program Learning Outcomes

1. Upon completion of the Doctor of Nursing Practice program, graduates should be able to:
2. Assume organizational and system leadership in the analysis, delivery, and management of nursing care.
3. Implement the highest level of advanced nursing care to produce high-quality, cost-effective outcomes for diverse patient outcomes.

4. Use theories, concepts, and analytic methodologies to design, implement, and evaluate practice by applying evidence to transform nursing systems.
5. Contribute to the knowledge of best-practices and dissemination of outcomes through professional writing and presentations.
6. Develop practice standards based on the integration of ethics and evidence-based nursing care.
7. Build interdisciplinary professional collaboration through leadership and mentorship.

#### MSN to DNP Adding a New Concentration Pathway

Students pursuing the MSN to DNP for adding a new specialty certificate area will follow the same requirements as the BSN to DNP program students. Since these students should already possess a MSN degree in an area of advanced practice nursing, they should have already completed the support courses (NU 518, NU 545, and NU 578). If they have not previously completed these courses they are required to complete them if required for their specialization. Students in the Executive Nursing Administration and Nursing Informatics specialties are not required to take these three courses to complete their programs.

The MSN to DNP adding a new certificate area curriculum consists of 69 to 87 credit hours. Students who graduated with an MSN from the University of South Alabama College of Nursing and completed the following courses NU 607, NU 608, NU 610, and NU 613 during the MSN coursework must complete the new certificate and the remaining 24 credit hours of the DNP program within the seven year time limit. The program can be completed in 10 semesters of full-time study or in twelve semesters of part-time study. Full-time study is defined as six or more credit hours per semester. Permission to take more than 12 Credit hours per semester must be obtained from the Associate Dean of Academic Affairs. Part-time study is also available.

The MSN to DNP Adding a new certificate program must be completed in seven years of matriculation.

Electives can be taken but are not required. The program does not require a thesis or dissertation; however, students are required to complete a major synthesis project that results in a quality improvement change and has a substantial effect on health care outcomes. Residency requirements for the synthesis project can be completed in the student's home region with an approved mentor.

### Admission Criteria

To be considered for admission to the DNP program, the applicant must meet the following requirements:

1. Citizen or Permanent Resident of the United States of America.
2. Current registered nurse licensure with no restrictions. Nurses with any restrictions on their license, including participation in a voluntary disciplinary alternative program, cannot be admitted.
3. Graduate of an approved regionally accredited master's program with a major in nursing.
4. Applicants to the MSN to DNP pathway must have a minimal grade-point average of 3.0 on all MSN work (A=4.00).
5. Submission of a résumé which documents clinical experience.
6. Prior to enrolling in nurse practitioner clinical course, students are required to have at least 2 years of experience in an area appropriate to the specialty track.
7. Students are admitted to a specialty track and may not change their track without permission.
8. Students must be in good standing with all academic institutions/ nursing programs that they have attended in order to be admitted to the DNP program.

### Contingency for Admission and Initial Registration

Admission and initial registration is contingent on completion of the following requirements:

1. Acceptance Packet
2. Negative Drug Screen
3. Acceptable Background Check
4. All Health Requirements as outlined in the Medical Documents Manager.
5. Letter of Clinical Commitment.

Notification of missing documents will be sent to your JagMail email account. Only students who have successfully completed the Acceptance Packet in its entirety, have a negative drug screen and acceptable background check, and completed all required portions of the Medical Documents Manager will be permitted to register for classes

### Application Procedures

Admission to the program is limited and selective. Application forms and other information may be obtained from the College of Nursing's website (<https://www.southalabama.edu/colleges/con/dnp/dnpapplic.html>) or by contacting the college directly at:

College of Nursing  
University of South Alabama  
Mobile, Alabama 36688  
condnpadmit@southalabama.edu  
Telephone: (251) 445-9400.

1. Completion of the Primary Application:
  - a. Primary Application (<http://bulletin.southalabama.edu/programs-az/nursing/nursing/nursing-practice-dnp-msn-adding-new-concentration-area/www.NursingCAS.org>) submitted through Nursing Centralized Application System (NursingCAS).
  - b. Official transcripts of all college and university studies, regardless of the outcome of enrollment, must be sent directly from the home institution to the NursingCAS. These documents become the property of the NursingCAS and will not be returned to the applicant. Applicants are responsible for any fees required by NursingCAS for their services.
  - c. Personal Goal Statement is required. The Personal Goal Statement is a description of the applicant's purpose for completing the graduate degree. This essay serves as a writing

sample to be reviewed by the Graduate Admissions Committee to determine the applicant's scholarly writing skills.

d. Submission of a résumé which documents clinical experience.

## 2. Completion of the Supplemental Application:

a. The Supplemental Application (<https://explore.southalabama.edu/account/register/?r=https%3a%2f%2fexplore.southalabama.edu%2fapply%2f%3fsr%3d870af7f1-de34-492d-b275-be6ef1c6297a>) is submitted electronically directly to the DNP Office at the USA College of Nursing. Under Academic Information please select the appropriate semester for admission. Select "graduate" under both student type and academic level of interest. A new option will appear asking if you are applying for a graduate nursing program, select "yes" and this will take you into the nursing application.

b. Please note that the Supplemental Application should be completed **AFTER** you have completed your NursingCAS application and it has moved through the following stages: received, complete then **VERIFIED**. Once it is verified you may complete the Supplemental Application.

c. Applicants are responsible for ensuring that their completed Supplemental Application is submitted by the deadline for the semester for which they are applying. Incomplete applications will not be processed.

d. This application requires a non-refundable processing fee of \$100.00.

5. A student earning two grades of "F" in the program will be academically dismissed.

6. The final outcome of the DNP Project Planning and Development course and the DNP Incomplete Extension course is "Successful/ Unsuccessful." Students receiving two grades of "U" in these courses will be academically dismissed.

7. Failure to show good ethical and moral character including but not limited to any of the following may result in dismissal from the program:

a. conviction of a crime,

b. disciplinary action against a nursing license in Alabama or any other state,

c. positive drug test,

d. adverse background check, or

e. disruptive behavior, including online behavior.

All students must notify the Associate Dean for Academic Affairs or the Dean of the College of Nursing immediately or no later than 48 hours of any of the above state incidents.

8. All students must notify the Associate Dean for Academic Affairs or the Dean of the College of Nursing immediately or no later than 48 hours following an arrest. Failure to report an arrest may result in removal from the program.

9. All students are subject to testing for controlled substances and must submit to random drug testing as requested. A positive test or refusal to submit to testing will result in removal from the program.

10. All students are subject to a background check and must submit to additional background checks as requested. An adverse finding or refusal to submit to a background check may result in removal from the program.

11. A student who has been academically dismissed is not eligible for readmission to the DNP program and is not eligible for admission to the MSN program.

## Application Deadlines

Applications are accepted three times a year, and must adhere to the following application deadlines:

- Fall Semester Deadline is March 1
- Spring Semester Deadline is September 1
- Summer Semester Deadline is February 1

## Academic Progression Policy

Students in the MSN-DNP Adding a Concentration program must meet the following requirements to progress in the program:

1. Maintain an overall GPA of 3.0. Any term in which a graduate student drops below a 3.0 Program GPA, the student is placed on probationary status and has a period of two terms to attain a 3.0 Program GPA or be dismissed.
2. Students in these programs can have a maximum of two "C"s.
3. A maximum of two (2) courses with a grade of "C" can be counted towards a degree; however, only one (1) "C" is permitted in support or specialization courses. If a second "C" or lower is earned in a support (NU 518, NU 545, NU 578) or specialization course, the course in which the second "C" or lower is obtained must be repeated before a student may move forward with a specialty course. All corresponding specialty clinical and didactic courses must be taken in sequence.
4. A student earning a third "C" or lower will be academically dismissed from the program.

## Policy for Students Who are Dismissed from a Clinical Setting for Unprofessional Behavior or Refused Approval by the Setting due to Previous Experience with the Student

Professional behavior is expected of all USA CON students within the clinical setting. Students who are asked to leave a clinical setting (by an administrator or preceptor) due to unprofessional behavior will be removed from the clinical site with no approval of return to the same site.

Should a clinical agency refuse to allow a student to obtain clinical hours in their facility for any reason, the agency's request will be honored by the college.

Students dismissed from a clinical site or refused by a clinical agency will be assisted to find an appropriate clinical placement at an affiliated clinical site at the college's discretion. Students who decline the placement provided will be delayed in completing the program.

Depending on the nature of the unprofessional behavior, action taken by the college may include dismissal from the academic program.

## DNP Residency Coursework Policy

The DNP Residency Coursework includes the DNP Project Planning and Development, Residency I, Residency II, and Residency III. Students who do not meet all requirements in a course must complete a DNP Incomplete Extension Course prior to moving forward with the next course in the DNP Residency progression.

## Scientific Review Committee Policy

The DNP project will be reviewed by the USA College of Nursing DNP Scientific Review Committee to evaluate rigor and feasibility. The review process will occur during Project Planning and Development. The DNP project must be reviewed by the Scientific Review Committee before enrolling in Residency I.

## Graduation Information

The MSN to DNP adding a new Concentration program must be completed in seven years of matriculation. Students in this program will receive a post-graduate certificate from the College of Nursing upon the completion of all certificate requirements. All post-graduate certificate requirements must be completed within 2 years from the semester the specialty option coursework begins. No application is required for the completion of the post-graduate certificate.

Students will only apply to graduate when they have completed all the requirements for the DNP degree.

Deadlines for each semester application are located on the Registrar's Graduation Website (<https://www.southalabama.edu/departments/registrar/commencement/>).

# Nursing Practice (DNP) - MSN to DNP for Advanced Practice Nursing Roles

## Degree Requirements

### Doctor of Nursing Practice (DNP)

#### MSN to DNP for Advanced Practice Nursing Roles Pathway

Code	Title	Hours
<b>DNP Core Courses</b>		
NU 607	Scientif Underpinnings Adv Nsg	3
NU 608	EBP & Quality Improvement HCS	3
NU 610	Healthcare Policy & Finance	3
NU 611	Translat Evidence Practice Sys	3
NU 612	Clinical Prev Population Hlth	3
NU 613	Organizational & Sys Leadrshp	3
NU 615	Qual Improv & Outcomes Assmnt	3
NU 616	Data & Dec Mking Healthcare Sys	3
<b>DNP Residency Courses</b>		
Select the DNP courses which match the MSN or Post-Graduate Concentration already completed:		12
<i>Adult-Gerontological Acute Care Nurse Practitioner</i>		
AHN 604	Adult-Geron Acute Care NP PP&D	
AHN 617	AG ACNP Residency I	
AHN 618	AG ACNP Residency II	

AHN 619	AG ACNP Residency III
<i>Adult-Gerontological Primary Care Nurse Practitioner</i>	
AHN 693	Adult-Geron Primary NP PP&D
AHN 694	Adult-Gero Primary Cr NP Res I
AHN 695	Adlt-Gero Primary Cr NP Res II
AHN 696	Adlt-Gero Prim Care NP Res III
<i>Adult-Gerontological Clinical Nurse Specialist</i>	
AHN 634	Adult-Geron CNS PP&D
AHN 635	Adult-Geron CNS Residency I
AHN 636	Adult-Geron CNS Residency II
AHN 637	Adult-Geron CNS Residency III
<i>Dual Role (Family NP/Adult-Gerontological Acute Care NP) Option: A.) Family NP</i>	
AHN 680	Family NP (DR) PP&D
AHN 681	Family NP (DR) Residency I
AHN 682	FNP (DR) Residency II
AHN 683	FNP (DR) Residency III
<i>Dual Role (Family NP/Adult-Gerontological Acute Care NP) Option B.) Adult-Gerontological Acute Care NP</i>	
AHN 670	AG-ACNP(DR) PP&D
AHN 671	AG/ACNP (DR) Residency I
AHN 672	AG-ACNP (DR) Residency II
AHN 673	AG-ACNP(DR) Residency III
<i>Dual Role (Family NP/Emergency NP)</i>	
NU 680	Family/Emergency NP PP&D
NU 681	Family/Emerg NP Residency I
NU 682	Family/Emerg NP Residency II
NU 683	Family/Emerg NP Residency III
<i>Executive Nursing Administration</i>	
NU 661	Executive Nsg Admin PP&D
NU 662	Nurse Exec Admin Res I
NU 663	Nurse Exec Admin Res II
NU 664	Nurse Exec Admin Res III
<i>Family Nurse Practitioner</i>	
CMN 680	Family NP PP&D
CMN 681	Family NP Residency I
CMN 682	Family NP Residency II
CMN 683	Family NP Residency III
<i>Neonatal Nurse Practitioner</i>	
MCN 674	Neonatal NP PP&D
MCN 675	NNP Residency I
MCN 676	NNP Residency II
MCN 677	NNP Residency III
<i>Nursing Informatics</i>	
NU 656	Nursing Informatics PP&D
NU 657	Nursing Informatic Residency I
NU 658	NU Informatics Residency II
NU 659	NU Informatics Residency III
<i>Pediatric Acute Care Nurse Practitioner</i>	
MCN 604	Pediatric Acute Care NP PP&D
MCN 617	Pediatric Acute Care NP Res I
MCN 618	Pediatric Acute Care NP Res II

MCN 619	Pediatric Acute Care NP Res III
<i>Pediatric Primary Care Nurse Practitioner</i>	
MCN 654	Pediatric Primary Care NP PP&D
MCN 655	Ped Prim Care NP Residency I
MCN 656	Ped Primary Care NP Res II
MCN 657	Ped Primary Care NP Res III
<i>Psychiatric Mental Health Nurse Practitioner</i>	
CMN 604	PMHNP PP&D
CMN 617	PMHNP Residency I
CMN 618	PMHNP Residency II
CMN 619	PMHNP Residency III
<i>Public Health Administration</i>	
CMN 643	Public Health Admin PP&D
CMN 644	Public Health Residency I
CMN 645	Public Health Residency II
CMN 646	Public Health Residency III
<i>Women's Health Nurse Practitioner</i>	
MCN 644	Women's Health NP PP&D
MCN 645	Women's Health NP Residency I
MCN 646	Women's Health NP Residency II
MCN 647	Women's Health NP Res III
<b>Total Hours</b>	<b>36</b>

## Subspecialties

Students can earn a Post-Graduate Certificate Subspecialty when adding the requirements for any of the following subspecialties to their degree program curriculum.

### Addictions Nursing

May be added to any concentration.

Code	Title	Hours
HSC 580	OUD/SUD Prevention/Screening	2
HSC 581	OUD/SUD Assessment/Treatment	2
HSC 582	OUD/SUD Recovery/Sys Practice	2
NU 510	Addictions Practicum I	1
NU 511	Addictions Practicum II	2
NU 512	Addictions Practicum III	2
NU 513	Addictions Practicum IV (Elective)	4
<b>Total Hours</b>		<b>15</b>

### Advanced Forensic Nursing

May be added to any concentration.

Code	Title	Hours
NU 500	Explore Culture Sexual Assault	2
NU 502	Sexual Assault Vic Practicum	1
NU 503	Trauma Care Sexual Assault Vic	2
NU 504	Adv Pharm Care Post Assault	2
NU 505	Sup Care Comorbid Post Assault	2
<b>Total Hours</b>		<b>9</b>

## Cardiovascular

May be added to Adult-Gerontological Acute NP, Adult-Gerontological Primary Care NP, Dual Role (Family NP/Adult-Gerontological Acute Care NP), and Dual Role (Family NP/Emergency NP), Family NP, Women's Health NP, Post-Graduate Certificate Emergency NP, and any Adult-Gerontological CNS student with a strong background in cardiovascular and/or acute care nursing

Code	Title	Hours
AHN 630	Dysrhythmias and the Heart	2
AHN 631	Foundations of Cardiac Care	2
AHN 632	Diag & Mgmt of Acute CVD	2
AHN 633	Dig/Mgmt Complex CV Disorders	2
<b>Total Hours</b>		<b>8</b>

## Clinical Lipidology

May be added to Adult-Gerontological Primary Care NP, Adult-Gerontological Acute NP, Adult-Gerontological CNS, Family NP, Dual Role (Family NP/Adult-Gerontological Acute NP), Dual Role (Family NP/Emergency NP), Women's Health NP, and Post-Graduate Certificate Emergency NP.

Code	Title	Hours
HSC 595	Evidence Based Lipid Practice	2
HSC 596	Adv Vascular Biology	2
HSC 597	Adv Pharm Complex Dyslipidemia	2
HSC 598	Diag/Mgt C-plex Dyslipidemia	2
<b>Total Hours</b>		<b>8</b>

## Diversity, Equity, and Inclusion in Healthcare

May be added to any concentration.

Code	Title	Hours
HSC 501	Found of Diversity Healthcare	2
HSC 502	Diversity Equity & Inclusion	2
HSC 503	Curr Issues & Trends Diversity	2
HSC 504	Lead&Change Mang Adv Diversity	2
<b>Total Hours</b>		<b>8</b>

## Emergency Nurse Practitioner

May be added to Family NP, Dual Role (Family NP/Adult-Gerontological Acute Care NP), or taken as a Post Graduate Certificate if already Family NP certified.

Code	Title	Hours
NU 570	Emergency NP I	2
NU 571	Emergency NP Practicum I	1-3
NU 572	Emergency NP II	2
NU 573	Emergency NP Practicum II	1-3
NU 574	Emergency NP III	2
NU 575	Emergency NP Practicum III	1-3
NU 576	Emergency NP IV	2
NU 577	Emergency NP Practicum IV	1-3
<b>Total Hours</b>		<b>12-20</b>

## Nurse Educator

May be added to any concentration.

Code	Title	Hours
NU 620	Prin Teach/Learn/Assess Nu Ed	3
NU 621	Curr Design/Outcome Eval Nu Ed	3
NU 622	Current Topics in Nu Education	2
NU 623	Nsg Educ Synthesis Practicum	3
<b>Total Hours</b>		<b>11</b>

## Palliative Care

May be added to any concentration.

Code	Title	Hours
AHN 530	Found Palliative Care/Adv Role	2
AHN 531	Adv Palliative Cr/End of Life	2
AHN 532	Adv Chronic Illness Care	2
AHN 533	Adv Palliative Care Practicum	3
<b>Total Hours</b>		<b>9</b>

## Trauma-Informed Integrated Behavioral Healthcare

May be added to any concentration.

Code	Title	Hours
HSC 510	IPT for TI-BH Primary Care	1
HSC 511	IPT Telehealth Deliv TI-IBH	1
HSC 512	TI-MI in IBH Seminar	1
NU 526	Trauma-Informed Integrated Behavioral Healthcare Practicum I	1
NU 527	Trauma-Informed Integrated Behavioral Healthcare Practicum II	2
NU 528	Trauma-Informed Integrated Behavioral Healthcare Practicum III	2
<b>Total Hours</b>		<b>8</b>

## Elective Courses

Code	Title	Hours
NU 509	Bioethics Advan Practice Nsg	1
NU 597	Intro to Scholarly Writing	3
HSC 500	Address Gender Discrimination (Addressing Gender Discrimination and Disparities in Healthcare)	3
HSC 573	Resp Prescrib Common Used Drug	1

## Additional Information

### Doctor of Nursing Practice Degree Program

The Doctor of Nursing Practice (DNP) is a professional degree and prepares graduates to provide the most advanced level of nursing care for individuals and communities. This includes the direct care of individual patients, management of care for individuals and populations, administration of health care and nursing systems, and the development and implementation of health policy. The program is designed to be in compliance with The Essentials of Doctoral Education for Advanced Nursing Practice as put forth by the American Association of Colleges of Nursing.

The College of Nursing has several pathways, specialization, and sub-specialization options within the DNP program. The pathways include the MSN to DNP for Advanced Nursing Practice roles, MSN to DNP adding a new advanced practice certification area, MSN to DNP Clinical Nurse Leader Bridge to Executive Nursing Administration, and the BSN to DNP.

### Areas of Specialization

Several concentration areas are offered to meet the career goals of students. Available Nurse Practitioner options include Adult-Gerontological Acute Care Nursing, Adult-Gerontological Primary Care Nursing, Dual Role (Family Nursing/Adult-Gerontological Acute Care Nursing), Dual Role (Family Nursing/Emergency Nursing), Family Nursing, Psychiatric Mental Health Nursing, Neonatal Nursing, Pediatric Acute Care Nursing, Pediatric Primary Care Nursing, Women's Health Nursing. Clinical Nurse Specialist is available in Adult-Gerontological Nursing. Concentrations are also available for students pursuing careers in Executive Nursing Administration, Nursing Informatics, and Clinical Nurse Leader Bridge to DNP Executive Nursing Administration. Emergency Nursing is offered only as a post-graduate certificate. Sub-specializations are available in Addictions Nursing, Advanced Forensic Nursing Care, Cardiovascular, Clinical Lipidology, Diversity, Equity, and Inclusion in Healthcare, Nursing Education, Palliative Care and Trauma-Informed Integrated Behavioral Healthcare Subspecialty.

### Doctor of Nursing Practice Program Learning Outcomes

Upon completion of the Doctor of Nursing Practice program, graduates should be able to:

1. Assume organizational and system leadership in the analysis, delivery, and management of nursing care.
2. Implement the highest level of advanced nursing care to produce high-quality, cost-effective outcomes for diverse patient outcomes.
3. Use theories, concepts, and analytic methodologies to design, implement, and evaluate practice by applying evidence to transform nursing systems.
4. Contribute to the knowledge of best-practices and dissemination of outcomes through professional writing and presentations.
5. Develop practice standards based on the integration of ethics and evidence-based nursing care.
6. Build interdisciplinary professional collaboration through leadership and mentorship.

### MSN to DNP for Advanced Nursing Roles Pathway

The DNP curriculum consists of 36 Credit hours for the student holding a Master of Science in Nursing degree with preparation in an area of advanced practice nursing. Students who graduated with an MSN from the University of South Alabama College of Nursing and completed the following courses NU 607, NU 608, NU 610, and NU 613 during the MSN coursework may complete the DNP program with an additional 24 Credit hours if the previous coursework is within the seven year limit. The MSN to DNP program can be completed in four semesters of full-time study. Full-time study is defined as six or more credit hours per semester. Permission to take more than 12 Credit hours per semester must be obtained from the Associate Dean of Academic Affairs. Part-time study is also available.

The program must be completed in five years of matriculation for the MSN to DNP for Advanced Practice Nursing Roles Pathway.

Course work for the MSN to DNP program is offered completely on-line. Students are not required to come to campus during the MSN to DNP program. Electives can be taken but are not required. The program does not require a thesis or dissertation; however, students are required to complete a major synthesis project that results in a quality improvement change and has a substantial effect on health care outcomes. Residency requirements for the synthesis project can be completed in the student's home region with an approved mentor.

## Admission Criteria

To be considered for admission to the DNP program, the applicant must meet the following requirements:

1. Citizen or Permanent Resident of the United States of America.
2. Current registered nurse licensure with no restrictions. Nurses with any restrictions on their license, including participation in a voluntary disciplinary alternative program, cannot be admitted.
3. Graduate of an approved regionally accredited master's program with a major in nursing.
4. Applicants to the MSN to DNP pathway must have a minimal grade-point average of 3.0 on all MSN work (A=4.00).
5. Submission of a résumé which documents clinical experience.
6. Prior to enrolling in nurse practitioner clinical course, students are required to have at least 2 years of experience in an area appropriate to the specialty track.
7. Students are admitted to a specialty track and may not change their track without permission.
8. Students must be in good standing with all academic institutions/nursing programs that they have attended in order to be admitted to the DNP program.

## Contingency for Admission and Initial Registration

Admission and initial registration is contingent on completion of the following requirements:

1. Acceptance Packet
2. Negative Drug Screen
3. Acceptable Background Check
4. All Health Requirements as outlined in the Medical Documents Manager.
5. Letter of Clinical Commitment.

Notification of missing documents will be sent to your JagMail email account. Only students who have successfully completed the Acceptance Packet in its entirety, have a negative drug screen and acceptable background check, and completed all required portions of the Medical Documents Manager will be permitted to register for classes.

## Application Procedures

Admission to the program is limited and selective. Application forms and other information may be obtained from the College of Nursing's Website (<https://www.southalabama.edu/colleges/con/dnp/dnpapplic.html>) or by contacting the college directly at:

College of Nursing  
University of South Alabama  
Mobile, Alabama 36688  
condnpadmit@southalabama.edu  
Telephone: (251) 445-9400.

### 1. Completion of the Primary Application:

- a. Primary Application (<http://bulletin.southalabama.edu/programs-az/nursing/nursing/nursing-practice-dnp-msn-advanced-roles/www.NursingCAS.org>) submitted through Nursing Centralized Application System (NursingCAS).
- b. Official transcripts of all college and university studies, regardless of the outcome of enrollment, must be sent directly from the home institution to the NursingCAS. These documents become the property of the NursingCAS and will not be returned to the applicant. Applicants are responsible for any fees required by NursingCAS for their services.
- c. Personal Goal Statement is required. The Personal Goal Statement is a description of the applicant's purpose for completing the graduate degree. This essay serves as a writing sample to be reviewed by the Graduate Admissions Committee to determine the applicant's scholarly writing skills.
- d. Submission of a résumé which documents clinical experience.

### 2. Completion of the Supplemental Application:

- a. The Supplemental Application (<https://explore.southalabama.edu/account/register/?r=https%3a%2f%2fexplore.southalabama.edu%2fapply%2f%3fsr%3d870af7f1-de34-492d-b275-be6ef1c6297a>) is submitted electronically directly to the DNP Office at the USA College of Nursing. Under Academic Information please select the appropriate semester for admission. Select "graduate" under both student type and academic level of interest. A new option will appear asking if you are applying for a graduate nursing program, select "yes" and this will take you into the nursing application.
- b. Please note that the Supplemental Application should be completed **AFTER** you have completed your NursingCAS application and it has moved through the following stages: received, complete then **VERIFIED**. Once it is verified you may complete the Supplemental Application.
- c. Applicants are responsible for ensuring that their completed Supplemental Application is submitted by the deadline for the semester for which they are applying. Incomplete applications will not be processed.
- d. This application requires a non-refundable processing fee of \$100.00.

## Application Deadlines

Applications are accepted three times a year, and must adhere to the following application deadlines:

- Fall Semester Deadline is March 1
- Spring Semester Deadline is September 1
- Summer Semester Deadline is February 1

## Academic Progression Policy

Students in the MSN-DNP for Advanced Practice Nursing Roles program must meet the following requirements to progress in the program:

1. Maintain an overall GPA of 3.0. Any term in which a graduate student drops below a 3.0 Program GPA, the student is placed on probationary status and has a period of two terms to attain a 3.0 Program GPA or be dismissed.
2. Students in these programs can have a maximum of one "C". A student earning a second "C" or lower will be academically dismissed from the program.
3. A student earning one grade of "F" in the program will be academically dismissed.
4. The final outcome of the DNP Project Planning and Development course and the DNP Incomplete Extension course is "Successful/Unsuccessful." Students receiving two grades of "U" in these courses will be academically dismissed.
5. Failure to show good ethical and moral character including but not limited to any of the following may result in dismissal from the program:
  - a. conviction of a crime,
  - b. disciplinary action against a nursing license in Alabama or any other state,
  - c. positive drug test,
  - d. adverse background check, or
  - e. disruptive behavior, including online behavior.  
All students must notify the Associate Dean for Academic Affairs or the Dean of the College of Nursing immediately or no later than 48 hours of any of the above stated incidents.
6. All students must notify the Associate Dean for Academic Affairs or the Dean of the College of Nursing immediately or no later than 48 hours following an arrest. Failure to report an arrest may result in removal from the program.
7. All students are subject to testing for controlled substances and must submit to random drug testing as requested. A positive test or refusal to submit to testing will result in removal from the program.
8. All students are subject to a background check and must submit to additional background checks as requested. An adverse finding or refusal to submit to a background check may result in removal from the program.

9. A student who has been academically dismissed is not eligible for readmission to the DNP program and is not eligible for admission to the MSN program.

## Policy for Students Who are Dismissed from a Clinical Setting for Unprofessional Behavior or Refused Approval by the Setting due to Previous Experience with the Student

Professional behavior is expected of all USA CON students within the clinical setting. Students who are asked to leave a clinical setting (by an administrator or preceptor) due to unprofessional behavior will be removed from the clinical site with no approval of return to the same site.

Should a clinical agency refuse to allow a student to obtain clinical hours in their facility for any reason, the agency's request will be honored by the college.

Students dismissed from a clinical site or refused by a clinical agency will be assisted to find an appropriate clinical placement at an affiliated clinical site at the college's discretion. Students who decline the placement provided will be delayed in completing the program.

Depending on the nature of the unprofessional behavior, action taken by the college may include dismissal from the academic program.

## DNP Residency Coursework Policy

The DNP Residency Coursework includes the DNP Project Planning and Development, Residency I, Residency II, and Residency III. Students who do not meet all requirements in a course must complete a DNP Incomplete Extension Course prior to moving forward with the next course in the DNP Residency progression.

## Scientific Review Committee Policy

The DNP project will be reviewed by the USA College of Nursing DNP Scientific Review Committee to evaluate rigor and feasibility. The review process will occur during Project Planning and Development. The DNP project must be reviewed by the Scientific Review Committee before enrolling in Residency I.

## Graduation Information

The program must be completed in five years of matriculation for the MSN to DNP for Advanced Practice Nursing Roles Pathway. Each candidate for the Doctor of Nursing Practice degree must submit an application for the degree the semester preceding their anticipated graduation through the Registrar's Office. See the University Calendar for specific deadlines. Deadlines for each semester application are located on the Registrar's Graduation Website (<https://www.southalabama.edu/departments/registrar/commencement/>).

## Nursing Subspecialty Options

### Post-Graduate Certificate Subspecialty Requirements

The following subspecialties can be added to specific APRN pathways as designated.

#### Addictions Nursing

May be added to any concentration.

Code	Title	Hours
HSC 580	OUD/SUD Prevention/Screening	2
HSC 581	OUD/SUD Assessment/Treatment	2
HSC 582	OUD/SUD Recovery/Sys Practice	2
NU 510	Addictions Practicum I	1
NU 511	Addictions Practicum II	2
NU 512	Addictions Practicum III	2
NU 513	Addictions Practicum IV (Elective)	4
<b>Total Hours</b>		<b>15</b>

## Advanced Forensic Nursing

May be added to any concentration

Code	Title	Hours
NU 500	Explore Culture Sexual Assault	2
NU 502	Sexual Assault Vic Practicum	1
NU 503	Trauma Care Sexual Assault Vic	2
NU 504	Adv Pharm Care Post Assault	2
NU 505	Sup Care Comorbid Post Assault	2
<b>Total Hours</b>		<b>9</b>

## Cardiovascular

May be added to Adult-Gerontological Acute NP, Adult-Gerontological Primary Care NP, Dual Role (Family NP/Adult Gerontological Acute Care NP), Dual Role (Family NP/Emergency NP), Family NP, Women's Health NP, Post-Graduate Certificate Emergency NP, and any Adult-Gerontological CNS student with a strong background in cardiovascular and/or acute care nursing.

Code	Title	Hours
AHN 630	Dysrhythmias and the Heart	2
AHN 631	Foundations of Cardiac Care	2
AHN 632	Diag & Mgmt of Acute CVD	2
AHN 633	Dig/Mgmt Complex CV Disorders	2
<b>Total Hours</b>		<b>8</b>

## Clinical Lipidology

May be added to Adult-Gerontological Primary Care NP, Adult-Gerontological Acute NP, Adult-Gerontological CNS, Family NP, Dual Role (Family NP/Adult-Gerontological Acute NP), Dual Role (Family NP/Emergency NP), Women's Health NP, and Post-Graduate Certificate Emergency NP.

Code	Title	Hours
HSC 595	Evidence Basd Lipid Practice	2
HSC 596	Adv Vascular Biology	2
HSC 597	Adv Pharm Complex Dyslipidemia	2
HSC 598	Diag/Mgt C-plex Dyslipidemia	2
<b>Total Hours</b>		<b>8</b>

## Diversity, Equity, and Inclusion in Healthcare

May be added to any concentration.

Code	Title	Hours
HSC 501	Found of Diversity Healthcare	2
HSC 502	Diversity Equity & Inclusion	2

HSC 503	Curr Issues & Trends Diversity	2
HSC 504	Lead&Change Mang Adv Diversity	2
<b>Total Hours</b>		<b>8</b>

## Nurse Educator

May be added to any concentration

Code	Title	Hours
NU 620	Prin Teach/Learn/Assess Nu Ed	3
NU 621	Curr Design/Outcome Eval Nu Ed	3
NU 622	Current Topics in Nu Education	2
NU 623	Nsg Educ Synthesis Practicum	3
<b>Total Hours</b>		<b>11</b>

## Palliative Care

May be added to any concentration.

Code	Title	Hours
AHN 530	Found Palliative Care/Adv Role	2
AHN 531	Adv Palliative Cr/End of Life	2
AHN 532	Adv Chronic Illness Care	2
AHN 533	Adv Palliative Care Practicum	1-9
<b>Total Hours</b>		<b>7-15</b>

## Trauma-Informed Integrated Behavioral Healthcare

May be added to any concentration.

Code	Title	Hours
HSC 510	IPT for TI-IBH Primary Care	1
HSC 511	IPT Telehealth Deliv TI-IBH	1
HSC 512	TI-MI in IBH Seminar	1
NU 526	Trauma-Informed Integrated Behavioral Healthcare Practicum I	1
NU 527	Trauma-Informed Integrated Behavioral Healthcare Practicum II	2
NU 528	Trauma-Informed Integrated Behavioral Healthcare Practicum III	2
<b>Total Hours</b>		<b>8</b>

# Graduate School

## General Information

(251) 460-6310

Graduate School website <https://www.southalabama.edu/colleges/graduateschool/>

## Graduate School Administrative Staff

Title	Name
Dean	J. Harold Pardue
Associate Director, Graduate School Services	DeAnna Cobb
Associate Director, Academic Programs & Reporting	Ashley Gibson

Assistant Director, Graduate School Avery Robinson  
Services

## Graduate School Academic Standards

### Applicability

All students enrolled in graduate courses or graduate programs are subject to Graduate School Academic Standards and Procedures. This includes those students who are in graduate programs, graduate certificate programs, non-degree graduate students, and transient graduate students.

### Grade Standards

Courses for which the grade of "D" was assigned may not be counted toward a degree program (Please note D grades are no longer granted on the graduate level). A maximum of two courses with the grade of "C" may be counted toward a degree program. However, some programs accept no grades of "C"; see specific program.

### Grades and Grade-Points (Graduate)

Students are graded on the basis of the following guidelines:

Grade	Guideline
A	4 grade-points per semester hour
B	3 grade-points per semester hour
C	2 grade-points per semester hour
F	Failure, no grade-points (weighted)
F*	Failure in cases where the student does not officially withdraw, but who failed to attend or participate in class activities, or who stopped attending or participating in class activities prior to the end of classes. No grade points.
S	Satisfactory, no grade-points (unweighted)
U	Unsatisfactory, no grade-points (unweighted)
U*	Unsatisfactory in cases where the student does not officially withdraw, but who failed to attend or participate in class activities, or who stopped attending or participating in class activities prior to the end of classes. No grade points.

The following symbols are substitutes for grades. They are not grades:

Symbol	Guideline
I	Incomplete (see below)
WD	Withdrawal in good standing
P	Course in progress (see below)
AU	Audit
UA	Unsatisfactory Audit (did not meet attendance requirements)
N	No grade or invalid grade (assigned only by the Registrar)

The symbol "I" (Incomplete) is assigned when, for reasons beyond the student's control, the student is unable to fulfill all the normal course requirements. The situation warranting an "I" must be a medical condition, an equipment problem, or other mitigating circumstance that is patently demonstrable to be beyond the student's control. This symbol is not used to provide time for completion of extra work beyond the normal course requirements for improving the student's grade, or to permit the student to avoid probation, suspension, or dismissal. The "I" symbol should not be assigned unless the amount of incomplete work can reasonably be completed in the time period allotted for an "I" grade without additional extensions. Extensions of "I" grades should only be granted in rare cases where additional and unanticipated circumstances beyond a student's control have prevented completion. All records of the symbols "I" must be cleared by the specified deadline of the next term; if they are not, grades of "F" will be recorded by the Registrar.

The symbol "P" (In Progress) is assigned only in a limited number of approved courses which require more than one term for completion. P grades remain in effect until they are changed to a letter grade, or until the time limits for a graduate degree have expired, when it will be changed to a F grade.

### Change of Grade

Grades reported by instructors to the Registrar may not be changed unless there was an error in recording or in evaluation. Grade changes require the approval of the primary instructor of record and the signature of the department chair and the dean of the college in which the course is taught (or, for graduate students, the Director of Graduate Studies and the Dean of the Graduate School.) A Dean may delegate this responsibility to an Assistant/Associate Dean or to a Director or other academic administrator in their college when appropriate. All grade changes involving an F\* or U\* grade will also require the signature of the Associate Vice President for Academic Affairs. Grades on record for one calendar year may not be changed. The approval authority of the Dean is not intended to impede or restrict the right of the faculty to request and be granted approval to change a grade when it has been erroneously entered into the official academic records of the University.

### Dismissals

#### 1. Academic Dismissal

- The Dean of the Graduate School has authority to dismiss graduate students from the Graduate School.
- Any semester in which a graduate student drops below a 3.0 Program GPA, the student is placed on probationary status and has a period of two semesters to attain a 3.0 Program GPA or be dismissed.
- A student will be dismissed from the Graduate School after two unsuccessful attempts to pass the comprehensive examination or the Qualifying Exam.
- A student who has been academically dismissed is eligible to reapply to the Graduate School subject to the approval of the director of graduate studies of the specific new program and the Dean of the Graduate School. This is not intended to include the program from which the student has been dismissed. See exception listed below.
- Students who have been previously academically dismissed from the Graduate School may apply for readmission. The student must present compelling evidence that it is probable the student will perform at the level required to satisfactorily complete the degree requirements of the program (see Readmission after Academic Dismissal form). The program's graduate

faculty and the Dean of the Graduate School must verify the student's circumstances have changed and/or the student has substantially improved such that the student can satisfactorily complete the degree requirements of the program. The program coordinator/director must include a plan of study for the student (see Readmission after Academic Dismissal Approval form). As part of readmission, the program graduate coordinator/director may request the student be allowed to repeat up to two (2) courses for Grade replacement. The request must be approved by the Graduate School Dean. Individual programs reserve the right to 1) limit the number of courses that can be repeated and 2) restrict which courses can be repeated. The grade for the first course is excluded from the student's GPA calculation if higher than the original grade; only grade points from the repeated course will be counted toward degree completion. The student's transcript will show all grades earned. Grade replacement is irrevocable. Only courses taken at USA may be used for grade replacement. Grades associated with a charge of academic misconduct may not be used for grade replacement.

#### 2. Non-Academic Dismissal

- A student dismissed from a graduate program as the result of an academic misconduct penalty or research misconduct will be automatically dismissed from the Graduate School and the University of South Alabama and will not be eligible to apply for readmission.

## Final Grade Grievance Policy

A student may initiate an inquiry under procedures set forth by the Undergraduate Final Grade Grievance Policy. A copy of this policy is available in the dean's office of each college and is published in The Lowdown (Student Handbook) and in the Faculty Handbook.

## English Language Proficiency

English is the language of instruction at the University of South Alabama. Any remedial work in English language skill, which may be found needed after a student has been admitted to the Graduate School, may be specified and requested by the director of the graduate program in which the student is enrolled.

## Academic Procedures

### Full Load of Course Work in a Semester

A full load is three to ten credit hours. Permission to take more than ten credit hours must be obtained within the college/department.

### Transfer Credit

#### 1. Transfer credit to masters programs

A maximum of twelve (12) semester hours of approved transfer credit from another institution is allowed for a master's degree. Transfer credit from regionally accredited universities may be accepted by certain programs. In the event that the university is non-accredited, the individual USA graduate program will determine if the quality and content of the course meets the standards of the program. Students may also transfer a maximum of twelve (12) semester hours of appropriate courses taken while at USA while in a non-degree graduate status or taken while in another program. Approval of the program's graduate coordinator, the college director of graduate studies, and the Graduate Dean is required. Only courses with "A", "B", or "S" grades are acceptable for transfer. The Graduate School does not award graduate credit for prior portfolio-based experiential learning.

#### 2. Transfer credit to doctoral programs

A maximum of one half of the minimum hours required for the degree is normally allowed as transfer credit. Exceptions are allowed under unusual circumstances, but in no case will the number of transfer credit hours exceed two thirds of the minimum hours required for the degree. Transfer credit from regionally accredited universities may be accepted by certain programs. In the event that the university is non-accredited, the individual USA graduate program will determine if the quality and content of the course meets the standards of the program. Students may also transfer appropriate courses taken while at USA while in non-degree graduate status or taken while in another graduate program. Some programs will allow graduate courses applied to certain master's degrees to be transferred in and also count towards the doctoral degree, subject to the limits of maximum transfer credit hours. The University of South Alabama does not award graduate credit for prior portfolio-based experiential learning. Approval of the program's graduate coordinator and the college director of graduate studies is required. Only courses with "A", "B", or "S" grades are acceptable for transfer.

## Change of Program

A student wishing to change from one graduate program to another in a separate college or school must apply to the new program through the Office of Admissions. If the new program is a related program within the same college or school, the student should first consult the Director of Graduate Studies of the new program.

## Application for Degree

Each candidate for the Master's, Specialist's, or Doctoral degree must make application for the degree during the semester preceding the semester of graduation, with the Registrar's Office. The dates are specified in the University Calendar.

## Student Responsibility

While the University of South Alabama will endeavor to provide timely and accurate advisement, it is the responsibility of the student to know and satisfy the degree requirements of the academic program, to be aware of the University calendar and to understand and comply with University academic policies and procedures.

## Thesis and Dissertations

### Guidelines for Theses and Dissertations

1. Students who intend to write a thesis or dissertation should consult early in their programs with the department chair or program director/coordinator for a list of Members of the Graduate Faculty from which to select an advisor to supervise and direct their research.
2. If the Member of the Graduate Faculty selected by the student consents to serve as an advisor, then the advisor and student initiate a recommendation for a thesis/dissertation committee using the Appointment of Graduate Faculty to a Thesis, Dissertation, or COMP form.
3. A Master's thesis committee must include a minimum of three members of the Graduate Faculty and a dissertation committee must include at least four members of the Graduate Faculty. Master's thesis committees may be chaired by Associate or Full Members of the Graduate Faculty. Dissertation committees must include at least one Full Member of the Graduate Faculty who is the committee chair and usually is the student's advisor/major professor. Both thesis and dissertation committees must have at least one member from outside the student's department or program.

Administratively appointed graduate faculty members may serve on thesis/dissertation committees for a specified student. At least half of the committee must be USA Associate or Full Members of the Graduate Faculty.

4. The Dean of the Graduate School is the appointing authority for thesis and dissertation committees. Once the Graduate Dean has appointed the committee, the student prepares a thesis or dissertation prospectus under the direction of the committee.
5. "A Guide for Preparing Theses and Dissertations", accessed at <https://www.southalabama.edu/colleges/graduateschool/thesis.html>, contains the guides for preparation of the prospectus and the thesis or dissertation. Diverse resources can also be found on this page.
6. Once a thesis or dissertation committee is appointed by the Dean of the Graduate School, the student may then enroll for 599 Thesis or 699/799 Dissertation credit with permission of the thesis/dissertation committee chair (advisor or major professor).
7. To be considered for approval by the Dean of the Graduate School, an acceptable thesis or dissertation must be submitted to the Graduate School office by the first submission deadline announced in the University Calendar.

## Standards for Theses and Dissertations

1. A thesis/dissertation must demonstrate that the student has the capacity for original research, facility in the use of the English language, the ability to review appropriate background material, formulate and address (a) significant question(s), obtain, collate, and analyze relevant appropriate data and draw logical conclusions, and integrate the new knowledge in a meaningful way into the greater body of existing knowledge and state its significance. The final thesis/dissertation must be acceptable to the major professor, a majority of the thesis/dissertation committee, the chair of the student's department, the college/school director of graduate studies and the Dean of the Graduate School.
2. The thesis or dissertation must be an original research and/or creative project. This document will demonstrate the student's ability to:
  - A. Select a topic and delineate a problem that can be studied in terms of time, equipment needs and experimental population available to the faculty sponsor.
  - B. Search the literature for relevant studies on the topic of choice.
  - C. Organize and analyze the information that is available, using logical and/or statistical analysis appropriate for the project.
  - D. Present the results orally and in a written form to the satisfaction of the thesis/dissertation committee and the Graduate Faculty.
  - E. Present a final document as the Thesis or Dissertation to the Graduate School Office in an acceptable form and by the procedures outlined in the Guide for Preparing Theses and Dissertations, University of South Alabama.
3. All theses/dissertations should meet current standards relative to responsible conduct of research.

## Graduate Certificate Program Requirements

A graduate certificate program is a related cluster of credit bearing graduate courses that constitutes a coherent body of study within a discipline or set of related disciplines.

1. Admissions follows the same graduate school standards and procedures as used for admission to a master's level graduate program. The individual graduate certificate program may impose more restrictive standards as necessary for the purposes of the specific program.
2. Available graduate certificate programs are listed here <https://www.southalabama.edu/colleges/graduateschool/certificateslist.html>. The curriculum is defined by the individual graduate certificate program per university standards and procedures. See: [https://www.southalabama.edu/departments/academicaffairs/resources/policies/guidelinesforcertificateprogramsJuly11\\_11.pdf](https://www.southalabama.edu/departments/academicaffairs/resources/policies/guidelinesforcertificateprogramsJuly11_11.pdf)
3. Upon approval by the graduate program and Graduate School, a student may transfer from another regionally accredited institution to a USA graduate certificate program: a maximum of fifty percent of the required graduate credit hours composing the certificate or 12 credit hours. Transfer credit must meet the guidelines established for master's level programs.
4. Graduate School academic standards policy applies to certificate programs.
5. Completion of a graduate certificate does not guarantee admission into a graduate degree program. Credit hours earned in a certificate program may or may not be used in a future graduate degree program.
6. The graduate certificate program must be completed within four years.

## Graduate Interdisciplinary Programs

- Chemical And Biomolecular Engineering (p. 733)
  - Chemical and Biomolecular Engineering (PhD) (p. 734)
- Clinical and Counseling Psychology (p. 735)
  - Clinical and Counseling Psychology (PhD) (p. 742)

## Admission Requirements and Procedures

The Dean of the Graduate School, advised by the Graduate Council, establishes and monitors the standards by which students are admitted for study in degree programs under its jurisdiction.

Each student must be qualified for admission to the Graduate School. The fact of qualification does not guarantee admission. Admission may be restricted because of capacity limitations. Official notice of actions on applications for admission is provided by the Office of Admissions. Any other correspondence between student and faculty members, department chairs, and/or administrative officers does not constitute nor does it imply admission to the Graduate School.

Application forms and other materials are available on-line at <https://www.southalabama.edu/departments/admissions/graduate.html>.

The Office of Admissions contact information (for students who have graduated from a U.S. accredited university/college):

2500 Meisler Hall, University of South Alabama  
 Mobile, Alabama 36688-0002  
 telephone (251)460-6141 or toll-free telephone number (800)872-5247  
 The e-mail address is [admiss@southalabama.edu](mailto:admiss@southalabama.edu)

The Office of Immigration and International Admissions contact information (for students who have graduated from an international university/college):

2200 Meisler Hall, University of South Alabama  
 Mobile, Alabama 36688-0002  
 telephone (251)460-6050  
 The email address is [internationaladmissions@southalabama.edu](mailto:internationaladmissions@southalabama.edu)

Specific information regarding academic programs may be obtained by contacting the Director of Graduate Studies in the appropriate colleges.

## Deadlines for Applications

Applications deadlines are posted at <https://www.southalabama.edu/departments/admissions/graduate-deadlines.html> and may be program specific. Not all programs admit students each semester and some programs set earlier application deadlines. Please see appropriate section of the Bulletin for exceptions. New graduate students who do not register for coursework in the semester for which they were accepted must contact their program for permission if they wish to enroll in a future semester.

Deadlines for applications and supporting documents for new international students are posted at <https://www.southalabama.edu/departments/international/requirements-deadline.html>.

Please note: The College of Education and Professional Studies and the College of Nursing evaluates files each semester and acceptance is only valid for the semester in which they apply.

USA graduate students who have not attended for three consecutive semesters must file for readmission with the Office of Admissions by the published deadlines found at <https://www.southalabama.edu/departments/eforms/admissions> (<https://www.southalabama.edu/departments/eforms/admissions/>). If a student has been absent from first enrollment in a Master's program for more than 7 years or from a doctoral program for more than 10 years, the student must apply through the Office of Admissions. Please note some programs may have shorter time limits.

## Documents Required for Admission

Transcripts and test scores must be official, i.e., mailed or sent electronically from the home institution or testing agency directly to the address specified by the Office of Admissions, and become the property of the University of South Alabama. If a student changes programs, a new application must be submitted.

## Admission Requirements

Each program has specific requirements for admission that may exceed the requirements listed as follows for admission to the Graduate School.

Applicants seeking admission must satisfy the following requirements:

1. Have earned a bachelor's degree from a regionally accredited United States institution of higher education or an international institution of higher education with an equivalent degree (including 3 year first level Bologna Process degrees).
2. Have earned the minimum grade-point average required by the relevant graduate program. See the individual program descriptions for details.
3. Possess sufficient coursework in the major subject to qualify for graduate study in the relevant graduate program. Students with a deficiency in required coursework may be required by the admitting graduate program to take pre-requisite courses.
4. International students who do not meet the exception listed above or below must submit an official language test (Please note some programs may require higher scores to prove English proficiency):
  - TOEFL minimum score of 71
  - IELTS minimum score of 6
  - ITEP minimum score of 3.7
  - PTE Academic minimum score of 48
  - Duolingo minimum score of 100
5. Standardized test scores may be required by specific graduate programs for admission. See the individual program descriptions for details.
6. Performance at the graduate level may be taken into consideration for students who have completed a prior graduate degree program, as well as undergraduate performance. An earned advanced degree may substitute for some admission requirements (see specific program requirements).
7. Non-Degree Admission - Students holding baccalaureate degrees from regionally accredited institutions of higher education who are not seeking graduate degrees or who need to complete prerequisites for particular degree programs may enroll as Non-

Certain graduate programs waive the English proficiency requirement for international applicants who are citizens of or who have attended school in specific countries where English is an official language and/or the medium of instruction. Approved countries are listed below. See individual program requirements elsewhere in this Bulletin.

- Antigua and Barbuda
- Australia
- Bahamas
- Barbados
- Belize
- Bermuda
- Botswana
- Canada, with the exception of Quebec
- Cayman Islands
- Dominica
- Ghana
- Grenada
- Guyana
- Irish Republic
- Jamaica
- Kenya
- Malawi
- New Zealand
- Nigeria
- Rwanda
- Singapore
- Saint Lucia
- St. Kitts and Nevis
- St. Vincent and the Grenadines
- Sierra Leone
- South Africa Tanzania
- Trinidad & Tobago
- Uganda
- United Kingdom (England, Scotland, Northern Ireland, Wales)
- Virgin Islands (British & US)
- Zambia
- Zimbabwe

Degree graduate students. A suitable background for the courses to be taken is expected. A minimum grade point average of 2.5 on all undergraduate work ("A" = 4.0) is required to enroll as a Non-Degree graduate student. Some graduate programs may impose additional requirements.

Because of limited class size and resources, academic units may limit the enrollment of Non-Degree students. After admission, permission to enter each course is obtained from the Graduate Director/Coordinator in the appropriate college, school and/or department.

International students must submit documentary evidence showing acceptable language test scores (see Admission Requirements above for acceptable language test scores), or bachelor's or graduate degrees earned at a regionally accredited United States institution of higher education.

8. Non-Degree students subsequently seeking admission into one of the graduate degree programs of the University must submit a formal application through the Office of Admissions to the Graduate Director/ Coordinator of the appropriate college, school and/or department. Students may be subject to further conditions, such as the completion of necessary undergraduate prerequisite courses. The student's record in graduate courses taken while in the Non-Degree status may be considered. Students may be able to transfer courses toward a graduate degree program (see section on Transfer Credit). Non-Degree graduate students are subject to the Graduate School Dismissal Policy. For dismissal purposes, program GPA will be calculated based on all credits earned while in non-degree graduate status.

## Dual Masters Degrees

A student may enroll in and pursue two master's degrees simultaneously. The student must apply to and be accepted in each of the two programs individually. One program has to be designated as primary and the other as a secondary degree program. All requirements for each degree have to be met, including the requirement for time to degree. A maximum of nine (9) credit hours may be counted towards both degrees if approved by each of the two degree programs. Although the start date of the two programs does not have to be the same date, the two degrees will be awarded on the same date after completion of both degrees. All requirements for the two degrees must be completed within seven calendar years of admission to the first graduate program.

## Transient Enrollment

Students in good standing in the graduate school of other universities may enroll in the Graduate School of the University of South Alabama, provided they have the written permission of the Dean of the Graduate School of the University of South Alabama. Enrollment as a transient student in no way implies future admission as a degree or non-degree graduate student. Students who wish to remain in transient status for more than one semester must submit the University's Transient Student Form and a readmission form (available from the Office of Admissions) each semester prior to the deadline (see "Readmission to the University").

## Graduate Study for Advanced Undergraduates

With permission of the department chair and appropriate director of graduate studies, a student who has completed 90 semester hours with a "B" (3.0) average may register for graduate courses. Each course can be applied to an undergraduate degree or perhaps a future graduate degree. The same course cannot be applied to both an undergraduate and a graduate degree (except for accelerated master's degrees and undergraduate/graduate dual degrees). Up to 12 graduate credit hours

may be transferred to a future graduate degree at USA. If and when a student has applied to and been admitted into graduate school, courses can be evaluated for transfer provided they were not taken any more than seven years ago.

## Accelerated Bachelor's to Master's Program

### Program Description

The USA Accelerated Bachelor's to Master's (ABM) Program provides exceptional undergraduate students the opportunity to earn a bachelor's and a master's degree at an accelerated pace in select academic programs. ABM students may count up to 12 credit hours of graduate coursework towards either the undergraduate or graduate degrees in approved programs. ABM students typically complete the master's degree within one academic year after completing the undergraduate degree.

### Eligibility Requirements

Undergraduate students must meet the following criteria:

- 3.0 cumulative undergraduate GPA
- have completed at least 90 credit hours
- have completed at least 30 credit hours at USA

### Credit Hour Requirements

Completion of the ABM program requires students complete at least 150 approved unique credit hours. To qualify for a baccalaureate degree, a student must complete at least 120 approved semester hours. To qualify for a master's degree a student must complete a minimum of 30 approved semester hours. Generally, undergraduate students are not approved to take more than 12 credit hours of graduate coursework.

### Admission

Application of graduate coursework taken at the undergraduate level requires ABM students to be admitted to a graduate program. ABM students must meet all requirements for admission to the Graduate School. However, each degree program has specific requirements that may exceed Graduate School minimums. An ABM student must meet all requirements of their specific degree program. A complete Graduate School application is required.

A student who withdraws or is dismissed from the ABM program may not count graduate coursework towards both degrees. Graduate courses for which an undergraduate student did not earn an "A" or "B" grade, may not be counted towards the graduate degree.

An ABM student must be enrolled full time and must complete all degree requirements for the master's degree within three semesters after admission into the Graduate School. An exception for a fourth semester may be granted if an additional semester is required for final revisions to and submission of a defended thesis. Exceptions to the ABM policy are at the discretion of the Dean of the Graduate School.

Contact the program coordinator to discuss individual program requirements. Application deadlines vary by program.

## Assistantships and Fellowships

Information concerning assistantships and fellowships may be obtained from the college or department concerned or on-line at <https://www.southalabama.edu/colleges/graduateschool/information.html>.

A completed graduate assistantship/fellowship application must be submitted. Tuition remission granted for a graduate assistantship/fellowship may not be applied to courses outside of the degree program.

## Research Integrity and Professional Ethics

Graduate programs may require instruction in research integrity and professional ethics.

### Requirements for the Master's Degree

1. A minimum of 30 semester hours of credit in a program approved by the graduate program and the Dean of the Graduate School is required. The following limitations apply:
  - A. No more than 18 hours of dual-listed courses (400- and 500-level listing for the same course) may be counted toward meeting the minimum hours required for a degree. Graduate students will only receive graduate credit for the 500 level version of dual-listed courses.
  - B. A maximum of twelve (12) semester hours of graduate credit obtained at another accredited institution may be approved for transfer to the University of South Alabama. Transfer credit must have the recommendation of the graduate program and appropriate director of graduate studies and the approval of the Dean of the Graduate School. Only grades of "A", "B", or "S" or the equivalent may be accepted as transfer credit. Grade equivalency must be verified by the appropriate director of graduate studies. Course work completed more than seven years prior to the date for graduation may not be counted for degree credit. Students must meet all degree residency requirements.
  - C. A course applied toward credit for a degree at this institution, or elsewhere, will not be acceptable as credit toward a subsequent master's degree, except in approved dual-master's programs where a maximum of nine (9) hours may be counted in both programs (or accelerated bachelor's to master's degree).
2. A minimum overall 3.0 grade-point average on all coursework attempted in the student's specific program of study as well as an overall 3.0 grade-point average on all work attempted while enrolled in the current program of study is required. Courses for which the grade of "D" was assigned may not be counted toward a degree program. A maximum of two courses with the grade of "C" may be counted toward a degree program; however, some programs accept no grades of "C" (see specific program).
3. A minimum of 21 semester hours of degree program credit in residence at the University of South Alabama is required.
4. All requirements for a master's degree must be completed within seven calendar years from admission as a graduate student at the University of South Alabama. Under extraordinary circumstances, an appeal may be made to the Graduate Dean for a time extension. The appeal form may be found on the Forms and Policies web page of the Graduate School. Some degree programs may set shorter time limits.
5. Each student will be evaluated to ensure achievement of program outcomes. This evaluation may be in the form of a comprehensive exam or other measurement tools. If unsatisfactory, after corrective action, the evaluation may be repeated once. The comprehensive exam committee must be comprised of at least 3 graduate faculty members. For details see specific programs.
6. Submission of a standardized test score may be required. For details, see specific programs.

7. A foreign language may be required. For details see specific programs.
8. Thesis
  - A. A program may require or allow a candidate for the Master's degree to prepare a thesis. A maximum of nine (9) semester hours of 599 thesis credit may be counted toward meeting the minimum hours required for a degree; some programs may allow fewer than nine hours (see specific program), but no fewer than three (3) hours.
  - B. A letter grade is assigned for each semester a student is enrolled in a thesis credit hour course.
  - C. A student on a thesis option program will be required to prepare a thesis prospectus.
  - D. An oral defense of the thesis is required.
  - E. The student must be enrolled in at least one hour of thesis during the semester in which the student defends their thesis. Normally, thesis students should be enrolled in 599 continuously from inception of the project until final approval of the thesis by the Dean of the Graduate School. Students who are not on campus or using University resources during the semester of their graduation may appeal to the Graduate Dean for an exception to this policy.
  - F. See Guidelines for Theses and Dissertations and Standards for Theses and Dissertations.

### Requirements for the Doctoral Degree

1. The specific requirements for doctoral degrees vary among the specialties. Each program leading to the completion of a doctoral degree has specific requirements regarding courses, seminars, laboratory studies, directed studies, workshops, and research. In general, a minimum of 60 credits of graduate work will be required for the doctoral degree. Transfer of graduate credit from regionally accredited universities may be accepted by certain programs. Prior approval of the college director of graduate studies is required. Only courses with "A" or "B" grades are acceptable for transfer. The quality of the student's program and performance are emphasized and are considered as important as the fulfillment of requirements. Completion of original research, and writing and defending a dissertation are requirements for the doctoral degree.
2. Students who are candidates for the doctoral degree must be enrolled for Research Dissertation during the semester in which the open defense of the dissertation is completed. Students who are not on campus or using University resources during the semester of their graduation may appeal to the Graduate Dean for an exception to this policy.
3. All requirements for a doctoral degree must be completed within ten calendar years from admission to a doctoral program at the University of South Alabama. Under extraordinary circumstances, an appeal may be made to the Graduate Dean for a time extension. Some degree programs may set shorter time limits.

### Degrees Offered

The Graduate School offers twenty different graduate degrees (Au.D., M.A., M.Acc., M.B.A., M.D., M.Ed., M.F.A., M.H.S., M.P.A., M.S., D.N.P., D.P.T., Ed.S., Ed.D., Ph.D. in a wide variety of programs, with numerous areas of concentration. For specific admission and degree requirements, in addition to those of the Graduate School, see individual program webpages.

## Graduate Programs

The following graduate degree programs are offered through the Graduate School of the University. Further information is available under the Colleges and Schools listings elsewhere in this Bulletin. Navigate to Degrees and Programs for a complete listing of graduate programs and certificates.

### Pat Capps Covey College of Allied Health Professions

- Master of Science in Biomedical Sciences
- Master of Science in Speech and Hearing Sciences
- Master of Science in Occupational Therapy
- Master of Science of Physical Therapy
- Master of Rehabilitation Science in Occupational Therapy
- Master of Rehabilitative Science in Speech-Language Pathology
- Master of Health Sciences in Physician Assistant Studies
- Doctor of Philosophy in Communication Sciences and Disorders
- Doctor of Audiology
- Doctor of Physical Therapy

### College of Arts and Sciences

- Master of Science in Biological Sciences
- Master of Arts in Communication
- Master of Arts in English
- Master of Arts in History
- Master of Science in Mathematics
- Master of Music
- Master of Public Administration
- Master of Music
- Master of Public Administration
- Master of Science in Psychology
- Master of Fine Arts in Creative Technologies and Practice

### School of Marine and Environmental Sciences

- Master of Environmental Toxicology
- Master of Science in Marine Conservation and Resource Management
- Master of Science in Marine Sciences
- Doctor of Philosophy in Marine Sciences

### Mitchell College of Business

- Master of Accounting
  - Master of Business Administration
  - Doctor of Philosophy in Business Administration
- These programs are given in the evenings and are designed for those individuals presently engaged in managerial or technical positions with business, industry, or government.
- A limited residence Doctor of Business Administration is also offered.

### School of Computing

- Master of Computer Science
- Master of Information Systems
- Ph.D. in Computing

### College of Education and Professional Studies

- Alternative Master of Education in Art Education
- Alternative Master of Education in Early Childhood Education
- Alternative Master of Education in Elementary Education
- Alternative Master of Education in English for Speakers of Other Languages
- Alternative Master of Education in Secondary Education
- Alternative Master of Education in Special Education
- Master of Education in Art Education
- Master of Education in School Counseling
- Master of Education in Early Childhood Education
- Master of Education in Early Childhood Education with Reading Certificate
- Master of Education in Educational Administration
- Master of Education Educational Media
- Master of Education Elementary Education
- Master of Education in Elementary Education with Reading Cert
- Master of Education Physical Education - P-12 Teacher Certification
- Master of Education in Physical Education - Health Education
- Master of Education in Secondary Education
- Master of Education in Special Education
- Master of Science in Clinical Mental Health Counseling
- Master of Science in Educational Media and Technology
- Master of Science in Exercise Science
- Master of Science in Health Education
- Master of Science in Instructional Design and Development
- Master in Sport Management
- Educational Specialist in Early Childhood Education
- Educational Specialist in Elementary Education
- Educational Specialist Instructional Leadership
- Educational Specialist in Reading Specialist
- Educational Specialist in Secondary Education
- Educational Specialist in Special Education
- Educational Specialist in Teacher Leader
- Education Doctorate in Educational Leadership
- Doctor of Philosophy in Exercise Science and Performance Nutrition
- Doctor of Philosophy in Instructional Design and Development

### College of Engineering

- Master of Science in Chemical and Biomolecular Engineering
- Master of Science in Civil, Coastal, and Environmental Engineering
- Master of Science in Electrical and Computer Engineering
- Master of Science in Mechanical Engineering
- Master of Science in Systems Engineering
- Doctor of Philosophy in Systems Engineering

### Whiddon College of Medicine

- Doctor of Philosophy degree in Basic Medical Sciences. The objective of the program is to produce graduates with training and knowledge in basic human biology with an in-depth knowledge of one of the basic medical sciences (Biochemistry and Molecular Biology, Microbiology and Immunology, Molecular and Cellular Pharmacology, Physiology, Cell Biology and Neuroscience). A combined program

leading to the awarding of both the Ph.D. and M.D. degree is available to highly qualified applicants.

- Medical Doctorate in Medical Sciences

## College of Nursing

- Master of Science in Nursing
- Doctor of Nursing Practice

## Interdisciplinary Graduate Program

- Doctor of Philosophy in Chemical and Biomolecular Engineering
- Doctor of Philosophy in Clinical and Counseling Psychology

## USA Education/Study Abroad

- Graduate students are encouraged to incorporate international experiences in their academic program through participation in study, research, internship and work abroad experiences. For more information please contact your academic advisor and the Office of International Education (<https://www.southalabama.edu/departments/international/>).

## Certificate Programs

- Graduate Certificate in Applied Statistics
- Graduate Certificate in Spanish for Healthcare Professionals
- Graduate Certificate in Gerontology
- Graduate Certificate in Clinical Mental Health Counseling
- Graduate Certificate in Computer Science Cybersecurity
- Graduate Certificate in Human Performance Improvement
- Graduate Certificate in Information Systems Cybersecurity
- Graduate Certificate in Instructional Design and Development
- Graduate Certificate in Reading Specialist
- Graduate Certificate in Systems Engineering
- Graduate Certificate in Nursing Subspecialty Options
- Certification in Post-Graduate Nursing

## Accelerated Bachelor's to Master's Program (ABM)

### Program Description

The USA Accelerated Bachelor's to Master's (ABM) program provides exceptional undergraduate students the opportunity to earn a bachelor's and master's degree at an accelerated pace in select academic programs. ABM students may count up to 12 credit hours of graduate course work towards either the undergraduate or graduate degrees in approved programs. ABM students typically complete the master's degree within one academic year after completing the undergraduate degree.

### Eligibility Requirements

Undergraduate students must meet the following criteria:

- 3.0 cumulative undergraduate GPA
- have completed at least 90 credit hours
- have completed at least 30 credit hours at USA

### Credit Hour Requirements

Completion of the ABM program requires students complete at least 150 approved unique credit hours. To qualify for a baccalaureate degree, a student must complete at least 120 approved semester hours. To qualify for a master's degree a student must complete a minimum of 30

approved semester hours. Generally, undergraduate students are not approved to take more than 12 credit hours of graduate coursework.

## Admission

Application of graduate coursework taken at the undergraduate level requires ABM students to be admitted to a graduate program. ABM students must meet all requirements for admission to the Graduate School. However, each degree program has specific requirements that may exceed Graduate School minimums. An ABM student must meet all requirements of their specific degree program. A complete Graduate School application is required.

A student who withdraws or is dismissed from the ABM program may not count graduate coursework towards both degrees. Graduate courses for which an undergraduate student did not earn an "A" or "B" grade, may not be counted towards the graduate degree.

An ABM student must be enrolled full time and must complete all degree requirements for the master's within three semesters after admission into the Graduate School. An exception for a fourth semester may be granted if an additional semester is required for final revisions to and submission of a defended thesis. Exceptions to the ABM policy are at the discretion of the Dean of the Graduate School.

Contact the program coordinator to discuss individual program requirements. Application deadlines vary by program.

## Chemical And Biomolecular Engineering

### Department Information

The USA Graduate School offers an interdisciplinary PhD program in Chemical and Biomolecular Engineering. The purpose of the PhD program is to produce graduates who can apply the fundamental principles of thermodynamics, mass transfer, and reaction kinetics to a variety of technical areas, such as drug discovery, industrial chemistry, biological systems, and environmental engineering. As an interdisciplinary program housed in the Graduate School, the PhD in Chemical and Biomolecular Engineering aligns with the mission of the University of South Alabama by delivering high quality graduates who will promote discovery, health, and learning to the citizens of Alabama and the Gulf Coast region.

Because the program is built upon the application of chemistry, the central science, and is interdisciplinary by design, graduates will find careers in diverse areas such as petrochemical, chemical processing, biotechnology, green technologies, pharmaceuticals, and private consulting. However, the program will also qualify graduates for academic appointments as professors, post-graduate researchers, and research scientists in university programs and laboratories. There is a growing demand for PhD graduates who possess the analytical skills to move from molecular design to process design using state-of-the-art, cutting-edge technologies, and this program will meet this need.

Succinctly list at least four (4) but no more than seven (7) of the most prominent student learning outcomes of the program. These outcomes should lend themselves to subsequent review and assessment of program accomplishments.

Graduates of the program will be able to:

1. integrate and apply advanced chemical and biomolecular analytical tools and techniques to solve problems in a specific science, technology, engineering, or math domains
2. formulate a significant research question and demonstrate the ability to carry out a research plan from inception to dissemination to answer such a question
3. obtain employment in chemical and biomolecular related positions in industry, academia, or government
4. work effectively on an interdisciplinary team in a variety of laboratory settings
5. present research findings in professional and academic journals

## Admissions

The admission requirements required by the Graduate School of the USA as listed below.

- Statement of purpose
- Three letters of recommendation
- Curriculum vita
- Official transcripts from all previous institutions attended
- A baccalaureate or graduate degree in a closely related field. A graduate degree is not required for admission
- An undergraduate minimum GPA of 3.0 overall or a graduate minimum of 3.5 overall (4 point scale)
- Official scores for the Graduate Records Examination (GRE)
- A completed application for admission to the Graduate School
- For international students, an official TOEFL, IELTS, iTEP, or Pearson (PTE Academic) score, or an equivalent level of competence as exhibited by a bachelor or graduate degree from an accredited university in the United States is required. The minimum required test scores are: TOEFL – 525 on the paper version, 197 on the computer version, or 71 on the internet version; IELTS – 6.0; iTEP – 3.7; Pearson's (PTE Academic) - 4
- Some variances in these admissions requirements may be allowed as approved by the program coordinator.

## Degrees, Programs, or Concentrations

- Chemical and Biomolecular Engineering (PhD) (p. 734)

# Chemical and Biomolecular Engineering (PhD)

## Admission Requirements

- A Bachelor's degree in chemical engineering or a related field such as chemistry, physics, mathematics, or engineering.
- A grade point average of 3.0 or greater (A=4.0) on all undergraduate work.
- International applicants whose native language is not English must have a minimum score of 550 on the written TOEFL, or a minimum score of 79 in the internet-based TOEFL, or a minimum band score of 6.5 on the IELTS, or a minimum overall score of 58 on the PTE academic test, or a minimum score of 100 on the Duolingo test.
- A GRE score is **not** required. Each application will be reviewed by the Admissions committee, which carries out a holistic review of all applications. This committee may reserve the right to evaluate

additional credentials, such as but not limited to course work taken and letters of recommendation.

## Degree Requirements

The core classes for this program are defined as CHE 510 Advanced Chemical Thermodynamics, CHE 520 Advanced Transport Phenomena I, and CHE 525 Chemical Reactor Analysis. For the proposed degree program, the student will complete a minimum of 43 credit hours of classwork courses and 18 credit hours for thesis research. In addition, a doctoral student must pass a PhD doctoral examination, which is comprised of the qualifying exam and a preliminary oral examination, to be admitted to candidacy. The qualifying exam requirement is satisfied by obtaining a B or better in the core courses defined above. The preliminary oral exam is completed at the end of the 6th semester, or earlier, where the student presents their proposed research. A doctoral plan of study must be submitted to the USA graduate school by the time the student completes 30 hrs of credit towards a doctorate. A final oral dissertation defense of the written dissertation is required to be presented to the students committee and a majority of the committee must approve.

## Course Requirements

Code	Title	Hours
<b>Program Core Courses</b>		
CHE 510	Adv Chemical Thermodynamics	3
CHE 520	Adv Transport Phenomena I	3
CHE 525	Chemical Reactor Analysis	3
<b>Program Support Courses</b>		
CHE 501	Chemical Engineering Seminar	1
CHE 592	Directed Independent Study	6
GIS 501	Responsible Conduct of Research	1
<b>Program Elective Courses</b>		
Select 21 hours from the following: ( <a href="http://bulletin.southalabama.edu/programs-az/graduate/chemical-biomolecular-engineering/footnote1/">http://bulletin.southalabama.edu/programs-az/graduate/chemical-biomolecular-engineering/footnote1/</a> ) <sup>1</sup>		21
Biology		
Chemical Engineering		
Chemistry		
Civil Engineering		
Mechanical Engineering		
Electrical Engineering		
Environmental Toxicology		
Math		
Statistics		
Pharmacology		
Other Areas		
<b>Dissertation</b>		
GIS 799	Dissertation	1-3
<b>Total Hours</b>		<b>39-41</b>

## Footnote

<sup>1</sup> Specific elective classes listed by course number are available from the Graduate School.

## Graduation Plan

(61 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CHE 520	Adv Transport Phenomena I	3
Graduate Elective	PhD Elective <sup>1</sup>	3
CHE 501	Chemical Engineering Seminar	1
GIS 501	Responsible Conduct of Research	1
<b>Hours</b>		<b>8</b>
<b>Spring</b>		
Graduate Elective	PhD Elective	3
Graduate Elective	PhD Elective	3
CHE 501	Chemical Engineering Seminar	1
<b>Hours</b>		<b>7</b>
<b>Summer</b>		
CHE 592	Directed Independent Study	3
<b>Hours</b>		<b>3</b>
<b>Second Year</b>		
<b>Fall</b>		
CHE 510	Adv Chemical Thermodynamics	3
CHE 592	Directed Independent Study	3
CHE 501	Chemical Engineering Seminar	1
<b>Hours</b>		<b>7</b>
<b>Spring</b>		
CHE 525	Chemical Reactor Analysis	3
CHE 592	Directed Independent Study	3
CHE 501	Chemical Engineering Seminar	1
<b>Hours</b>		<b>7</b>
<b>Summer</b>		
GIS 799	Dissertation	3
<b>Hours</b>		<b>3</b>
<b>Third Year</b>		
<b>Fall</b>		
GIS 799	Dissertation	3
Graduate Elective	PhD Elective	3
CHE 501	Chemical Engineering Seminar	1
<b>Hours</b>		<b>7</b>
<b>Spring</b>		
GIS 799	Dissertation	3
Graduate Elective	PhD Elective	3
CHE 501	Chemical Engineering Seminar	1
<b>Hours</b>		<b>7</b>
<b>Summer</b>		
GIS 799	Dissertation	3
<b>Hours</b>		<b>3</b>
<b>Fourth Year</b>		
<b>Fall</b>		
GIS 799	Dissertation	3
Graduate Elective	PhD Elective	3
CHE 501	Chemical Engineering Seminar	1
<b>Hours</b>		<b>7</b>
<b>Spring</b>		
GIS 799	Dissertation	3
Graduate Elective	PhD Elective	3
CHE 501	Chemical Engineering Seminar	1
<b>Hours</b>		<b>7</b>

<b>Summer</b>		
GIS 799	Dissertation	3
<b>Hours</b>		<b>3</b>
<b>Total Hours</b>		<b>69</b>

<sup>1</sup> PhD Electives must be approved by the PhD program director.

## Clinical and Counseling Psychology Department Information

The University of South Alabama offers a Doctor of Philosophy in Clinical and Counseling Psychology (CCP). This program is a collaborative effort between the Department of Psychology in the College of Arts and Sciences and the Department of Counseling and Instructional Sciences in the College of Education and Professional Studies. The program combines an asset-strength model from Counseling Psychology with a health psychology/wellness model from Clinical Psychology. The Clinical and Counseling Psychology program prepares professionals to provide the most effective and culturally sensitive types of psychological care for individuals and communities. Further, the program is based on a scientist-practitioner model of training, meaning that graduates will develop competence in clinical practice, scientific research, and ability to integrate these two domains. Graduates of the program will have a set of competencies which will also enable them to work successfully with a variety of other health care professionals for the purposes of health promotion and to prevent and remediate mental health conditions in the world. Graduates might be employed in a variety of settings, including counseling centers in colleges and universities, medical centers, Veterans Administration hospitals, schools, private practices, health and wellness facilities, state and federal agencies, family counseling services, academic departments in higher education institutions, and professional associations. Such responsibilities would include direct service to individuals and the management of psychological services for individuals and groups using evidence-based interventions as well as research, advocacy, teaching, supervision and/or training other health professionals.

### Program Admission Requirements

#### Routes To Admission

Applicants can apply at one of two stages of their education.

1. Admission having only previously completed with a Bachelor's Degree: Students admitted at this stage must complete the requirements of the master's degree in psychology (Clinical & Counseling Psychology Concentration) along the way to earning their Ph.D. (see required coursework). Such students are automatically granted admission to the Ph.D. program of study once their M.S. coursework and degree requirements are completed. Students who fail to complete the requirements of the master's degree in psychology within 2 years may be prohibited from entering the doctoral program.
2. Admission having already earned with a Master's Degree: Students who have completed a master's degree (Master of Science/Arts/ Education) at another institution will enter the doctoral training program upon admission. Students are still held to course and program requirements of the Masters' Degree in Psychology (Clinical & Counseling Psychology Concentration). Such students may submit requests to have these requirements waived based on prior graduate level coursework and other program requirements (e.g., master's thesis). The core faculty of the CCP program evaluate prior

graduate coursework and may waive some of the foundational course requirements if they are equivalent to USA's version of the same course. Students who enter the CCP with a master's degree will invariably have a number of courses that need to be remediated, particularly students with master's degrees in fields other than psychology.

Students are admitted to start the program in the fall semester only. No spring or summer admissions are permitted. Participation in the program is full-time and, with the exception of an assistantship, students are discouraged from engaging in any outside employment. Applications to the CCP program should be completed by December 15th for admission for the following fall semester. In addition to the Graduate School application form and required supporting documentation, the Clinical and Counseling Psychology program requires submission of a program application form, a statement of purpose, curriculum vitae (CV), and three letters of academic recommendation. The following criteria supplement the Graduate School criteria for admission:

In addition to meeting graduate school requirements for regular admission, applicants to the Clinical and Counseling Psychology program must meet the following criteria:

- a. Completion of an undergraduate or graduate degree in psychology, counseling or a similar program from an accredited institution. Applicants must have completed at least 21 semester hours of prior psychology courses (usually at the undergraduate level) including a statistics course, and a course in research design and methods.
- b. The program's model of admission heavily values the degree of match between the student's clinical and research interests and that of their faculty mentor. Students are assigned a mentor at the time they are offered admission, and usually this individual is their primary advisor, mentor as well as thesis and dissertation chair. Thus, students will ideally articulate their clinical and research interests as well as identify the faculty member(s) with whom these best fit in their applications materials.

## Required Psychological Foundations

Students must complete graduate coursework and demonstrate competency in the following foundation areas. These courses will be completed in the student's master's degree program for those admitted with a Bachelor's Degree. Although students entering with a Master's Degree may request waivers for these competency area courses such students will invariably have a number of courses that need to be remediated, particularly students with master's degrees in fields other than psychology. For the courses in the Master's Degree in Psychology (Clinical & Counseling Psychology Concentration) that correspond to the domains listed below see the bulletin page for this program of study.

Students entering the doctoral program after completing a bachelor's degree will take these M.S. courses and earn the M.S. degree before transferring to the Ph.D. program of study.

- Biological, Cognitive, & Affective Bases of Behavior Cognitive
- Neuroscience
- Applied Psychology & Diagnostic Interviewing
- Evidence Based Psychological Practice
- Statistics
- Lifespan Development
- Personality & Affective Assessment
- Psychopathology

- Social & Personal Psychology
- Clinical Practicum in Psychotherapy & Assessment

Applicants should submit the following materials electronically by December 15th to the below link:

<https://southalabama.liaisoncas.com/applicant-ux/#/loginlogin>

- Unofficial copies of all undergraduate and graduate academic transcripts; official copies will be required prior to enrollment for those applicants admitted
- Statement of purpose
- Three letters of academic recommendation
- Clinical and Counseling Psychology program application form
- Curriculum Vitae (CV)
- The GRE is optional and applicants may elect to submit their official scores for review

An interview either in-person or via video-conference/telephone must be completed with faculty designated by the Director of Clinical Training prior to a potential admissions offer being made.

## Graduate Assistantships

Graduate assistantships are available annually on a competitive basis. Applicants interested in receiving an assistantship will complete the graduate assistantship application form upon being admitted into the program.

## Comprehensive Examination

Students must pass a comprehensive examination following successful completion of six semesters of clinical practica coursework. Passing the exam is one of the required components for admission to candidacy for the doctoral degree. The content of the comprehensive examination will be determined by the comprehensive examination committee and may consist of a written as well as an oral component.

## Candidacy

Admission to candidacy for the doctoral degree requires completion of the following:

- successful completion of required academic work, except the capstone internship
- successful completion of the comprehensive examination
- approval of a dissertation research project

The doctoral candidate is, therefore, a student who has fulfilled all requirements for the Ph.D. degree with the exception of completing the dissertation research and the required internship.

## Dissertation Hours and Defense

Nine credit hours of dissertation research may be applied to and are required for completion of the doctoral program of studies in Clinical and Counseling Psychology. However, a student must be continually enrolled in CCP 799 (Dissertation Research) until the final defense of the dissertation is completed and the dissertation document has been approved by the Graduate School. The final defense is scheduled following the completion of and preparation of the final written report of the dissertation research. Revisions of the dissertation may be required for final approval by the student's advisory committee or as a condition of the Graduate School's evaluation of the written report.

## The Limit

After being admitted to candidacy for the Ph.D. degree in Clinical and Counseling Psychology, the student has a maximum of three years to complete the dissertation.

## Residency Requirement

Prior to beginning their capstone internship, students must have completed a minimum of 3 years of graduate study in the clinical and counseling psychology program. Years spent in the M.S. portion of the program can count towards this requirement, but at least 1 of these 3 years must occur in the Ph.D. portion of the program.

## Dismissal from the CCP Program

Dismissal from the university typically falls in one of two categories. Academic Dismissal and Dismissal Due to Misconduct. Per Graduate School Policy, Academic Dismissal results from inadequate academic performance and includes the following

- The Dean of the Graduate School has authority to dismiss graduate students from the Graduate School.
- Any semester in which a graduate student drops below a 3.0 Program GPA, the student is placed on probationary status and has a period of two semesters to attain a 3.0 Program GPA or be dismissed.
- A student will be dismissed from the Graduate School after two unsuccessful attempts to pass the comprehensive examination or the Qualifying Exam.
- A student who has been academically dismissed is eligible to reapply to the Graduate School subject to the approval of the director of graduate studies of the specific new program and the Dean of the Graduate School. This is not intended to include the program from which the student has been dismissed.
- The CCP Program has additional program-specific policies for Academic Dismissal not covered by the University or Graduate School policies:
  - Any combination of six semester hours or equivalent with grades of "C" or less in work attempted for graduate credit will result in the student's immediate dismissal from the CCP Program.
  - Any student on formal Program Probation may be dismissed at any time during the Probation Period as defined by the conditions described within the student's Probation Notification Letter. Dismissal under such circumstances is typically the result of failure to perform at a level deemed necessary for doctoral trainees and/or continued engagement in specific behaviors previously identified as problematic and for which prior written feedback and the need for correction action has been provided.

Per the Graduate School Policy, Dismissal Due to Misconduct can be the result of an academic misconduct penalty or research misconduct. Instances of Dismissal Due to Misconduct are subject to the university Academic Misconduct Policy. This policy, including definitions regarding the nature of academic misconduct and procedures for determining consequences and appeal of those consequences is available on the Bulletin. Students dismissed as a result of misconduct will be automatically dismissed from the Graduate School and the University of South Alabama and will not be eligible to apply for readmission. Instances of misconduct should be reported using the prescribed university reporting system (<https://cm.maxient.com/reporting.php?UnivofSouthAlabama>).

## Degrees, Programs, or Concentrations

- Clinical and Counseling Psychology (PhD) (p. 742)

## Courses

### Clinical Counseling Psy (CCP)

#### CCP 742 Advanced Psych Assessment 3 cr

This course will offer an in-depth understanding of the assessment of complex cases, which includes both mental illness and physical disorders, as well as the impact of complex social issues, such as culture, ethnicity, and economic issues. The course covers topics pertaining to adults and children. The emphasis will be on the integration of nomothetic and empirical perspectives with idiographic approaches in an evidence-based assessment model. Topics covered will be assessing special populations (e.g., severely mentally ill, trauma, forensic, parents), therapeutic assessment, person-centered report writing, providing feedback, theoretical and scientific issues in assessment, and current controversies.

**Prerequisite:** CCP 706 (may be taken concurrently) Minimum Grade of B

#### CCP 745 Teaching of Psychology 3 cr

This course will offer an in-depth understanding of the teaching of psychology at the post secondary level.

#### CCP 750 Applied Psychophys Biofeedback 3 cr

This course will survey theory, research, and applications of psychophysiology and biofeedback in the prevention and treatment of illness and the enhancement and maintenance of health.

**Prerequisite:** CCP 706 Minimum Grade of B

#### CCP 752 Clinical Neuropsychology 3 cr

This course will offer an in-depth understanding of the different theories of brain function in humans. Assessment methods for detecting abnormal functioning and the localization of functioning by behavioral methods will also be examined. The possible etiologies of abnormal functioning as well as their treatment will be reviewed.

**Prerequisite:** CCP 706 Minimum Grade of B and CCP 742 Minimum Grade of B

#### CCP 756 Practicum Therapy 1-3 cr

Supervised experience with child and/or adult populations; includes case conference and seminars. This course may include supervised placement in an applied setting.

**Prerequisite:** CCP 706 (may be taken concurrently) Minimum Grade of B or PSY 506 (may be taken concurrently) Minimum Grade of B

#### CCP 758 Psychology Resilience & Trauma 3 cr

This course will offer an in-depth understanding of resilience, as it manifests across the lifespan in response to various types of traumas (natural vs. manmade; community-wide versus family- or individually-specific). Prevention and reduction of psychological impact related to trauma and the development, enhancement, and maintenance of resilience in the face of adversity will be emphasized.

**Prerequisite:** CCP 706 (may be taken concurrently) Minimum Grade of B

#### CCP 759 Group and Systems Theory 3 cr

This course will survey group and systems theories and the interventions that have been derived from this perspective. The dynamics of group processes will be delineated.

**Prerequisite:** CCP 706 Minimum Grade of B

**CCP 763 Prevention Treat Public Health 3 cr**

This course will survey the basic theory and techniques underlying the study of public health problems. Research related to the prevention and treatment of several specific public health problems (e.g. suicide, HIV/AIDS, youth violence) will be covered in depth.

**CCP 764 Consult Psych Program Develop 3 cr**

This course provides an overview of approaches to psychological consulting and program development in individual, small group and large organization contexts. Specific aspects of psychological consulting in mental health, business, and educational settings will be reviewed

**CCP 766 Clinical Supervision 3 cr**

This course provides an overview of the various theoretical approaches to supervision of professional psychological services, particularly psychotherapy services. In addition, relevant research findings in the area of supervision are reviewed. Students also have the opportunity to receive feedback on audio/video tapes of their supervision sessions with a junior graduate student clinician

**Prerequisite:** CCP 706 Minimum Grade of B and CCP 756 Minimum Grade of S

**CCP 772 Child Family Psychopath Interv 3 cr**

This course provides an overview of current theory and research findings relevant to psychological disorders typically occurring in childhood and adolescence. In addition, evidence-based interventions for various childhood disorders are reviewed. A focus will be upon an ecological and developmental view of childhood psychopathology that integrates family, community, and societal forces in a comprehensive view of such disorders.

**Prerequisite:** CCP 706 Minimum Grade of B

**CCP 777 Seminar on Suicide 3 cr**

This graduate seminar will examine the topic of suicide and self-harm in depth. Theoretical and empirical perspectives from sociology, psychology, and genetics/neuroscience will be considered. Additionally, we will examine suicide as both a clinical phenomenon and as a public health issue. Accordingly, cultural, political, and policy issues related to suicide will be explored alongside risk factors, mental health, and individual patient-level factors. This course will utilize focused readings, group discussions, and writing assignments to achieve the course objectives.

**CCP 780 Applied Health Psychology 3 cr**

This course will survey theory, research, and applications of health psychology in the prevention and treatment of illness and the enhancement and maintenance of health.

**Prerequisite:** CCP 706 (may be taken concurrently) Minimum Grade of B

**CCP 782 Advanced Practicum 1-3 cr**

Supervised experience with child and/or adult populations in a variety of settings; includes case conferences and advanced psychological assessment and interventions and supervision of lower level graduate students.

**Prerequisite:** CCP 756 Minimum Grade of B

**CCP 790 Special Topics- 3 cr**

Selected topics in psychology and may be repeated or credit when course varies.

**CCP 795 Multicultural Counseling 3 cr**

CCP 795 Multicultural Counseling in Professional Psychology. Provides a foundation in multicultural awareness, knowledge, and skills from a clinical and counseling psychology perspective.

**CCP 796 Directed Studies 1-3 cr**

Directed study and research.

**CCP 797 Psychology Internship 3 cr**

The predoctoral internship is a supervised learning experience in a work setting similar to that in which students will eventually be employed. The internship provides students with an opportunity to apply the theories and concepts learned during their graduate program. Not more than 18 hours may be taken.

**CCP 799 Dissertation Research 1-6 cr**

Completion and oral defense of a dissertation based upon original research. May be repeated for up to 12 hours credit. A minimum of nine hours is required to meet degree requirements.

**Psychology (PSY)****PSY 120 Introduction to Psychology 3 cr**

A survey of the basic theories, concepts, principles, and research findings in the field of Psychology. Core course.

**Cross-Listed:** PSY 121

**PSY 121 Honors Gen Psychology - H 3 cr**

This course will provide a survey of the basic theories, concepts, principles, and research findings in the field of Psychology. Along with the broad overview provided by the course, students will participate in a more in-depth examination of selected special topics (e.g. those topics generating controversy in the research community and in our society) as selected by the instructor. By contrast with the PSY 120 Introduction to Psychology course already being taught, the Honors General Psychology course will provide a more thorough coverage of selected topics. Prerequisite: Special permission.

**Cross-Listed:** PSY 120

**PSY 220 Res Design and Analysis I 3 cr**

Research methods in psychology with an emphasis on the experimental method.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (EH 102 Minimum Grade of D or EH 105 Minimum Grade of D)

**PSY 221 Research Desgn/Analysis I-Apps 1 cr**

Laboratory in research methods in psychology with an emphasis on the experimental method.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 210 Minimum Grade of D) or PSY 121 Minimum Grade of D and (EH 102 Minimum Grade of D or EH 105 Minimum Grade of D)

**Corequisite:** PSY 220

**PSY 250 Life Span Development 3 cr**

An overview of human development from conception to death. Special emphasis will be placed on cognitive and social development. Core course.

**PSY 270 Psy of Black Experience 3 cr**

Theories and principles of psychology pertaining to the experience of black Americans. Includes the development of the black psychological perspective, African-American historical developments and philosophy, identity development and the determinants of the black personality, and contemporary issues in the black community.

**PSY 280 Professions & Careers in Psychology 2 cr**

A survey of subfields and professions in psychology. Students will also practice active learning related to obtaining a career with a bachelor's and/or graduate level degree in Psychology.

**Prerequisite:** (PSY 120 Minimum Grade of D)

**PSY 290 Special Topics - 1-3 cr**

Selected topics in psychology. May be repeated for credit when course content varies for a total of 12 credit hours.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 310 Biological Psychology I 3 cr**

An introductory survey of research and theory in neuroscience as it applies to the understanding of behavior. Focus will be on understanding basic mechanisms of neuron function and general coverage of topics such as sensory and motor systems, motivation and emotion, learning and memory, language and thinking, and mental disorders.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 317 Applied Behavior Analysis I 3 cr**

An introduction to the principles of behavior intended as a prerequisite to the specific strategies and procedures practiced by behavior analysts. This course will present the historical and scientific foundations of behavior analysis as applied in educational and other human service settings.

**Prerequisite:** (PSY 120 Minimum Grade of C or PSY 121 Minimum Grade of C or PSY 210 Minimum Grade of C) and (PSY 220 Minimum Grade of C or PSY 222 Minimum Grade of C)

**PSY 320 Res Design-Analysis II-W 3 cr**

Experience in applying methodological and statistical concepts introduced in PSY 220 and ST 210, as well as instruction in additional topics such as research and analysis. The course will emphasize the use of computers in conducting behavioral research (e.g. literature searches, collecting data, analyzing data, writing reports).

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**PSY 321 Research Design/Analysis II-App 1 cr**

Laboratory in research methods in psychology with an emphasis on applying methodological and statistical concepts introduced in PSY 220 and PSY 320.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 210 Minimum Grade of D) or PSY 121 Minimum Grade of D and (PSY 220 Minimum Grade of D and PSY 222 Minimum Grade of D) and (EH 102 Minimum Grade of D and EH 105 Minimum Grade of D)

**Corequisite:** PSY 320

**PSY 340 Abnormal Psychology 3 cr**

Nature and development of deviant behavior.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 350 Child and Adolescent Dev 3 cr**

The development and psychosocial aspects of childhood and adolescence.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 394 Directed Study 1-3 cr**

Specific topics and research findings introduced through the reading of appropriate professional and scientific literature. Requires special permission. May be repeated for a total of 8 credit hours.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 395 Psychology Practicum 1-6 cr**

Supervised experience in an area of psychology. May include supervised placement in an applied setting. May be repeated for a total of 12 credit hours.

**Prerequisite:** (PSY 120 Minimum Grade of C or PSY 121 Minimum Grade of C or PSY 210 Minimum Grade of C)

**PSY 412 History-Systems Psy - W 3 cr**

The historical foundations of modern psychology and the development of major theories in psychology.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**PSY 414 Introduction to Clin Psych 3 cr**

This course serves as a practical capstone for Psychology students interested in careers in professional Psychology. Through a series of lectures, readings, exercises, films, and demonstrations, this course will introduce student to the ways that clinical psychologists approach the conceptualization, assessment, diagnosis, and treatment of health problems. The course will focus on the scientific basis for the practice of clinical psychology.

**Prerequisite:** PSY 120 Minimum Grade of D or EH 102 Minimum Grade of D or EH 105 Minimum Grade of D

**PSY 416 Cognition 3 cr**

An overview of psychological research and theory in cognitive psychology. The course will emphasize how people gather, process, represent, and use information to guide thought and action. This course is an approved elective for students seeking gerontology certification.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D)

**PSY 417 Applied Behav Analysis I-Intro 3 cr**

An introduction to the principles of behavior intended as a prerequisite to the specific strategies and procedures practiced by behavior analysts. This course will present the historical and scientific foundations of behavior analysis as applied in educational and other human service settings. Prerequisites: PSY 120 or PSY 121 and PSY 220 or Education Teacher candidacy.

**Prerequisite:** (PSY 120 Minimum Grade of C or PSY 121 Minimum Grade of C or PSY 210 Minimum Grade of C) and (PSY 220 Minimum Grade of C or PSY 222 Minimum Grade of C)

**PSY 418 Applied Behav Analysis II-Meth 3 cr**

Behavioral assessment techniques and operant and respondent methods for deceleration of inappropriate behavior will be covered. Operant methods for accelerating appropriate behaviors, teaching new behaviors, and maintaining behaviors will be covered. Data-based decision making strategies will be used in developing and altering individual programs.

**Prerequisite:** PSY 317 Minimum Grade of C

**PSY 419 App Behav Analysis III-Adv App 3 cr**

Behavioral assessment techniques and experimental designs for the evaluation of behavior change programs will be covered. Data-based decision making strategies for formative program evaluation and modification are also included.

**Prerequisite:** PSY 417 Minimum Grade of C

**PSY 420 Psychology of Learning 3 cr**

Theories, experimental findings, and methods of investigation in learning.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D)

**PSY 425 Mental Health and Law 3 cr**

Selected topics in psychology and criminal Justice. An overview of the relevant federal and state laws, federal regulations and court rulings which address the issues of justice for preserving the rights of individuals with mental illness.

**Prerequisite:** PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D

**PSY 428 Perception 3 cr**

A critical analysis of the main theories and research trends in sensation and perception. This course will include computer simulations and demonstrations, and will also emphasize computer applications for data collection, data analysis, and for reporting results. This course is an approved elective for students seeking gerontology certification.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D) and (PSY 310 Minimum Grade of D or PSY 380 Minimum Grade of D)

**PSY 435 Social Psychology 3 cr**

A survey and analysis of major theoretical and experimental topics of interest in social psychology, such as how we perceive others. attitude, interpersonal attraction, aggression, prejudice and altruism.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 440 Psychology of Personality 3 cr**

A survey and critical analysis of major historical and current theories about personality. The course will also examine research relevant to the different approaches and consider various techniques of personality assessment.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 450 Advanced Data Analysis and Visualization 3 cr**

A methods-focused course covering the exploration, transformation, visualization, and analysis of data in the psychological sciences using widely or freely available software (e.g. Excel, Jamovi, and JASP). The course builds upon the skills taught in PSY 220 (Research Design & Analysis I) and PSY 320 (Research Design & Analysis II).

**Prerequisite:** (PSY 120 Minimum Grade of D) and (PSY 220 Minimum Grade of D) and (PSY 320 Minimum Grade of C)

**PSY 456 Adult Development and Aging- 3 cr**

The development and psychosocial aspects of adulthood and late life. This course is an approved elective for gerontology certification.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of C or PSY 210 Minimum Grade of D)

**Cross-Listed:** PSY 356

**PSY 460 Industrial Psychology 3 cr**

Application of psychological principles and techniques to business, industry, and government.

**Prerequisite:** PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D

**PSY 465 Intro to Measurements-Tests 3 cr**

This course will provide a survey of the methodology of assessment, test design and construction, test administration and scoring, achievement and intelligence testing, personality observations and inventories, and issues in ethics and applications of testing.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or ST 210 Minimum Grade of D)

**PSY 470 Intellectual Disabilities 3 cr**

The study of theories and research in intellectual disabilities and related areas.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 475 Comparative Evolutionary Psy 3 cr**

A critical analysis of the main theories and research trends in comparative and evolutionary psychology. This course is an approved elective for students seeking gerontology certification.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D)

**PSY 480 Health Psychology - W 3 cr**

Current theories, research and applications in health psychology.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**PSY 485 Psychology of Gender 3 cr**

The study of psychological research on gender differences and theories regarding the origins of these differences.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or ST 210 Minimum Grade of D)

**PSY 490 Special Topics 1-3 cr**

Selected topics in psychology. May be repeated for a total of 12 credit hours when course content varies.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 492 Seminar - 1-3 cr**

A survey of basic theories, concepts, principles, and research findings in a particular focal topic in psychology. Students will study topics in depth by reading and presenting research reports, review papers and book chapters, and through active in-class discussion of the reading materials. Requires permission of department chair. May be repeated up to 2 times when content varies for a total of 6 credit hours.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D)

**PSY 494 Directed Studies - 1-3 cr**

Directed study and research. Requires special permission. May be repeated for a total of 8 hours.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 499 Honors Senior Thesis-H 3-6 cr**

Student conducts an independent research project under the supervision of a faculty sponsor. Recommended for psychology majors planning graduate school. Permission of department chair is required prior to registration. Requires GPA of 3.3 or higher. May be repeated for a total of 6 credit hours.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D)

**PSY 500 Proseminar in Psychology 1 cr**

Research presentations will be given by faculty and advanced graduate students. In addition, discussion of project and thesis requirements and procedures will take place. Required of all students registered for PSY 500, 502, and 503.

**PSY 501 Research Design and Stats I 3 cr**

Theories and principles of research design and elements of modern statistics. Introduction to computer programs for statistical analysis will be included.

**Corequisite:** PSY 500

**PSY 502 Research Design and Stats II 3 cr**

Theories and principles of advanced research design and elements of modern statistics. The use of computer applications such as SPSS to analyze empirical data sets will be covered.

**Prerequisite:** PSY 501 Minimum Grade of B or PSY 521 Minimum Grade of B

**Corequisite:** PSY 500

**PSY 503 Quantitative Methods II 3 cr**

Elements of modern statistics with emphasis on application to psychological research. Multivariate statistical techniques to include multiple regression, multivariate analysis of variance, discriminant, canonical, and factor analysis will be discussed.

**Prerequisite:** (PSY 502 Minimum Grade of B or PSY 522 Minimum Grade of B)

**Corequisite:** PSY 500

**PSY 506 Prof Ethics and Standards 3 cr**

An introduction to professional and ethical issues as they pertain to psychology. Focus is on the development of an ethical and professional awareness in the practice of psychology, including teaching and research.

**PSY 507 History of Psych & Prof Ethics 3 cr**

This course provides instruction through readings, lecture, and case studies in the application of ethics in the professional practice of psychology. In addition, the course focuses on the philosophical foundations, professional identity, and standards of practice found in both clinical psychology and counseling psychology.

**PSY 510 Physiological Psychology 3 cr**

This course provides a foundation in the techniques of advanced psychophysiological methods. The course covers the history of psychophysiology, including the electrical properties of cells, and major organ systems, with particular emphasis on the electroencephalogram (EEG) and neuroimaging techniques. Students are introduced to the principles of psychophysiological recording, common applications of psychophysiology, safety and ethics in psychophysiological research, instrumentation, and research design issues in psychophysiology. Relevant statistical treatment of psychophysiological data will be discussed, including multiple regression, complex ANOVA, scaling of data, and non-parametric alternatives such as bootstrapping.

**PSY 512 Adv History/Systems Psychology 3 cr**

An advanced course in the historical foundations of modern psychology and the development of major theories in psychology.

**PSY 514 Learning 3 cr**

A survey of research and theory in learning.

**PSY 516 Cognitive Psychology 3 cr**

An advanced survey of research and theory in cognitive psychology. Topics include pattern recognition, attention, memory, language processing, decision making, and problem solving. This course is an approved elective for students seeking gerontology certification.

**PSY 520 Personality Res and Theory 3 cr**

A critical analysis and evaluation of major theories and current research trends in personality.

**PSY 522 Soc & Personality Psychology 3 cr**

This course provides a foundation for conducting quantitative research in personality and social psychology. Topics covered will include (a) measurement of personality and individual differences (e.g., narcissism, self-esteem), (b) measurement of cognitive and behavioral outcomes in laboratory and non-laboratory settings (e.g. decision-making, implicit cognitions), and (c) data analytic techniques (e.g. testing for mediation/moderation, structural equation modeling).

**PSY 524 Lifespan Development 3 cr**

Analysis of theories, research methods, and major findings of sensory, perceptual, social, and cognitive changes across the lifespan, from infancy to late life. Research in social and cognitive development, including cognitive disabilities, the underlying mechanisms involved in thinking and learning processes, and age-related cognitive models are central to this course. \*\*This course is an approved elective for students seeking gerontology certification.

**PSY 528 Sensation and Perception 3 cr**

This course provides a multidisciplinary analysis of how the sensory systems analyze physical stimuli to support perception and successful actions. Consideration is given to how the anatomy and physiology of the major sensory systems extract information using low- and high-level mechanisms to create meaningful percepts. Other topics include psychophysics, comparative studies, communication, production and performance, face and object recognition, attention, and event perception.

**PSY 530 Applied Psy & Dx Interviewing 3 cr**

Theories, principles and techniques of interviewing, behavioral observation and classification of psychological disorders.

**PSY 532 Psychopathology 3 cr**

Current research and theoretical aspects of psychopathology in children and adults.

**PSY 534 Introduction to Family Therapy 3 cr**

This course is designed to introduce graduate students to major research-based models of family therapy. It covers the models of therapy that are most widely used by mental health professionals assisting families dealing with relationship difficulties.

**PSY 540 Psychometrics 3 cr**

Theories and methods of test construction and principles of measurement and evaluation in the behavioral sciences.

**PSY 542 Cognitive Assessment 3 cr**

Principals and methods of individual intelligence testing, including the administration of the Wechsler and the Stanford-Binet tests. Practical experience in the administration, interpretation and report writing of a psychological evaluation using intelligence tests.

**Prerequisite:** PSY 530 Minimum Grade of B and (PSY 540 Minimum Grade of B or PSY 571 Minimum Grade of B)

**PSY 544 Personality & Affective Assmt 3 cr**

Theory, development and interpretation of selected personality assessment instruments. Methods and procedures in administering and interpreting personality, aptitude and career interest tests.

**Prerequisite:** (PSY 540 Minimum Grade of B or PSY 571 Minimum Grade of B) and (PSY 542 Minimum Grade of B or PSY 575 Minimum Grade of B)

**PSY 550 Evidenced Based Clin/Coun Prac 3 cr**

Study of the theoretical and empirical foundations of the major systems of psychotherapeutic change.

**PSY 552 Multicultural Issues in Psy 3 cr**

This course will focus on theoretical models, research, techniques, and interventions for working with culturally diverse populations in various settings. Specific issues to be addressed include world views, acculturation and acculturative stress, prejudice and prejudice-reduction techniques, racial/ethnic identity, culture and assessment, and the nature of multicultural competence in Psychology. Issues related to ethnic and racial identity will form the primary focus; however, other types of diversity (e.g., religion, gender, sexual orientation, physically challenged) will also be considered.

**Prerequisite:** (PSY 550 Minimum Grade of B or PSY 589 Minimum Grade of B) and PSY 506 Minimum Grade of B and PSY 530 Minimum Grade of B and (PSY 532 Minimum Grade of B or PSY 561 Minimum Grade of B)

**PSY 554 Cognitive Behavior Therapy 3 cr**

A follow up course to PSY 550, this course will survey theory, research and application of cognitive behavior therapy. Focus will be on treatment strategies and application to a variety of psychological disorders of adults and children.

**Prerequisite:** PSY 530 Minimum Grade of B and (PSY 532 Minimum Grade of B or PSY 561 Minimum Grade of B) and (PSY 550 Minimum Grade of B or PSY 589 Minimum Grade of B)

**PSY 556 Practicum 1-3 cr**

Supervised experience with adult and children clients. Includes case conference and seminars. May include supervised placement in an applied setting. May be repeated up to five times for a total of 18 credit hours.

**Prerequisite:** (PSY 532 Minimum Grade of B or PSY 561 Minimum Grade of B) and (PSY 550 Minimum Grade of B or PSY 589 Minimum Grade of B)

**PSY 558 External Practicum 3-5 cr**

Supervised placement in an applied setting. May be repeated four times for a total of 15 credit hours.

**Prerequisite:** PSY 552 Minimum Grade of B and PSY 554 Minimum Grade of B

**PSY 570 Intel Disable/Autism Spec Dis 3 cr**

A study of theories and research related to Intellectual Disabilities and Autism Spectrum Disorders.

**PSY 572 Child Psychopathology 3 cr**

The description and etiology of deviant behavior patterns in children and adolescents.

**Prerequisite:** (PSY 532 Minimum Grade of B or PSY 561 Minimum Grade of B)

**PSY 575 Comparative Psychology 3 cr**

An in-depth analysis of the proximal and ultimate causes of animal and human behavior examined from the perspectives of comparative and evolutionary psychology, psychobiology and ethology. Relevant research in animal models of biological and cognitive systems, learning and motivation, lifespan development and related biopsychosocial factors will be included. \*\* This course is an approved elective for students seeking gerontology certification.

**PSY 586 Cognitive Neuroscience 3 cr**

This course includes an advanced and integrative study of the experimental study of cognition and neuroscience. Topics include sensation and perception, memory, learning, language, metacognition, intelligence, problem solving, decision making, mental imagery, consciousness, attention, and the development of cognition through the life span. Major theoretical perspectives and current research within the fields of cognition and neuroscience are discussed. This course also provides students with a basic understanding of the neural underpinnings of a variety of cognitive processes.

**PSY 590 Sp Top in Psychology - 1-3 cr**

Selected topics in psychology. May be requested for credit when course content varies for a total of 12 credit hours.

**PSY 594 Dir Individual Study 1-3 cr**

Individual study under the direction of a member of the graduate faculty. May be repeated for up to 9 hours credit.

**PSY 598 Project in Psychology 1-6 cr**

Completion of a research project, program proposal, program evaluation, major literature review or other comparable experience under the direction of a member of the graduate faculty. IRB or Animal Use and Care Committee approval may be required for some projects. May be repeated for up to 6 hours credit. A minimum of 3 hours is required to meet degree requirements.

**PSY 599 Thesis Research 1-6 cr**

Completion and oral defense of a master's thesis based upon original research. May be repeated for up to 9 hours credit. A minimum of 6 hours is required to meet degree requirements. Prerequisite: Approval of research prospectus including IRB or Animal Use and Care Committee approval if applicable.

## Clinical and Counseling Psychology (PhD)

### Degree Requirements

#### Program Completion Requirements

A minimum of 66 credit hours of doctoral level courses taken at the University of South Alabama is required for the doctoral degree in Clinical and Counseling Psychology.

Code	Title	Hours
<b>Core Courses</b>		
IDE 630	Quantitative Methods III (Multivariate Statistics in Psychology)	3
CCP 780	Applied Health Psychology	3
CCP 758	Psychology Resilience & Trauma	3
PSY 512	Adv History/Systems Psychology	3
CCP 795	Multicultural Counseling	3
CCP 766	Clinical Supervision	3
CCP 759	Group and Systems Theory	3
CCP 797	Psychology Internship	3
Nine hours of PSY 556 Practicum		9
Nine hours of CCP 756 Practicum Therapy		9
Six hours of CCP 782 Advanced Practicum		6
Nine hours of CCP 799 Dissertation Research		9
<b>Elective Courses</b>		

Elective courses as approved by the Director of Clinical Training	9
<b>Total Hours</b>	<b>66</b>

**Note:** This list above represents the minimum requirements for completion of the doctoral program of studies. A student may be required or elect to take additional course work in a specific area if needed to enhance skills or to support an area of specialization. Each candidate for the Ph.D. degree in clinical psychology takes practicum courses in the psychological clinic and must also complete a one-year internship in an accredited facility. The internship is taken after completion of coursework and passing of the doctoral preliminary exam, and is a degree requirement.

## Honors College

### General Information

(251) 461-1637

Honors College website <https://www.southalabama.edu/colleges/honors/>

### Honors College Administrative Staff

Title	Name
Dean	Doug Marshall
Director of Undergraduate & Honors Research	Christy Wheeler West
Honors Academic Advisor	Lauren Williams
Coordinator, Honors & Undergraduate Research	Loretta Wilson
Administrative Assistant	Pamm Chastang-Howard
Whiddon College of Medicine Early Acceptance Program	Aline Allen
Graduate Assistant	Ruby Staten

The University of South Alabama Honors College offers a program designed to cultivate the thinking and communication skills of exceptionally qualified and highly motivated students in any major or course of study. To this end, the Honors College challenges students with enhanced course offerings and scholarly creative activity while offering them expanded opportunities to engage in cultural enrichment, travel, service, leadership, and community. The Honors College is built around three major pillars: Intellectual Curiosity and Courage, Citizenship, and the Creation of Knowledge and Culture.

At the convenience and price point of a midsize regional university, the Honors College at South combines the personal attention and human scale of a small liberal arts college, with the diversity, breadth and depth of expertise, and wide range of opportunities usually associated with a large 'research-intensive' university.

### Program Description

The Honors College experience includes curricular (course-work), co-curricular (mentorship projects), and extra-curricular (field trips, movie/game nights) dimensions throughout a student's undergraduate career. Honors students take some, but not all, of their courses as enriched 'Honors' courses, which allow them to dive deeper into the subject matter, to study unique and uniquely interesting topics from an interdisciplinary perspective, and to be more than a Jag Number to their instructors (with most Honors sections having around 15 students). Students eventually choose a mentor (usually in their major or minor) who works with the

student on a two or more semester project that culminates in their senior mentorship project (for which the students receive course credit towards their graduation requirements).

In addition to a challenging academic curriculum, the Honors College offers a variety of experiences that extend learning beyond the classroom, including social and cultural events and community service projects. Honors students often participate in international programs, such as study abroad or exchange programs, and off-campus internship opportunities.

Students who complete the requirements of both the Honors College and of the selected major with an institutional grade-point average of 3.50 or higher will receive the relevant designation on the transcript and the diploma.

### Qualifications for Consideration for the Honors College

Applicants typically have a 27 or higher ACT Composite (or comparable SAT score) and a minimum 3.5 high school grade-point average (4.0 unweighted), as computed by the University of South Alabama. But our admissions process is holistic and looks at more than the numbers, so students who are below but close to these benchmarks are encouraged to use our application essays and resume (see below) to make the case for their admission on other grounds.

### Procedure to Apply for the Honors College

1. Apply for admission to the University of South Alabama and complete all necessary steps for acceptance.
2. After admission to the university, complete and submit the Honors College Application found on the Honors College website (<https://www.southalabama.edu/colleges/honors/apply.html>) (<https://www.southalabama.edu/colleges/honors/apply.html>).
3. Based upon these materials, successful applicants will be invited to interview for a spot in the next entering class.

### Other Honors Options

For transfer students, or others, who have completed significant credits toward graduation, the specific curriculum requirements for the University Honors College may be impracticable. Additionally, other non-honors students may find certain honors courses desirable while being unable to commit to the entire honors curriculum. Options available in these cases include enrollment in specific honors courses (indicated on the transcript as honors credit) with permission of the instructor and the Honors College Dean when space is available, and/or completing an appropriate Departmental Honors project. Students interested in these options should consult with the Honors College Dean.

### USA International Education/Study Abroad

Honors College students are encouraged to participate in an international experience through study, research, internship or work abroad. Honors students should seriously consider applying for one of the many international prestigious scholarship programs such as the Goldman Sachs Global Leaders Program, Winston Churchill Foundation Scholarship, George J. Mitchell Scholarship, Rhodes Scholarship, Fulbright Student Grants, Gates Cambridge, Rotary Ambassadorial Scholarships and NSEP Boren Scholarship and Gilman Scholarship. For more information contact your Honors advisor and the Office of International Education.

## Honors Requirements

### Honors College Curriculum Requirements

The following courses, or a substitute approved by the Honors College Dean, must be completed with a grade of "C" or better, in addition to general studies requirements and specific requirements of the major department, to graduate with Honors College recognition. Transfer students may petition to receive credit for honors courses taken elsewhere. High School AP and IBP credits may not substitute for Honors required courses.

Code	Title	Hours
HON 101	First-Year Honors Seminar (Recommended in first semester)	1
HON 201	Second-Year Honors Seminar	1
HON 301	Intro Senior Honors Project (variable content)	1
Five (5) Honors Electives (may count toward major or general ed requirements)		15
Two (2) Honors Senior Thesis/Project Courses (may count toward major) <sup>1</sup>		6
<b>Total Hours</b>		<b>24</b>

<sup>1</sup> Student should determine early in their program the requirements in their major.

Honors Seminars are special topics courses, and a variety are available each fall and spring semester for students to make their selection.

The Honors Electives requirements can be satisfied by taking any courses offered for Honors credit (courses with "Honors" in the title or an "H" suffix).

## Departments of Instruction

- Honors Interdisciplinary Studies (p. 744)
  - Departmental Honors Designation (p. 745)
  - University Honors Designation (p. 745)

## Honors College Membership Requirements

Honors students must maintain satisfactory progress in the required curriculum to remain in the Honors College. Scholarship recipients must meet any additional requirements of their specific award. To remain in good standing with the Honors College, honors students must maintain satisfactory progress in the required curriculum and must maintain an institutional GPA of 3.50 or higher after their first year. Scholarships that depend on GPA will not be reinstated after probation.

In order to maintain membership in the Honors College, you must satisfactorily complete all Honors College requirements, including maintaining satisfactory academic progress in your classes, making timely progress towards the completion of your mentorship project, remaining active in the Honors community, and being a good citizen of the College and University.

More specifically, "satisfactory academic progress" is defined by:

1. Enrolling full-time each fall and spring semester.
2. Completing 30 credit hours during the academic year. Students are encouraged to take an average of 14-16 hours each term to stay on

track. Note that repeating a course for which you already have credit (such as AP, IB, or DE) will not contribute credit hours toward the 30-credit-hour requirement. Summer courses taken at South also count towards the 30-credit-hour/year benchmark.

3. Maintaining a cumulative grade point average (GPA) of at least 3.5 for courses taken at South. At the start of each year after your freshman year, you must have a 3.50 to remain in good standing with the Honors College. If your GPA drops below a 3.50 you may continue to participate in the College, but you will not be eligible for supplemental scholarship and funding opportunities unless and until your cumulative GPA rises to or above a 3.50. To graduate with Honors, you must have a cumulative institutional GPA of 3.50 at the end of your graduating semester.

Likewise, being a "good citizen of the College and University" is defined as:

1. Adhering to all standards of student conduct as laid out in The Lowdown (<https://www.southalabama.edu/departments/studentaffairs/lowdown/>), and to the adjudication process described therein.
2. Abiding by the Bethel Use Agreement signed upon entering the Honors College.
3. Refraining from criminal and other destructive actions that could reflect badly on the Honors College.

By the junior year, each Honors student will identify a suitable faculty mentor and design an Honors Senior Project. The project represents a scholarly effort appropriate to the student, including a significant component of investigation and written presentation. The Honors Senior Project will total 6 credit hours. Graduating Honors seniors will present their Honors senior project at a defense before their committee in a professional format suitable for the project and discipline (e.g., an exhibition, research presentation or poster, or performance). The senior project will be evaluated and graded by a committee of three faculty members, and chaired by the honors project mentor. The senior project also must be approved by the Dean of the Honors College in order to graduate with an Honors designation.

## Honors Interdisciplinary Studies

### Department Information

The University of South Alabama Honors College is a diverse community of interdisciplinary excellence designed to stimulate the thinking and intellectual curiosity of highly motivated students. Here in Honors we challenge each other through discussion, research, creative scholarship, intercultural engagement and the arts so that together we create the feel of a small college environment in the midst of the opportunities provided by a large urban university.

Our graduates, equipped with this intensive education as well as a wide variety of additional learning experiences, are especially well-prepared for productive careers, committed citizenship and meaningful lives.

## Degrees, Programs, or Concentrations

- Departmental Honors Designation (p. 745)
- University Honors Designation (p. 745)

## Courses

### HON 101 First-Year Honors Seminar 1 cr

This course introduces first-year Honors students to the Honors College, and sets them up to get the most out of their time at the University. The course emphasizes community-building, creativity, communication, motivation, success strategies, and academic planning. Reading, writing, and project assignments relevant to the student's first year experience are required.

**Cross-Listed:** HON 111

### HON 201 Second-Year Honors Seminar 1 cr

This course helps students refine the thinking, creative, and communication skills necessary to be successful in Honors, graduate school, professional school, and in one's career. Emphasis is on getting students started on their Honors capstone projects, along with honing their presentation, networking, and application skills. Reading, writing, and project assignments relevant to the student's second-year experience are required.

**Cross-Listed:** HON 211

### HON 290 Special Topics Honors 1-3 cr

Topics for USA Honors Students of an interdisciplinary or multidisciplinary nature. May be repeated when topic varies. Prerequisite: USA Honors Program

### HON 301 Intro Senior Honors Project 1 cr

This course is designed to introduce juniors in the USA Honors Program to scholarly research and creative activities in diverse disciplines. The primary graded assignment of the course is the guided development of an approved Prospectus for the Senior Honors Project.

### HON 390 Special Topics Honors 1-3 cr

Advanced topics for USA Honors students of an interdisciplinary or multidisciplinary nature. May be repeated when topic varies. Prerequisite: USA Honors Program

### HON 499 Honors Senior Thesis 3 cr

In this course, students undertake the process of creating knowledge and/or culture. With the guidance of their honors mentor, students in HON 499 become experts in their research, creative, or interdisciplinary project through the process of researching, writing, and disseminating their senior thesis research. This course is designed for students with projects outside of their departmental major. Approval of instructor if prerequisites are not met.

**Prerequisite:** HON 301 (may be taken concurrently) Minimum Grade of B and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

## Departmental Honors Designation

### Degree Requirements

Students who have completed significant credits toward graduation before deciding to pursue an honors degree, and for whom completing the entire Honors curriculum would not be practical, may pursue "Departmental Honors". To receive a designation of "Departmental Honors," students must:

1. Successfully complete an Honors thesis in their major or minor;
2. Have at least a 3.50 institutional GPA; and
3. Meet the specific honors requirements of their major or minor department.

Additionally, students must remain a good citizen of the College and University. Being a "good citizen of the College and University" is defined as:

1. Adhering to all standards of student conduct as laid out in The Lowdown (<https://www.southalabama.edu/departments/studentaffairs/lowdown/>), and to the adjudication process described therein.
2. Abiding by the Bethel Use Agreement signed upon entering the Honors College.
3. Refraining from criminal and other destructive actions that could reflect badly on the Honors College.

Departmental Honors students may also elect to take Honors courses and participate in other Honors College activities. The Dean of the Honors College, the Dean of the relevant College or School, and the Chair or Director of the relevant major must approve all Departmental Honors graduation designations.

Please consult departmental sections of the Bulletin for any additional honors requirements specific to your major that may apply.

## University Honors Designation

### Degree Requirements

Code	Title	Hours
HON 101	First-Year Honors Seminar (recommended in first semester) <sup>1</sup>	1
HON 201	Second-Year Honors Seminar	1
Select one of the following:		1
HON 301	Intro Senior Honors Project (taken junior year)	
HON 290	Special Topics Honors	
One (1) Lower-level Honors elective (may count toward gen ed, major, minor, or other requirements)		3
Three (3) Honors electives, either upper- or lower-level (may count toward gen ed, major, minor, or other requirements)		9
One (1) Upper-level Honors elective (may count toward major, minor, or other requirements)		3
Two (2) Honors Senior Thesis/Project Courses (may count toward major) <sup>2</sup>		6
<b>Total Hours</b>		<b>24</b>

<sup>1</sup> Not required of transfer students or USA students who have completed at least 15 semester hours with a 3.50 or greater GPA.

<sup>2</sup> Student should determine early in their program the requirements in their major.

## Mitchell College of Business

### General Information

(251) 460-7167

Mitchell College of Business website

<https://www.southalabama.edu/colleges/mcob> (<https://www.southalabama.edu/colleges/mcob/>)

Title	Name
Dean	Michael Capella
Associate Dean	William Gillis
Interim Assistant Dean of Graduate Studies & International	Vacant

The Mitchell College of Business offers the degrees of Bachelor of Science in Business Administration, Master of Accounting, Master of Business Administration, and Doctor of Philosophy. The foundation of the College is quality instruction in all undergraduate and graduate programs. Our instructional mission is to prepare our graduate and undergraduate students for professional careers in the fields of accounting, economics, finance, real estate, management, marketing, international business, and supply chain management through a curriculum designed for both broad exposure to each field and in-depth coverage within a specific field of choice.

## Mission

The Mitchell College of Business provides value-added experiential business education opportunities to undergraduate, masters, and doctoral students along the Gulf Coast through innovative engagement with constituents, while advancing the area's economic and social well-being.

## Priorities

### I. Instruction

The highest responsibility of the College is the instruction of its students and primary emphasis is placed on excellent teaching. In so doing, the College affirms its commitment to the University focus on excellence, lifelong learning and the education of the whole person. The College fulfills its instructional mission through the Bachelor of Science in Business Administration degree program for undergraduates and the Master of Business Administration, Master of Accounting, and Doctor of Philosophy programs at the graduate level.

### II. Intellectual Contributions

The College encourages and supports faculty basic and applied scholarship as well as instructional development for the purposes of expanding knowledge, enhancing classroom instruction, and contributing to regional economic development. Scholarship is broadly defined to include investigative efforts that lead to the origination, the integration, or the application of knowledge pertinent to the various fields of business. A program of continuing scholarship is the responsibility of each faculty member. The College is responsible for using its resources to encourage, support, and reward faculty scholarship.

### III. Service

The College's service mission is to engage in activities that support and contribute to the development of the University, community and region, and to provide a vehicle for the continuing development of faculty and staff through interaction with the College's numerous constituents. This mission is accomplished through participation in the College's external programs, and through the efforts of individual faculty and staff.

## South Alabama Center for Business Analytics, Real Estate and Economic Development (SABRE)

SABRE offers a comprehensive range of services and resources for those in business, industry, government, education, and economic and community development. Drawing on the expertise of its staff and

Mitchell College of Business faculty members, SABRE can customize strategic planning, personnel training, data analysis and visualization, consulting, economic impact analysis and forecasting, financial statement evaluation, site location assessment, and digital dashboard development, and much more, to best meet its clients' most critical needs. For those studying at the University of South Alabama, SABRE partners with Mitchell College of Business faculty and PhD students to pursue wide-ranging research opportunities. For undergraduates, SABRE provides support and advising for those pursuing the real estate concentration and also oversees USA Jaguar Realty, a first in the nation university-sanctioned company for real estate students, designed to educate and license the next generation of real estate professionals. Each year, SABRE also hosts and conducts multiple professional education seminars and conferences.

## The Melton Center for Entrepreneurship and Innovation

The Melton Center impacts the Central Gulf Coast region by stimulating and nurturing entrepreneurship and innovation. The Center leverages federal, state, and local resources to impact and expand the entrepreneurial culture at the University of South Alabama and the Central Gulf Coast region through education, engagement, and development opportunities. The activities of the Melton Center directly support the service mission of the Mitchell College of Business to contribute to the economic development of the region.

## Career Services Center

The University Career Services Center acts as a liaison between employers and students. Business and professional firms of national significance visit the campus regularly to interview prospective graduates.

## Scholarships

The Mitchell College of Business offers prestigious scholarships to entering freshmen students who are majoring in the Mitchell College of Business. Contact the Office of Enrollment Services, (251) 460-6494, for application procedures, deadline dates and more information about the Abraham Mitchell Business Scholarships. In addition, scholarships for eligible students in the Mitchell College of Business are made available by local and regional firms in Accounting, Management, Marketing, Real Estate, and Finance. (Refer to the Financial Aid section of this Bulletin for details.) Visit JagSPOT on the University's website to apply.

## Cooperative Education Program

The Cooperative Education Program is available to students in the Mitchell College of Business. This program offers qualifying students opportunities to work part-time while attending school as a full-time student or alternate full-time employment with course work on a rotating semester basis. For details contact:

Director, Career Services Center  
2100 Meisler Hall, University of South Alabama  
Mobile, Alabama 36688-0002  
(251) 460-6188

## Transfer Students

The Office of Student Services in the Mitchell College of Business evaluates for credit all courses transferred from other colleges and universities. Degree credit will be given only for those courses which meet the requirements for the degree program of the College. Transfer credit for major-specific courses will only be given for courses taken at an AACSB accredited institution. Students transferring into the Mitchell College of Business with fewer than 45 hours will be required to take

BUS 150, Introduction to Business. Students transferring into the College with 46-60 hours are highly encouraged to take BUS 150. Students transferring from a community college may have a maximum of 61 semester hours accepted toward the degree program. No junior or senior-level courses listed in the curriculum of the Mitchell College of Business will be accepted from a community college for degree credit.

## Transient Course Credit

Students enrolled in the Mitchell College of Business must receive prior approval from the MCOB Dean's Office before enrolling in any courses at another institution. Approval will not be granted for dual enrollment for any semester in which the requested course is taught at USA. If the course is a major requirement, prior approval of the Department Chair is also required. Transient credit approval for upper division business courses will only be given for courses to be taken at AACSB accredited institutions.

Transient course approval may be granted to students in good academic standing who have not previously attempted the course at USA on one of the following conditions:

1. Students who are not residents of the area and who leave USA to return home for one or more semesters and the course is not offered on-line at USA during the at-home semester.
2. Students who move to another area prior to completing all degree requirements but who have met the residency requirements for the Mitchell College of Business and the courses needed to complete the degree are not offered on-line at USA.
3. Students who are scheduled to graduate and the course will not be offered at USA during the final term.

Except in extraordinary circumstances, transient approval will not be given for Pre-Major Courses (EH 101, EH 102 and MA 120) and courses in the 200-level Basic Business Technique Core. Transient approval for upper division major courses will only be given for approved courses taken at an AACSB accredited institution.

**Failure to obtain prior approval may result in loss of transfer credit for the course work.** The Transient Approval form may be downloaded from the MCOB website and forwarded to the Office of Student Services for consideration.

Transient Approval will not be granted to students on probation or for previously-unsuccessful courses attempted at USA. Approval will not be granted for a course the student is not eligible to take at USA.

## Departments of Instruction

- Accounting (p. 748)
  - Accounting (BSBA) (p. 751)
  - Accounting For Business Majors Minor (p. 754)
- Economics, Finance And Real Estate (p. 755)
  - Economics & Finance (BSBA) (p. 760)
  - Economics & Finance (BSBA) - Economics Concentration (p. 760)
  - Economics & Finance (BSBA) - Finance Concentration (p. 764)
  - Economics & Finance (BSBA) - Real Estate Concentration (p. 767)
  - Economics for Business Majors Minor (p. 770)
  - Economics for Non-Business Majors Minor (p. 770)
  - Finance for Business Majors Minor (p. 770)

- Finance for Non-Business Majors Minor (p. 771)
- Real Estate for Business Majors Minor (p. 771)
- Real Estate for Non-Business Majors Minor (p. 771)
- Management (p. 771)
  - Entrepreneurship for Non-Business Majors Minor (p. 780)
  - General Business (BSBA) (p. 780)
  - General Business for Non-Business Majors Minor (p. 783)
  - Industrial-Organizational Psychology Minor (p. 783)
  - Management (BSBA) (p. 784)
  - Management (BSBA) - Entrepreneurship Concentration (p. 786)
  - Management (BSBA) - General Management Concentration (p. 789)
  - Management (BSBA) - Human Resources Concentration (p. 793)
  - Management for Business Major Minor (p. 796)
  - Management for Non-Business Majors Minor (p. 796)
- Marketing and Quantitative Methods (p. 796)
  - Data Analytics Minor (p. 801)
  - International Business (BSBA) (p. 801)
  - Marketing (BSBA) (p. 805)
  - Marketing (BSBA) - Marketing Management Concentration (p. 805)
  - Marketing (BSBA) - Professional Sales Concentration (p. 808)
  - Marketing for Business Majors Minor (p. 812)
  - Marketing for Non-Business Majors Minor (p. 812)
  - Supply Chain & Logistics Management (BSBA) (p. 812)
- MCOB Graduate Programs (p. 815)
  - Accounting (MAcc) (p. 829)
  - Business Administration (MBA) (p. 829)
  - Business Administration (PhD) (p. 830)
  - Graduate Certificate in Accounting (<http://bulletin.southalabama.edu/programs-az/business/mcob-graduate-programs/accounting-macc-certificate/>)
  - [mcob-graduate-programs/accounting-macc-certificate/](http://bulletin.southalabama.edu/programs-az/business/mcob-graduate-programs/accounting-macc-certificate/) (<http://bulletin.southalabama.edu/programs-az/business/mcob-graduate-programs/accounting-macc-certificate/>)

## Admission to the Mitchell College of Business

Students may transfer from other colleges in the University to the Mitchell College of Business. Students transferring into the Mitchell College of Business with fewer than 45 hours will be required to take BUS 150, Introduction to Business. Students transferring into the College with 46-60 hours are highly encouraged to take BUS 150. Degree requirements are defined by the University Bulletin in effect for the semester of entry into the College.

## College Requirements

Student classifications in MCOB are Pre-Business, Business Administration, and Declared Major. Freshmen who are admitted in the Pre-Business Classification will be restricted to enrollment in General Education classes, which can include ECO 215, ECO 216, CIS 150, CIS 250, BUS 101, and BUS 150. In order to advance to the Business Administration classification, students admitted in the Pre-Business classification must successfully complete any developmental studies

requirements and MA 112 with a GPA of 2.0 or higher before enrolling in MCOB courses.

Students enrolling in the College, who are eligible to enroll in MA 112, are assigned to Business Administration as their major until they have completed EH 101, EH 102, MA 120, and the 200-level Basic Business Techniques Core listed below with a minimum grade of C in each course and have a 2.0 USA GPA. After fulfilling these requirements, students must declare a major selected from the fields of Accounting, Economics and Finance, Management, Marketing, International Business, Supply Chain Management, or General Business. In Economics and Finance, Management, and Marketing, a concentration must also be declared. Students must have completed or be in the process of completing eighteen (18) hours of the 200 Business Techniques Core before enrolling in the Upper Division Business Core. MCOB students should officially declare a major before taking major courses or business electives.

After declaring a major, students will be advised by a faculty advisor from that area.

Students attending other colleges, including community colleges, who are planning to enter the Mitchell College of Business must take at least 50% of the required business credit hours and at least six (6) out of nine (9) major courses at the University of South Alabama. Transfer credit will only be awarded for upper division major courses taken at AACSB accredited institutions.

Each student is responsible for meeting all requirements of the degree program. Before registering for any course, students must complete any prerequisites listed in course descriptions in this Bulletin. The Office of Student Services is available to all students for the evaluation of their degree-program records. When an exception is made in a student's program, written approval of the exception by the Associate Dean must be placed in the student's file. Failure to properly document exceptions may delay graduation.

### Requirements for a Second Major in Business, Dual Major Across Colleges, and Minors in Business

Undergraduate students enrolled in the Mitchell College of Business who plan to add a second major to their curriculum must meet all requirements for the second major. Courses included in the first major cannot be counted toward the second major requirements. Students not enrolled in the Mitchell College of Business who are interested in a dual major in business or a minor in business must meet with the Director of the MCOB Office of Student Services for information and course planning.

### All Course Requirements for the Bachelor of Science in Business Administration Degree

All students enrolled in the Mitchell College of Business are required to take specified business courses and courses in other colleges of the University. Additionally, a major field of study must be selected in Accounting, Economics and Finance, Management, Marketing, International Business, General Business, or Supply Chain Management.

General Business is the only major with all upper division business courses available online. The 300 and 400 level courses necessary to complete the General Business major are delivered on-line at least one time each academic year. The tentative schedule for on-line delivery is available from the MCOB Office of Student Services.

To graduate, students must complete a minimum of 122 semester hours with an overall institution grade-point average of 2.0 (38 hours of general education requirements and 84 hours of business courses). In addition, a

grade of at least C is required in each of the Basic Business Techniques courses, a 2.0 GPA is required in the 300-level business core courses, and a 2.0 GPA is required for all courses counted in the Major.

All students enrolling in the Mitchell College of Business must complete at least fifty percent of all business credit hours and at least six of the nine courses counted toward the major at the University of South Alabama.

All students must petition for graduation according to University requirements explained elsewhere in this Bulletin.

## Minors

### Minors in the Mitchell College of Business

The Mitchell College of Business offers minors for both business and non-business students. Business students, except General Business majors, may elect minors in Accounting, Data Analytics, Economics, Finance, I/O Psychology, Management, Marketing, and Real Estate. Because of the general nature of the General Business degree, General Business majors are not eligible for business minors. Students in other colleges may elect, with the approval of their department chair, a minor in the Mitchell College of Business. Minors for non-business majors are offered in Data Analytics, Economics, Entrepreneurship, Finance, General Business, I/O Psychology, General Management, Marketing and Real Estate. A 2.0 is required for the courses applied toward the minor. Students must complete at least 50% of the courses counted towards the minor at the University of South Alabama. With the exception of psychology classes needed for the I/O Psychology minor, only courses taken at an AACSB accredited institution may count towards a business minor. Except as otherwise noted in the Bulletin, courses used for the business minor may not also count as major courses. Courses used for a first business minor may not be used for a second business minor. Specific course requirements for each minor may be found in the individual departments' bulletin information.

## Accounting

### Department Information

(251) 460-6144

Department of Accounting website

<https://www.southalabama.edu/colleges/mcob/accounting/index.html>  
(<https://www.southalabama.edu/colleges/mcob/accounting/>)

Title	Name
Interim Chair	Kenneth Hunsader
Professor Emeritus	Russell Hardin, Mark A. Segal
Professors	Baldwin
Associate Professor	Hua, Rich, Vann
Assistant Professors	DeRoy, Johnson
Instructors	Foster, Madden

### Department of Accounting Mission

Our mission is to provide value-added accounting education, conduct research that improves accounting practice and instructional development, and provide service to the profession, university, and Gulf Coast Region constituencies. Our graduates should have the requisite accounting and information technology skills to become the future ethical leaders of the accounting profession.

## Degrees, Programs, or Concentrations

- Accounting (BSBA) (p. 751)
- Accounting For Business Majors Minor (p. 754)

## Courses

### ACC 211 Financial Accounting 3 cr

The course provides an understanding of ways in which financial accounting information supports business decision-making. The focus is on the financial statements and the transactions and processes that produce them. ACC 211 and ACC 212 must be taken in sequence.

### ACC 212 Managerial Accounting 3 cr

The course provides an understanding of ways in which managerial accounting information supports business decision-making. The focus is on identifying, measuring, analyzing, interpreting, and communicating financial information to managers for the pursuit of an organization's goals. ACC 211 and ACC 212 must be taken in sequence.

**Prerequisite:** ACC 211 Minimum Grade of C

### ACC 310 Intro to Acc & Bus Software 3 cr

An introductory course in practical application and study of current accounting and business software. The course provides an overview of commonly used business and accounting software with practical applications.

**Prerequisite:** ACC 212 Minimum Grade of C

### ACC 321 Acct for Entrepreneurial Bus 3 cr

A study of the analysis and use of accounting information by entrepreneurial businesses. Among the topics covered are typical financing sources of entrepreneurial businesses and valuation of closely held businesses. In addition, the course includes coverage of how financial statements can be used to: manage a business, monitor an entity's performance, determine credit decisions, manage cash flow, and prepare forecasted financial statements.

**Prerequisite:** ACC 212 Minimum Grade of C

### ACC 331 Taxation of Individuals 3 cr

Basic federal income tax law and tax planning considerations relating to individuals.

**Prerequisite:** ACC 212 Minimum Grade of C

### ACC 341 Accounting Information Systems 3 cr

The study of accounting as a comprehensive information system which provides for planning and control, special reports, and preparation of external financial statements.

**Prerequisite:** ACC 212 Minimum Grade of C and CIS 250 Minimum Grade of D

### ACC 350 Financial Statement Analysis 3 cr

In-depth coverage of the principles and practices of effective analysis of the financial statements of firms for the purpose of understanding (1) the economic and financial characteristics and current conditions of the firm, (2) particular strategies the firm may select with which to compete, and (3) the accounting principles and procedures underlying the financial statements. The course integrates concepts from accounting, economics, finance and management. Credit cannot be received for both ACC 350 and FIN 350.

**Prerequisite:** ACC 212 Minimum Grade of C and (FIN 315 Minimum Grade of D or FIN 340 Minimum Grade of D)

**Cross-Listed:** FIN 350

### ACC 371 Intermediate Accounting I 3 cr

Accounting theory as related to income measurement; preparation of balance sheets and income statements; recognition, measurement, and reporting of assets.

**Prerequisite:** ACC 212 Minimum Grade of C and (MA 112 Minimum Grade of D or MA 120 Minimum Grade of D or MA 125 Minimum Grade of D or MA 126 Minimum Grade of D) and ACC 212 Minimum Grade of D and ECO 215 Minimum Grade of D and ECO 216 Minimum Grade of D and BUS 255 Minimum Grade of D and BUS 265 Minimum Grade of D and CIS 250 Minimum Grade of D

### ACC 372 Intermediate Accounting II 3 cr

Includes measurement, recognition and reporting of liabilities, equities, investments, and deferred taxes; EPS; and the preparation of cash flow statements. Coverage of selected professional pronouncements.

**Prerequisite:** ACC 313 Minimum Grade of C or ACC 371 Minimum Grade of C

### ACC 380 Cost Accounting for Managers 3 cr

Managers must use cost and revenue data to make decisions about which products or services to produce. This course teaches managers about cost-accounting theory and practice including job-order and process-cost systems, cost-volume-profit relationships, budgets, standard costs, variance analysis, direct costing, and cost allocation.

**Prerequisite:** ACC 212 Minimum Grade of C

**Cross-Listed:** ACC 381

### ACC 381 Cost Accounting 3 cr

Includes cost-accounting theory and practice involving such topics as job-order and process-cost systems, cost-volume-profit relationships, budgets, standard costs, variance analysis, direct costing, and cost allocation.

**Prerequisite:** ACC 212 Minimum Grade of C

### ACC 410 Forensic Accounting 3 cr

An intro to principles for forensic accounting and professional ethics. Civil and criminal procedures and litigation services are covered. The course introduces forensic accounting topics such as fraud, bankruptcy, digital forensics, and financial statement misrepresentation.

**Prerequisite:** ACC 372 Minimum Grade of C

### ACC 415 Data Analytics for Accounting 3 cr

This course focuses on the use of data analytic tools in the accounting profession. Students will learn the fundamentals of data analysis in a variety of accounting disciplines, how to interpret the output, and ways to communicate the results. Students will work on projects aimed at enhancing their competency in critical thinking, problem-solving, written and oral communication, and data analytic skills.

**Prerequisite:** (ACC 341 Minimum Grade of C and ACC 372 Minimum Grade of C and ACC 381 Minimum Grade of C)

### ACC 416 Int'l and Advanced Accounting 3 cr

Study of accounting in a global context including standards and issues and the roles and responsibilities of accountants. Additional topics include: business combinations, government accounting, interim and segmented reporting.

**Prerequisite:** ACC 314 Minimum Grade of C or ACC 372 Minimum Grade of C

**ACC 432 Tax of Partnerships and Corps 3 cr**

An examination of the federal tax treatment of partnerships and corporations. Topics include: tax aspects of the formation of the entity, elements of gross income, treatment of property dispositions, allowable deductions and credits, determination of entity and investor basis, and liquidation of the entity.

**Prerequisite:** (ACC 331 Minimum Grade of C or ACC 411 Minimum Grade of D) and (ACC 314 Minimum Grade of C or ACC 372 Minimum Grade of C)

**ACC 451 Auditing - W 3 cr**

Theory and application of the attest function, ethical issues, and written communication for accountants. Includes standards, objectives, review of internal control structures, tests of controls, substantive testing and reporting. Ethical issues and the preparation of written letters and formal reports are covered.

**Prerequisite:** (ACC 314 Minimum Grade of C or ACC 372 Minimum Grade of C) and MGT 305 Minimum Grade of D

**ACC 452 Advanced Auditing & Analytics 3 cr**

Advanced study of the application of auditing standards, internal control evaluations, applications of statistics, audits of information systems, internal and operational auditing, and legal and reporting obligations.

**Prerequisite:** ACC 451 Minimum Grade of C

**ACC 461 Acc for Gov and Not-For-Profit 3 cr**

A study of the concepts and procedures underlying fund accounting, budgetary control, and financial reporting requirements for governmental and not-for-profit entities.

**Prerequisite:** ACC 314 Minimum Grade of C or ACC 372 Minimum Grade of C

**ACC 490 Special Topics 3 cr**

Designed to provide senior students an opportunity to study selected topics of particular interest. A student may count no more than six hours of Special Topics in the concentration. Prerequisite: Approval of Department Chair.

**ACC 494 Directed Studies 3 cr**

Primarily designed to give superior students an opportunity to study some phase of accounting of particular interest. Conferences, a bibliography, and a formal research report are required. Requires permission of Department Chair, 2.5 GPA or better and junior or senior standing.

**ACC 496 Accounting Internship 3 cr**

The internship program is designed to give students practical experience in their field of study. Students complete directed projects under the supervision of Department Chair.

**Prerequisite:** ACC 314 Minimum Grade of C or ACC 372 Minimum Grade of C

**ACC 510 Forensic Acc. & Litig. Svcs. 3 cr**

An intro to forensic accounting from the CPA perspective, focusing on civil and criminal procedures, and litigation services. Includes topics such as fraud, bankruptcy, digital forensics, and financial statement misrepresentations.

**ACC 511 Financial Accounting Theory 3 cr**

The evolution of general accounting theory leading up to and including the Conceptual Framework will be discussed as well as the specific theory underlying certain accounting topics of current interest.

**ACC 516 Advanced Financial Accounting 3 cr**

Study of Business combinations, consolidation issues, interim and segmented reporting, inflation accounting. Coverage of selected professional pronouncements.

**ACC 521 Advanced Managerial Accounting 3 cr**

Advanced managerial and cost accounting topics. Tools for planning and control, development of cost information for decision making, cost allocation, inventory management systems, capital budgeting, performance measurement, transfer pricing and multi-national considerations.

**ACC 531 Tax Planning and Research 3 cr**

An examination of tax research tools, their utilization, and various tax planning considerations. Students are required to conduct research and tax planning upon assigned topics, and write a report on their findings.

**ACC 532 Tax Partnerships/Corporations 3 cr**

An examination of the federal tax treatment of partnerships and corporations. Topics include: tax aspects of the formation of the entity, elements of gross income, treatment of property dispositions, allowable deductions and credits, determination of entity and investor basis, and liquidation of the entity.

**ACC 534 Tax of Gifts, Trusts & Estates 3 cr**

An examination of the federal tax treatment of gratuitous transfers made during life and at death.

**ACC 535 Multi Tax 3 cr**

This course addresses the increased importance of international and multi-jurisdictional taxation in today's global environment. It introduces students to the principles guiding nexus, geographic allocation of income and the avoidance of double taxation. The course helps students develop an understanding of the U.S. tax rules that may apply to income involving the U.S. and other countries. It also helps students understand multistate tax rules. Students will develop an understanding of the tax implications resulting from business that is conducting electronically. Students will apply multi-jurisdictional tax principles and rules to solve case studies.

**ACC 541 Advanced Accounting Systems 3 cr**

Analysis of accounting information system case studies in order to expose students to real-world system problems and applications. Course work includes hands-on work with a variety of computer-based accounting application packages.

**ACC 552 Advanced Auditing & Analytics 3 cr**

Advanced study of the application of auditing standards, internal control evaluations, applications of statistics, audits of information systems, internal and operational auditing, and legal and reporting obligations.

**ACC 561 Acc of Government and NFPE 3 cr**

A study of the concepts and procedures underlying fund accounting, budgetary control, and financial reporting requirements for governmental and not-for-profit entities.

**ACC 570 Professional Accounting I 3 cr**

A study of issues and responsibilities relevant to the public accounting profession, including financial, regulation, assurance, and business considerations.

**ACC 571 Professional Accounting II 3 cr**

A study of contemporary issues and responsibilities relevant to the accounting profession, including ethical, legal and international considerations.

**ACC 572 Fraud Ex 3 cr**

Overview of the nature of occupational fraud and how it is committed included an introduction to the actions that can be taken to determine the presence of occupational fraud and procedures that can be implemented to deter fraud. Students will also learn how financial statement fraud and reporting occur, including investigation and financial fraud prevention techniques.

**ACC 580 Emerging Issues in Accounting 3 cr**

A study of current and emerging issues and responsibilities relevant to the accounting profession, with special emphasis on technology advancements, new services, regulatory changes, and international developments in accounting and business.

**ACC 590 Special Topics 3 cr**

Designed to provide graduate students an opportunity to study selected topics. Prerequisites: Permission of Department Chair. A student may count no more than three hours of Special Topics in the MBA degree program.

**ACC 594 Independent Study in Account 3 cr**

Readings and research on selected topics. Conference and formal research report required. Permission of department chair.

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
BALDWIN, AMELIA ANNETTE (baldwin@southalabama.edu)	Accounting	Professor	BSBA, Auburn University MAC, Auburn University PHD, Virginia Polytechnic Inst and
DEROY, TIFFANY LYNN (tderoy@southalabama.edu)	Accounting	Assistant Professor	BSBA, University of South Alabama MAC, University of South Alabama PHD, Kennesaw State University
FOSTER, RICHARD MARK (markfoster@southalabama.edu)	Accounting	Instructor	BSBA, University of Tennessee-Knox MAC, University of South Alabama
HSU, KO-CHENG (khsu@southalabama.edu)	Accounting	Associate Professor	BS, Illinois State University MS, Illinois State University MS, Iowa State University PHD, University of Memphis
JOHNSON, TRISTAN B (tristanjohnson@southalabama.edu)	Accounting	Assistant Professor	BSBA, Drexel University PHD, Florida State University
MADDEN, ELLEN KOPPERSMITH (emadden@southalabama.edu)	Accounting	Senior Instructor	BA, Birmingham-Southern College MBA, Spring Hill College
RICH, JAMES C. (jrich@southalabama.edu)	Accounting	Associate Professor	BBA, Campbell University MBA, Troy University-Main DBA, Kennesaw State University
VANN, CAROL E. (cvann@southalabama.edu)	Accounting	Assistant Professor	BSBA, University of Southern Miss MPAC, University of Southern Miss PHD, University of Memphis
XIN, HUA CHRISTINE (christinexin@southalabama.edu)	Accounting	Associate Professor	BS, Beijing Tech & Business Univ MS, Beijing Tech & Business Univ PHD, Rutgers The St U Central Offic

## Accounting (BSBA)

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 752)		59-62
<b>Major Requirements</b>		
<i>Freshman Core</i>		
A. Complete the following:		
BUS 150	Intro to Business and Mgt (linkurl^../footnote1/^or Transfer Student Elective - ) <sup>1</sup>	3
<i>Upper Division Business Core</i>		
A 2.0 GPA is required in the Upper Division Business Core		
A. Complete the following:		
BUS 305 or ECO 453	Data Analytics III Intro to Econometrics	3
B. Complete the following:		

FIN 315	Business Finance	3
MGT 300	Management Theory and Practice	3
MGT 305	Organizational Comm - W	3
MGT 325	Operations Management	3
MKT 320	Principles of Marketing	3
<i>Experiential Learning</i>		
A. Select three hours from the following:		3
BUS 101	Prof Experience I	
BUS 201	Professional Experience II	
BUS 301	Professional Experience III	
BUS 302	Professional Preparation	
B. Select one of the following:		3
ACC 496	Accounting Internship	
ECO 496	Economics Internship	
FIN 496	Finance Internship	
MGT 496	Management Internship	
MKT 496	Marketing Internship	

#### Accounting Major Courses

A 2.0 GPA is required for the Accounting Major Courses

A. Complete the following:

ACC 331	Taxation of Individuals	3
ACC 341	Accounting Information Systems	3
ACC 371	Intermediate Accounting I	3
ACC 372	Intermediate Accounting II	3
ACC 381	Cost Accounting	3
ACC 415	Data Analytics for Accounting	3
ACC 416	Int'l and Advanced Accounting	3
ACC 451	Auditing - W	3

B. Select one of the following: 3

ACC 350	Financial Statement Analysis	
ACC 432	Tax of Partnerships and Corps	
ACC 452	Advanced Auditing & Analytics	
ACC 461	Acc for Gov and Not-For-Profit	
ACC 410	Forensic Accounting	

#### Business Electives

A. 300-400 electives from ACC, BUS, ECO, FIN, MGT, MKT 6

#### Business Policy Capstone

A. Complete the following:

MGT 485	Bus Policy in Global Eco - W	3
MGT 486	Undergraduate Comp Exam	0

#### Minor Requirements

A minor is not required for this degree program

**Total Hours** **122-125**

## Footnote

<sup>1</sup> For students transferring into the College with more than 45 hours. Students transferring with 46-60 hours are highly encouraged to take BUS 150.

## General Education Requirements

Code	Title	Hours
<b>Area I - Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II - Humanities &amp; Fine Arts</b>		
A. Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/business/accounting/footnote2/">http://bulletin.southalabama.edu/programs-az/business/accounting/footnote2/</a> ) <sup>1</sup>		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
B. Select one of the following: 3		
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	

DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	
C. Select six hours from the following: 6		
AFR 101	Intro to African Amer Studies	
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARH 203	Survey of Non-Western Art	
ARS 101	Art Appreciation	
CLA 110	Intro Anc Greek Roman Culture	
CA 110	Public Speaking	
DRA 110	Introduction to Theatre	
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
LG 101	Introductory Latin I	
LG 102	Introductory Latin II	
LG 111	Introductory French I	
LG 112	Introductory French II	
LG 121	Introductory Chinese I	
LG 122	Introductory Chinese II	
LG 131	Introductory Spanish I	
LG 132	Introductory Spanish II	
LG 141	Intro Classical Greek I	
LG 142	Intro Classical Greek II	
LG 151	Introductory German I	
LG 152	Introductory German II	
LG 153	Accelerated Intro German	
LG 171	Introductory Russian I	
LG 172	Introductory Russian II	
LG 173	Accelerated Intro Russian	
LG 201	Intermediate Latin I	
LG 202	Intermediate Latin II	
LG 211	Intermediate French I	
LG 212	Intermediate French II	
LG 213	Accelerated Inter French - H	
LG 221	Intermediate Chinese I	
LG 222	Intermediate Chinese II	
LG 231	Intermediate Spanish I	
LG 232	Intermediate Spanish II	
LG 234	Inter Spanish Accel -H	
LG 241	Interm Classical Greek I	
LG 242	Interm Classical Greek II	
LG 251	Intermediate German I	
LG 252	Intermediate German II	
LG 271	Intermediate Russian I	
LG 272	Intermediate Russian II	
LG 273	Intensive Second Year Russian	
LGS 101	Introductory Japanese I	

LGS 102	Introductory Japanese II
LGS 106	Introductory Arabic I
LGS 107	Introductory Arabic II
LGS 110	Intro American Sign Language I
LGS 111	Intro American Sign Lang II
LGS 171	Introductory Korean I
LGS 172	Introductory Korean II
LGS 201	Intermediate Japanese I
LGS 202	Intermediate Japanese II
LGS 206	Intermediate Arabic I
LGS 207	Intermediate Arabic II
LGS 210	Intermediate ASL I
LGS 211	Intermediate ASL II
MUL 101	Introduction to Music
PHL 110	Introduction to Philosophy
PHL 120	Critical Thinking
PHL 121	Introduction to Logic
PHL 131	Introduction to Ethics
PHL 231	Social Ethics
PHL 240	Western Philosophy: Classical
REL 100	Intro to the Study of Religion
REL 200	Old Testament/Hebrew Bible
REL 201	Survey of the New Testament

### Area III – Natural Sciences & Mathematics

A. Complete the following:

MA 120	Calculus and Its Applications	3-4
or MA 125	Calculus I	

B. Select 8-10 hours from the following: 8-10

AN 121 & 121L	Biological Anthropology and Biological Anthropology Lab	
BLY 101 & 101L	Life Science I and Life Science I Laboratory	
or BLY 121 & 121L	General Biology I and General Biology I Lab	
BLY 102 & 102L	Life Science II and Life Science II Lab	
or BLY 122 & 122L	General Biology II and General Biology II Laboratory	
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab	
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab	
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab	
GY 111 & 111L	Physical Geology and Physical Geology Lab	
GY 112 & 112L	Earth History and Earth History Lab	
MAS 134 & 134L	Ocean Science and Ocean Science Lab	

PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab

### Area IV – History, Social & Behavioral Sciences (<http://bulletin.southalabama.edu/programs-az/business/accounting/footnote2/>)<sup>1</sup>

A. Select one of the following: 3

HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 135	US History to 1877
HY 136	US History since 1877

B. Select one of the following: 3

AN 100	Intro to Cultural Anthropology
AN 101	Intro Archaeology-Bio Anthro
CA 100	Intro to Communication
CA 211	Interpersonal Comm
CJ 105	Introduction to Criminal Justice
GEO 114	People, Places, Environment
GEO 115	World Regional Geography
GS 101	Intro to Gender Studies
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
IS 100	Global Issues
IST 201	Seasons of Life
NAS 101	Intro Native American Studies
PSC 130	Intro to US Government
PSY 120	Introduction to Psychology
PSY 250	Life Span Development
SY 109	Introductory Sociology
SY 112	Social Problems

C. Complete the following: 6

ECO		3
ECO 216	Prin of Macroeconomics	3

### Area V 200-Level Business Core

A grade of a least C is required in each course

A. Complete the following:

ACC 211	Financial Accounting	3
ACC 212	Managerial Accounting	3

B. Complete the following:

BUS 245	Data Analytics I	3
BUS 255	Data Analytics II	3

C. Complete the following:

BUS 265	Legal Environ of Business I	3
D. Complete the following:		
CIS 250	Advanced Comp Applications	3
<b>Total Hours</b>		<b>65-68</b>

**Footnote**

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 135 & HY 136)

**Notes:**

- Course substitutions are possible with the approval of the student's advisor or the Dean.
- Transfer credit for Accounting Major Courses will only be accepted from AACSB accredited institutions.
- Only one internship may be counted towards a business degree. Internship courses may only be used to fulfill the Experiential Learning requirement and may not be used as business electives or to fulfill any other degree requirement.

**Graduation Plan**

(122 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I	3
BUS 150	Intro to Business and Mgt	3
MA 120 or MA 125	Calculus and Its Applications or Calculus I	3-4
Fine Arts	Area II <sup>1</sup>	3
History	Area IV <sup>1</sup>	3
BUS 101	Prof Experience I	1
<b>Hours</b>		<b>16-17</b>
<b>Spring</b>		
EH 102	English Composition II	3
ECO 215	Prin of Microeconomics	3
CIS 250	Advanced Comp Applications	3
Humanities or Fine Art	Area II <sup>1</sup>	3
Natural Science + Lab	Area III <sup>1</sup>	4
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
ACC 211	Financial Accounting	3
BUS 245	Data Analytics I	3
ECO 216	Prin of Macroeconomics	3
Literature	Area II <sup>1</sup>	3
Natural Science + Lab	Area III <sup>1</sup>	4
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ACC 212	Managerial Accounting	3
BUS 255	Data Analytics II	3
BUS 265	Legal Environ of Business I	3
BUS 201	Professional Experience II	1
MGT 300	Management Theory and Practice	3
Gen Ed	Area II or IV <sup>1</sup>	3
<b>Hours</b>		<b>16</b>

**Third Year****Fall**

ACC 371	Intermediate Accounting 1	3
ACC 381	Cost Accounting	3
BUS 301	Professional Experience III	1
MKT 320	Principles of Marketing	3
FIN 315	Business Finance	3
2nd Literature or 2nd History	Area II or IV <sup>2</sup>	3
<b>Hours</b>		<b>16</b>

**Spring**

ACC 372	Intermediate Accounting II	3
ACC 341	Accounting Information Systems	3
ACC 331	Taxation of Individuals	3
Business Elective #1 <sup>3</sup>		3
MGT 305	Organizational Comm - W	3
<b>Hours</b>		<b>15</b>

**Fourth Year****Fall**

ACC 451	Auditing - W	3
MGT 325	Operations Management	3
ACC 415	Data Analytics for Accounting	3
Business Elective #2 or Internship <sup>4</sup>		3
BUS 305 or ECO 453	Data Analytics III or Intro to Econometrics	3
<b>Hours</b>		<b>15</b>

**Spring**

ACC 416	Int'l and Advanced Accounting	3
Select one of the following:		
ACC 350	Financial Statement Analysis	3
ACC 410	Forensic Accounting	3
ACC 432	Tax of Partnerships and Corps	
ACC 461	Acc for Gov and Not-For-Profit	
ACC 452	Advanced Auditing & Analytics	
MGT 485	Bus Policy in Global Eco - W	3
MGT 486	Undergraduate Comp Exam	0
Business Elective #2 or Internship <sup>4</sup>		3
<b>Hours</b>		<b>18</b>
<b>Total Hours</b>		<b>128-129</b>

<sup>1</sup> See General Education Requirements for options

<sup>2</sup> All students must complete either a literature or a history sequence.

<sup>3</sup> Anything in MCOB at the 300 or 400 level not used to fulfill another requirement except internship courses (ACC 310 strongly suggested).

<sup>4</sup> Anything in MCOB at the 300 or 400 level not used to fulfill another requirement except internship courses.

**Accounting For Business Majors Minor****Degree Requirements**

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

Code	Title	Hours
ACC 212	Managerial Accounting	3
ACC 371	Intermediate Accounting 1	3

Select four additional ACC courses at the 300 or 400 level 12

**Total Hours** 18

## Economics, Finance And Real Estate

### Department Information

(251) 460-7171

Department of Economics, Finance and Real Estate website  
[https://www.southalabama.edu/colleges/mcob/economic\\_and\\_finance](https://www.southalabama.edu/colleges/mcob/economic_and_finance)  
 (https://www.southalabama.edu/colleges/mcob/economic\_and\_finance/)

Title	Name
Chair	Hunsader
Professors	Affuso, Cummings, Swofford, Wood
Associate Professor	Huang, Istiak, Lawrey, Le, Pennywell
Assistant Professors	Harper, Jain

The Economics and Finance major is designed to prepare students for managerial positions in business and government. Three concentrations are available within the Economics/Finance major: Economics, Finance, and Real Estate. All Economics/Finance majors are required to take the following two courses and choose one concentration area:

Code	Title	Hours
ECO 315	Intermediate Microeconomics	3
FIN 343 or ECO 340	Money Mkts and Fin Instit Money and Banking	3

### The Economics Concentration

The Economics program is designed to prepare students for professional careers in managerial positions, government, administration, education, and others. Positions in business economics and graduate study require knowledge of economics and the application of economic tools to analyze problems for decision-making.

### The Finance Concentration

The Finance program is designed to provide an understanding of the various areas and principles of finance. Students will develop a body of specialized knowledge and analytical techniques that are used in the acquisition, allocation and management of financial resources. Finance careers are typically in industry and commercial businesses, public utilities and government agencies, banks, insurance companies, brokerage houses, investment companies and other financial institutions. The finance degree is appropriate for students who plan a career in corporate finance, financial planning, investment planning and research, or insurance.

### The Real Estate Concentration

The Real Estate program is designed to educate and prepare students for the myriad of professional careers available in residential, commercial, and related real estate industries. Students will develop the specialized quantitative and qualitative skills necessary to elevate their knowledge of real estate as an asset class and investment vehicle. Studying real estate will better prepare students for the unique demands and complex risks associated with real estate practice and investment. Additionally, exposure to active real estate professionals through coursework and internships will provide students the opportunity to begin building a

professional network that will add value to their education and enhance their career prospects upon graduation.

## Degrees, Programs, or Concentrations

- Economics & Finance (BSBA) (p. 760)
- Economics & Finance (BSBA) - Economics Concentration (p. 760)
- Economics & Finance (BSBA) - Finance Concentration (p. 764)
- Economics & Finance (BSBA) - Real Estate Concentration (p. 767)
- Economics for Business Majors Minor (p. 770)
- Economics for Non-Business Majors Minor (p. 770)
- Finance for Business Majors Minor (p. 770)
- Finance for Non-Business Majors Minor (p. 771)
- Real Estate for Business Majors Minor (p. 771)
- Real Estate for Non-Business Majors Minor (p. 771)

## Courses

### Economics (ECO)

#### ECO 215 Prin of Microeconomics 3 cr

Functions of the price system in a market economy; role of households and business firms in mobilizing resources to meet human needs. The functional and personal distribution and use of income. Relevant problems are discussed.

#### ECO 216 Prin of Macroeconomics 3 cr

Economics as a science; its nature and functions. Analysis of the American economy from the macroeconomic viewpoint, stressing full employment, monetary and fiscal policy, national income accounting, and their application to current problems and issues.

#### ECO 300 Introduction to Economics 3 cr

Intensive study of micro- and macroeconomic principles with emphasis on application to current economic issues and problems of interest to public school teachers and students.

#### ECO 315 Intermediate Microeconomics 3 cr

Operation of the price system, with special reference to a market economy and to related public policies and business issues; analysis of the distribution of income; theories of consumer behavior, the firm, resource allocation, and product distribution.

**Prerequisite:** ECO 215 Minimum Grade of D or ECO 300 Minimum Grade of D and ACC 212 Minimum Grade of D and ECO 216 Minimum Grade of D and BUS 255 Minimum Grade of D and BUS 265 Minimum Grade of D and CIS 250 Minimum Grade of D

#### ECO 316 Intermediate Macroeconomics 3 cr

The nature and control of forces in a developed economy which determine levels of employment, income and use of resources, and rate and direction of economic growth.

**Prerequisite:** ECO 214 Minimum Grade of D or ECO 216 Minimum Grade of D or ECO 300 Minimum Grade of D

#### ECO 318 Prin of Managerial Economics 3 cr

Study of economic principles and methods in analyzing problems faced by management of a business or other type of organization; application of economic concepts to finding solutions of such problems that advance the best interest of such organizations.

**Prerequisite:** ECO 215 Minimum Grade of D or ECO 300 Minimum Grade of D

**ECO 322 Economics of Industrial Org 3 cr**

An analysis of the effect of modern industrial structure on competitive behavior and performance, in the light of contemporary price theory and the theory of workable competition; a critical evaluation of the legislative content, judicial interpretation, and economic effects of antitrust laws, current problems and proposed remedies.

**Prerequisite:** ECO 215 Minimum Grade of D or ECO 300 Minimum Grade of D

**ECO 323 Public Finance 3 cr**

The nature, purposes, and economic effects of various types of taxes in a federal government. Problems of tax administration, budgeting, and expenditure of tax revenues. Review of current problems.

**Prerequisite:** ECO 215 Minimum Grade of D or ECO 300 Minimum Grade of D

**ECO 330 Current Global Economic Issues 3 cr**

Application of the standard economic theory to markets to analyze major issues confronting U.S. consumers and businesses in the global economy. Topics include comparative advantage, commercial policy and protectionism, currency markets and foreign exchange rates, economic integration and free trade areas, international trade accounting, and financial aspects of international trade.

**Prerequisite:** ECO 215 Minimum Grade of D or ECO 300 Minimum Grade of D

**ECO 340 Money and Banking 3 cr**

Analysis of monetary, credit, and banking institutions in the American economy, emphasizing commercial banks, the Federal Reserve System, and the Treasury. Credit for both ECO 340 and FIN 343 is not allowed.

**Prerequisite:** FIN 315 Minimum Grade of D

**Cross-Listed:** FIN 343

**ECO 343 Labor Economics 3 cr**

United States population analyzed by age, sex, and other characteristics; study of the labor force and its composition; unemployment and underemployment. Education as an investment in productive resources. Economics of leisure, health, housing, recreation, and other areas of human-resource development.

**Prerequisite:** ECO 215 Minimum Grade of D or ECO 300 Minimum Grade of D

**ECO 355 Sport & Entertainment Econ 3 cr**

The analysis of the economics of decision making and trends in sports and entertainment media. This class will cover cases where economic analysis has caused in behavior, as well as cases where various groups appear to behaving irrationally. Prerequisites: ECO 215 or ECO 300 for non-business and non-economic major.

**Prerequisite:** ECO 215 Minimum Grade of D or ECO 300 Minimum Grade of D

**ECO 363 International Economics 3 cr**

Modern international trade theory; the balance of payments and the adjustments processes; the evolution of international economic institutions; critical analysis of current international economic policies - trade, monetary, and regional economics organizations.

**Prerequisite:** ECO 214 Minimum Grade of D or (ECO 212 Minimum Grade of D or ECO 215 Minimum Grade of D) or ECO 216 Minimum Grade of D or ECO 300 Minimum Grade of D

**ECO 371 Economic Development 3 cr**

Economic development theory with stress on the roles of technology, management, international financing, technical assistance organizations, and international private investment. Factors that control and influence the developmental and growth process either positively or negatively. Prerequisites: ECO 215 or ECO 300 for non-business and non-economics majors.

**Prerequisite:** ECO 215 Minimum Grade of C or ECO 300 Minimum Grade of C

**ECO 372 Economics of Urban Development 3 cr**

This course addresses contemporary issues of urban and metropolitan areas. The course focuses on understanding the main economic forces leading to the existence of cities and regional agglomeration. Students will also use neoclassical economic theory to critically analyze economic efficiency and the spatial structure of markets. The course includes a wide range of topics such as urban growth, business clusters, poverty, crime, urban transportation, positive and negative externalities in urban areas, land use theory, housing, and the role of local governments.

**Prerequisite:** ECO 215 Minimum Grade of D or ECO 300 Minimum Grade of D

**ECO 383 Economic History of the US 3 cr**

The evolution of the modern United States economic system. The parts played by exploitation of natural resources, investment from abroad, financial institutions, and technology in arriving at the present economic situation. Critical analysis of development just before, during, and after World War II, and of current economic problems.

**Prerequisite:** (ECO 215 Minimum Grade of D or ECO 212 Minimum Grade of D) and (ECO 214 Minimum Grade of D or ECO 211 Minimum Grade of D or ECO 216 Minimum Grade of D) or ECO 300 Minimum Grade of D

**ECO 390 Environmental Economics 3 cr**

This course introduces students to the economic and environmental implications of natural resource management. The course covers conceptual and methodological topics, including sustainability, which will be applied to contemporary issues i.e. depletion of renewable resources, land and water scarcity, and climate change. Specific topics include the economics of energy, fisheries, forestry, food and pollution.

**Prerequisite:** ECO 215 Minimum Grade of D or ECO 300 Minimum Grade of D

**ECO 451 Mathematical Economics 3 cr**

Application of business and economics concepts using economic models and equilibrium, matrix algebra, differentiation, comparative static analysis, optimization problems, and other selected techniques.

**Prerequisite:** MA 120 (may be taken concurrently) Minimum Grade of D and ECO 215 Minimum Grade of D and ECO 216 Minimum Grade of D or ECO 300 Minimum Grade of D

**ECO 453 Intro to Econometrics 3 cr**

Study of regression analysis and its application to business, economics, and other social-science problems; emphasis on model building, research writing, and econometric forecasting. Students are required to write a term paper on econometric applications under direct supervision of the instructor.

**Prerequisite:** BUS 255 Minimum Grade of D and (ECO 215 Minimum Grade of D or ECO 216 Minimum Grade of D)

**ECO 490 Special Topics 3 cr**

Designed to provide senior students an opportunity to study selected topics of particular interest. A student may count no more than six hours of Special Topics in the concentration. Prerequisite: Approval of Department Chair.

**ECO 491 History of Economic Thought -W 3 cr**

Economic ideas from the Greeks to present with intensive study of the classical, neoclassical, and contemporary schools of economic thought.

**Prerequisite:** (ECO 215 Minimum Grade of D or ECO 212 Minimum Grade of D) or ECO 300 Minimum Grade of D

**ECO 494 Dir St in Economics 3 cr**

Reading and research on selected economic topics under guidance of the departmental faculty. Junior and senior standing, a cumulative GPA of 2.5 or better, and approval of the department chair following the evaluation of a written proposal.

**ECO 496 Economics Internship 3 cr**

The internship program is designed to give students practical experience in their field of study. Students complete directed projects under the supervision of Department Chair. Prerequisites: Junior or Senior standing, declared major in economics, overall GPA of least 2.0, and Internship Agreement signed by the Department Chair.

**ECO 506 Economic Theory 3 cr**

An introduction to economic theory, including the basic theory of the market (supply and demand); elasticity; introduction to market structure; trade theory; international trade and balance of payments; national income accounting; money and the banking system; macroeconomic theories, and macroeconomic stabilization policy.

**ECO 535 Forecasting Business Dynamics 3 cr**

Application of business and economic concepts using business cycle models, international trade theories, dynamics of stock market, unemployment, tax policies, monetary policy regulation, and forecasting of important business indicators.

**ECO 590 Sp Top - 3 cr**

Designed to provide graduate students an opportunity to study selected topics. (A student may count no more than three hours of Special Topics in the MBA degree program.) Prerequisite: Approval of Department Chair.

**ECO 594 Independent Study in Economics 3 cr**

Readings and research on selected topics. Conferences and formal research report required. Approval of Department Chair.

**ECO 609 Industrial Organiz Economics 3 cr**

This course focuses on industrial organization topics such as consumer choice, market structure, and pricing. It is designed to give students fundamentals in economics and to help them start research agendas.

**Finance (FIN)****FIN 300 Personal Finance 3 cr**

General principles and techniques of finance as applied to personal business transactions and the management of personal funds. Finance majors may not count this course as a finance elective.

**FIN 305 Introduction to Finance 3 cr**

A survey course covering corporate financial management. Basic concepts such as interest rates, time value of money, cost of capital, and risk are discussed and applied to stock, bond, and long-term investment valuation. Guidelines are developed for corporate financial decision-making in such areas as working capital management and capital structure policy, but with emphasis on short-term financial management and financial planning. The impact of ethical considerations and global financial markets are discussed. This course is for non-business and non-economics majors only.

**Prerequisite:** ACC 212 Minimum Grade of D and (ECO 212 Minimum Grade of D or ECO 215 Minimum Grade of D) and (BUS 245 Minimum Grade of D or ST 175 Minimum Grade of D or ST 210 Minimum Grade of D)

**FIN 315 Business Finance 3 cr**

A survey course covering corporate financial management. Basic concepts such as interest rates, time value of money, cost of capital, and risk are discussed and applied to stock, bond and long-term investment valuation. Guidelines are developed for corporate, financial decision making in the areas of capital structure policy, dividend policy, long-term financing, corporate control, and working capital management. The impact of ethical considerations and global financial markets are discussed.

**Prerequisite:** (ECO 215 Minimum Grade of D and ACC 211 Minimum Grade of D and MA 120 Minimum Grade of D or MA 121 Minimum Grade of D or MA 126 Minimum Grade of D or MA 125 Minimum Grade of D or MA 131 Minimum Grade of D or MA 287 Minimum Grade of D) and (BUS 245 Minimum Grade of D or ST 175 Minimum Grade of D or ST 210 Minimum Grade of D)

**FIN 332 Multinational Finance 3 cr**

Analysis of financial management of multinational firms. Introduces the environment of international capital and foreign exchange markets and examines the effects of international business environment on risk, capital budgeting, working capital management, and capital structure decisions of the firm.

**Prerequisite:** FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D

**FIN 343 Money Mkts and Fin Instit 3 cr**

An examination of the major financial institutions operating in our economy, and the environment in which they operate. In light of the changing environment of the financial institutions area, the changing roles of the various financial markets, major legislation, and the regulatory agencies are also studied in this course. Credit for both FIN 343 and ECO 340 is not allowed.

**Prerequisite:** FIN 315 (may be taken concurrently) Minimum Grade of D or FIN 341 (may be taken concurrently) Minimum Grade of D

**Cross-Listed:** ECO 340

**FIN 344 Real Estate 3 cr**

Introduction to the tools used to make intelligent decisions regarding real estate as a wealth-building asset. Topics include legal rights, valuation, financial analysis, contracts, and brokerage with practical applications. Emphasis is given to local supply and demand conditions and property location and their impact on typical consumer decisions.

**FIN 345 Principles of Insurance 3 cr**

Examines risks facing the individual and business organizations and applications of public and private insurance to reduce or eliminate such risks. This is a survey course involving all classes of insurance.

**FIN 346 Alabama Real Estate Law & Reg 1 cr**

Course required for students planning to take the Alabama Real Estate License Examination. Topics include current Alabama Real Estate License Law, Administrative Rules and regulations, Consumer Guides, State Court Cases and relevant readings in Real Estate Risk Management. Requires Consent of Instructor.

**Prerequisite:** FIN 344 (may be taken concurrently) Minimum Grade of D or MKT 345 Minimum Grade of D

**FIN 350 Fin Stmt Analysis & Corp Strat 3 cr**

In-depth coverage of the principles and practices of effective analysis of the financial statements of firms for the purpose of understanding (1) the economic and financial characteristics and current conditions of the firm, (2) particular strategies the firm may select with which to compete, and (3) the accounting principles and procedures underlying the financial statements. The course integrates concepts from accounting, economics, finance and management. Credit cannot be received for both ACC 350 and FIN 350.

**Prerequisite:** FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D

**Cross-Listed:** ACC 350

**FIN 370 Short-Term Financial Management 3 cr**

In-depth coverage of liquidity, management of working capital, corporate cash management, short term investment, financing and forecasting.

**Prerequisite:** FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D

**FIN 410 Intermediate Bus Finance 3 cr**

In-depth coverage of financial planning and management. including cost of capital, capital budgeting, valuation and other topics.

**Prerequisite:** (FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D) and (BUS 255 Minimum Grade of D or ST 275 Minimum Grade of D)

**FIN 411 Advanced Business Finance - W 3 cr**

Actual and simulated cases in finance from business and industry; includes businesses of all sizes.

**Prerequisite:** FIN 350 Minimum Grade of D and FIN 410 Minimum Grade of D or FIN 441 Minimum Grade of D

**FIN 420 Investments 3 cr**

Survey of the characteristics of investment alternatives and the investment environment, including market operations and regulations, sources and uses of information, and an introduction to capital market theory.

**Prerequisite:** (FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D) and (BUS 245 Minimum Grade of D or ST 175 Minimum Grade of D or ST 210 Minimum Grade of D)

**FIN 421 Sec Analy-Portfolio Mgt 3 cr**

The development of the theory and practice of security analysis and portfolio management. Security analysis involves the fundamental determination of security values through economic, industry, and firm analysis. Portfolio management addresses asset selection and allocation for the construction and maintenance of portfolios that meet specific investment objectives in a risk-return context.

**Prerequisite:** FIN 420 Minimum Grade of D or FIN 441 Minimum Grade of D

**FIN 425 Student Managed Invest Fund I 3 cr**

This is the first in a sequence of two courses whereby students manage a real portfolio of securities. The selected students research the prospective investments, generate reports, and make decisions to buy or sell the securities. Administrative responsibilities are assigned and analyst teams are formed. Students accepted into this course must enroll in FIN 426 (Student Managed Investment Fund II) the following term unless otherwise disqualified. Requires Department Chair permission.

**Prerequisite:** FIN 420 Minimum Grade of B

**FIN 426 Student Managed Invest Fund II 3 cr**

This is the second in a sequence of two courses whereby students manage a real portfolio of securities. The selected students research the prospective investments, generate reports, and make decisions to buy or sell the securities. Administrative responsibilities are assigned and analyst teams are formed. Students build on and add depth to skills and knowledge acquired in FIN 425. Requires Department Chair permission.

**Prerequisite:** FIN 425 Minimum Grade of B

**FIN 430 Derivative Securities 3 cr**

Covers principles of Options and Futures contracts and their economic functions. Options: basic strategies; combinations and spreads; pricing; and the various types of contracts. Futures: fundamentals of the market; contract specifications and their uses. Program trading and portfolio insurance.

**Prerequisite:** (FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D)

**FIN 442 Real Estate Dev & Prop Mgmt 3 cr**

This course provides an overview of the real estate development and property management processes, as well as introduces students to various disciplines, professionals, and industry sectors, and how they interact and participate in these processes.

**Prerequisite:** FIN 344 Minimum Grade of D

**FIN 444 Real Estate Valuation - W 3 cr**

Emphasis is given to the valuation process and the analysis that leads to valid estimates of value. The cost, sales comparison, and income approaches to value are examined and illustrated within the Uniform Standards of Professional Appraisal Practice requirements. Preparation of typical valuation reports is covered.

**Prerequisite:** FIN 344 Minimum Grade of D and MKT 345 Minimum Grade of D and EH 101 Minimum Grade of C and EH 102 Minimum Grade of C

**FIN 445 Life and Disability Insurance 3 cr**

Principles and practices of insurance used for family and income protection against premature death and disability; retirement and pension plans including group insurance and social security.

**Prerequisite:** FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D

**FIN 446 Real Estate Finance & Invest 3 cr**

Analysis of income property debt and equity instruments, financing documents, financial analysis and risk scenarios of different property types, and relevant local, state, and federal laws and court cases.

**Prerequisite:** FIN 344 Minimum Grade of D or MKT 345 Minimum Grade of D

**FIN 448 Real Estate Law 3 cr**

A detailed examination of the contracts, documents, and instruments used in a transaction on one or more of the real property rights, and relevant local, state, and federal laws and court cases.

**Prerequisite:** FIN 344 Minimum Grade of D or MKT 345 Minimum Grade of D

**FIN 470 Depository Institution Mgt I 3 cr**

Analysis of depository institution management processes focusing on management of capital, assets, and liabilities with emphasis on the regulatory environment in which depository institutions operate.

**Prerequisite:** (FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D)

**FIN 471 Depository Institutions Mgt II 3 cr**

In-depth analysis of consumer, real estate, commercial, and agricultural lending areas of depository institution.

**Prerequisite:** FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D

**FIN 490 Special Topics 3 cr**

Designed to provide senior students an opportunity to study selected topics of particular interest. A student may count no more than six hours of Special Topics in the concentration. Prerequisite: Approval of Department Chair.

**Prerequisite:** FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D

**FIN 492 Seminar - Finance 3 cr**

Oral reports on readings of various aspects of business finance.

**Prerequisite:** FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D

**FIN 494 Directed Studies 3 cr**

Primarily designed to give superior students an opportunity to study selected topics of particular interest. Grades are awarded on a satisfactory/unsatisfactory basis. Prerequisites: a cumulative GPA 2.5 and approval of Department Chair.

**Prerequisite:** (FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D) and FIN 343 Minimum Grade of D and FIN 410 Minimum Grade of D and FIN 350 Minimum Grade of D and (FIN 420 Minimum Grade of D or FIN 441 Minimum Grade of D)

**FIN 496 Finance Internship 3 cr**

The internship program is designed to give students practical experience in their field of study. Students complete directed projects under the supervision of the Department Chair. Prerequisites: Junior or Senior standing, declared major in finance, overall GPA of least 2.0, Internship Agreement signed by the Department Chair, FIN 315 Minimum grade of D.

**Prerequisite:** FIN 315 Minimum Grade of D

**FIN 508 Introduction to Corp Finance 3 cr**

Coverage of fundamental finance concepts and techniques. Major topics include time value of money, risk, asset valuation including fixed income securities and stock, financial markets, term structure of interest rates, risk management (derivatives), and multinational financial management issues. Cases will be used as appropriate.

**FIN 590 Sp Top - 3 cr**

Designed to provide graduate students an opportunity to study selected topics. (A student may count no more than 3 hours of Special Topics in the M.B.A. degree program). Prerequisites: Approval of Department Chair

**Prerequisite:** MBA P

**FIN 594 Independent Study in Finance 3 cr**

Reading and research on selected topics. Conference and formal research report required. Prerequisites: Approval of Department Chair.

**Prerequisite:** MBA P

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
AFFUSO, ERMANNO (eaffuso@southalabama.edu)	Econ, Finance, and Real Estate	Professor	MS, Polytechnic University of Bari PHD, Auburn University
CUMMINGS, JOHN REID (cummings@southalabama.edu)	Econ, Finance, and Real Estate	Professor	BA, University of NC- Chapel Hill MBA, University of Mobile DBA, Kennesaw State University
HARPER, ADAM CADE (harper@southalabama.edu)	Econ, Finance, and Real Estate	Assistant Professor	BS, University of Texas- Arlington MA, University of Texas- Arlington MA, University of Texas- Arlington PHD, University of Texas- Arlington
HUNSADER, KENNETH JAMES (khunsader@southalabama.edu)	Econ, Finance, and Real Estate	Professor	BS, Florida State University PHD, Florida State University
ISTIAK, KHANDOKAR (kistiak@southalabama.edu)	Econ, Finance, and Real Estate	Associate Professor	BS, University of Dhaka MS, University of Dhaka MA, University of Arizona PHD, Univ of Calgary
JAIN, URVASHI (urvashijain@southalabama.edu)	Econ, Finance, and Real Estate	Assistant Professor	BA, St Stephens College MS, Indian Statistical Institute PHD, University of Southern CA
JOHNSON, YING HUANG (yhuang@southalabama.edu)	Econ, Finance, and Real Estate	Associate Professor	MS, University of Memphis MRCP, University of Memphis PHD, University of Memphis
LAWREY, CHRISTOPHER M (clawrey@southalabama.edu)	Econ, Finance, and Real Estate	Associate Professor	BS, Arkansas State University-Main MBA, Arkansas State University-Main PHD, University of Mississippi
LE, HUUBINH B (hble@southalabama.edu)	Econ, Finance, and Real Estate	Associate Professor	BS, Georgia State University PHD, Kansas State University
PENNYWELL, GWENDOLYN P. (gpennywell@southalabama.edu)	Econ, Finance, and Real Estate	Associate Professor	BS, Prairie View A & M University PHD, Georgia State University

SWOFFORD, JAMES L. Econ, Finance, and Real Estate  
(jswoffor@southalabama.edu)

WOOD, BOB G Econ, Finance, and Real Estate  
(bgwood@southalabama.edu)

Professor BA, University of Richmond  
MA, University of Florida  
PHD, University of Florida

Professor BS, Arkansas State University-Main  
MBA, Arkansas State University-  
Main  
PHD, Louisiana State University

## Economics & Finance (BSBA)

### Degree Requirements

#### Bachelor of Science Degree Requirements - Major in Economics and Finance

To graduate, students complete a minimum of 122 semester hours with an overall institution grade-point average (GPA) of 2.0 (38 hours of general education requirements and 84 hours of business courses). In addition, a grade of at least C is required in each of the Basic Business Techniques courses and a 2.0 GPA is required in the 300-level business core courses, and a 2.0 GPA is required for all courses counted in the Economics and Finance Major, which include the following:

##### Concentration in Economics

Code	Title	Hours
ECO 315	Intermediate Microeconomics	3
FIN 343 or ECO 340	Money Mkts and Fin Instit Money and Banking	3
ECO 316	Intermediate Macroeconomics	3
ECO 330	Current Global Economic Issues	3
ECO 491	History of Economic Thought -W	3
Select four electives from the following:		12
ECO 318	Prin of Managerial Economics	
ECO 322	Economics of Industrial Org	
ECO 323	Public Finance	
ECO 343	Labor Economics	
ECO 355	Sport & Entertainment Econ	
ECO 363	International Economics	
ECO 371	Economic Development	
ECO 372	Economics of Urban Development	
ECO 383	Economic History of the US	
ECO 390	Environmental Economics	
ECO 451	Mathematical Economics	
FIN 420	Investments	
FIN 430	Derivative Securities	
<b>Total Hours</b>		<b>27</b>

##### Concentration in Finance

Code	Title	Hours
ECO 315	Intermediate Microeconomics	3
FIN 343 or ECO 340	Money Mkts and Fin Instit Money and Banking	3
FIN 332	Multinational Finance	3
FIN 350	Fin Stmt Analysis & Corp Strat	3
FIN 410	Intermediate Bus Finance	3
FIN 411	Advanced Business Finance - W	3
FIN 420	Investments	3

Select two electives from the following:		6
FIN 344	Real Estate	
FIN 345	Principles of Insurance	
FIN 370	Short-Term Financial Managemnt	
FIN 421	Sec Analy-Portfolio Mgt	
FIN 425	Student Managed Invest Fund I	
FIN 426	Student Managed Invest Fund II	
FIN 430	Derivative Securities	
FIN 445	Life and Disability Insurance	
FIN 446	Real Estate Finance & Invest	
FIN 470	Depository Institution Mgt I	
FIN 471	Depository Institutions Mgt II	

**Total Hours** 27

##### Concentration in Real Estate

Code	Title	Hours
ECO 315	Intermediate Microeconomics	3
FIN 343 or ECO 340	Money Mkts and Fin Instit Money and Banking	3
FIN 344	Real Estate	3
FIN 444	Real Estate Valuation - W	3
FIN 446	Real Estate Finance & Invest	3
FIN 448	Real Estate Law	3

Select three electives from the following: 9

ECO 372	Economics of Urban Development	
FIN 345	Principles of Insurance	
FIN 350	Fin Stmt Analysis & Corp Strat	
FIN 420	Investments	
MGT 347	Franchising	
MKT 381	Professional Selling & Sales Management	

**Total Hours** 27

## Economics & Finance (BSBA) - Economics Concentration

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 761)		59-62
<b>Major Requirements</b>		
<i>Freshman Core</i>		
BUS 150	Intro to Business and Mgt (linkurl^../footnote1/^or Transfer Student Elective ) <sup>1</sup>	3
<i>Upper Division Business Core</i>		
A 2.0 GPA is required in the Upper Division Business Core		

A. Complete the following:		
ECO 453	Intro to Econometrics	3
B. Complete the following:		
FIN 315	Business Finance	3
MGT 300	Management Theory and Practice	3
MGT 305	Organizational Comm - W	3
MGT 325	Operations Management	3
MKT 320	Principles of Marketing	3
<i>Experiential Learning</i>		
A. Select three hours from the following:		
BUS 101	Prof Experience I	
BUS 201	Professional Experience II	
BUS 301	Professional Experience III	
BUS 302	Professional Preparation	
B. Select one of the following:		
ACC 496	Accounting Internship	
ECO 496	Economics Internship	
FIN 496	Finance Internship	
MGT 496	Management Internship	
MKT 496	Marketing Internship	
<i>Economic Concentration</i>		
A 2.0 GPA is required for the major courses		
A. Complete the following:		
ECO 315	Intermediate Microeconomics	3
ECO 316	Intermediate Macroeconomics	3
ECO 330	Current Global Economic Issues	3
ECO 491	History of Economic Thought -W	3
B. Complete the following:		
FIN 343	Money Mkts and Fin Instit	3
or ECO 340	Money and Banking	
C. Select four of the following:		
ECO 318	Prin of Managerial Economics	
ECO 322	Economics of Industrial Org	
ECO 323	Public Finance	
ECO 343	Labor Economics	
ECO 355	Sport & Entertainment Econ	
ECO 363	International Economics	
ECO 371	Economic Development	
ECO 372	Economics of Urban Development	
ECO 383	Economic History of the US	
ECO 390	Environmental Economics	
ECO 451	Mathematical Economics	
ECO 490	Special Topics	
FIN 420	Investments	
FIN 430	Derivative Securities	
<i>Business Electives</i>		
A. Select two courses from 300-494 Electives from ACC, ECO, FIN, MGT, MKT		
<i>Business Policy Capstone</i>		
A. Complete the following:		
MGT 485	Bus Policy in Global Eco - W	3
MGT 486	Undergraduate Comp Exam	0

Minor Requirements	
A minor is not required for this degree program	0
<b>Total Hours</b>	<b>122-125</b>

**Notes:**

\*Transfer credit will only be awarded for courses in the Economics Concentration if the course was taken at an AACSB accredited institution.

\*\*Only one internship may be counted towards a business degree. Internship courses may only be used to fulfill the Experiential Learning requirement and may not be used as business electives or to fulfill any other degree requirement.

**Footnote**

<sup>1</sup> BUS 150 or Transfer Student Elective for students transferring into the College with more than 45 hours. Students transferring with 46-60 hours are highly encouraged to take BUS 150.

**General Education Requirements**

Code	Title	Hours
<b>Area I - Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II - Humanities &amp; Fine Arts</b>		
A. Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/business/economics-finance-real-estate/footnote2/">http://bulletin.southalabama.edu/programs-az/business/economics-finance-real-estate/footnote2/</a> ) <sup>1</sup>		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
B. Select one of the following:		
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	
C. Select six hours from the following:		
AFR 101	Intro to African Amer Studies	
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARH 203	Survey of Non-Western Art	
ARS 101	Art Appreciation	
CLA 110	Intro Anc Greek Roman Culture	
CA 110	Public Speaking	
DRA 110	Introduction to Theatre	
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	

EH 226	Am Lit after 1865	PHL 120	Critical Thinking
EH 235	World Lit before 1650	PHL 121	Introduction to Logic
EH 236	World Lit after 1650	PHL 131	Introduction to Ethics
LG 101	Introductory Latin I	PHL 231	Social Ethics
LG 102	Introductory Latin II	PHL 240	Western Philosophy: Classical
LG 111	Introductory French I	REL 100	Intro to the Study of Religion
LG 112	Introductory French II	REL 200	Old Testament/Hebrew Bible
LG 121	Introductory Chinese I	REL 201	Survey of the New Testament
LG 122	Introductory Chinese II	<b>Area III – Natural Sciences &amp; Mathematics</b>	
LG 131	Introductory Spanish I	A. Complete the following:	
LG 132	Introductory Spanish II	MA 120	Calculus and Its Applications 3-4
LG 141	Intro Classical Greek I	or MA 125	Calculus I
LG 142	Intro Classical Greek II	B. Select 8-10 hours from the following: 8-10	
LG 151	Introductory German I	AN 121	Biological Anthropology
LG 152	Introductory German II	& 121L	and Biological Anthropology Lab
LG 153	Accelerated Intro German	BLY 101	Life Science I
LG 171	Introductory Russian I	& 101L	and Life Science I Laboratory
LG 172	Introductory Russian II	or BLY 121	General Biology I
LG 173	Accelerated Intro Russian	& 121L	and General Biology I Lab
LG 201	Intermediate Latin I	BLY 102	Life Science II
LG 202	Intermediate Latin II	& 102L	and Life Science II Lab
LG 211	Intermediate French I	or BLY 122	General Biology II
LG 212	Intermediate French II	& 122L	and General Biology II Laboratory
LG 213	Accelerated Inter French - H	CH 101	Survey of Inorg and Org Chem
LG 221	Intermediate Chinese I	& 101L	and Survey Inorg-Org Chem Lab
LG 222	Intermediate Chinese II	CH 131	General Chemistry I
LG 231	Intermediate Spanish I	& 131L	and General Chemistry I Lab
LG 232	Intermediate Spanish II	CH 132	General Chemistry II
LG 234	Inter Spanish Accel -H	& 132L	and General Chemistry II Lab
LG 241	Interm Classical Greek I	GEO 101	Environmental Geography
LG 242	Interm Classical Greek II	& 101L	and Environmental Geography Lab
LG 251	Intermediate German I	GEO 102	Earth and the Environment
LG 252	Intermediate German II	& 102L	and Earth and the Environment Lab
LG 271	Intermediate Russian I	GY 111	Physical Geology
LG 272	Intermediate Russian II	& 111L	and Physical Geology Lab
LG 273	Intensive Second Year Russian	GY 112	Earth History
LGS 101	Introductory Japanese I	& 112L	and Earth History Lab
LGS 102	Introductory Japanese II	MAS 134	Ocean Science
LGS 106	Introductory Arabic I	& 134L	and Ocean Science Lab
LGS 107	Introductory Arabic II	PH 101	Introduction to Astronomy
LGS 110	Intro American Sign Language I	& 101L	and Introduction to Astronomy Lab
LGS 111	Intro American Sign Lang II	PH 104	Concepts of Physics
LGS 171	Introductory Korean I	& 104L	and Concepts of Physics Laboratory
LGS 172	Introductory Korean II	PH 114	Physics with Algebra-Trig I
LGS 201	Intermediate Japanese I	& 114L	and Alg-Trig Based Physics I Lab
LGS 202	Intermediate Japanese II	PH 115	Physics with Algebra -Trig II
LGS 206	Intermediate Arabic I	& 115L	and Alg-Trig Based Physics II Lab
LGS 207	Intermediate Arabic II	PH 201	Calculus-Based Physics I
LGS 210	Intermediate ASL I	& 201L	and Calculus-Based Physics I Lab
LGS 211	Intermediate ASL II	PH 202	Calculus-Based Physics II
MUL 101	Introduction to Music	& 202L	and Calculus-Based Physics II Lab
PHL 110	Introduction to Philosophy	<b>Area IV – History, Social &amp; Behavioral Sciences (<a href="http://bulletin.southalabama.edu/programs-az/business/economics-finance-real-estate/footnote2/">http://bulletin.southalabama.edu/programs-az/business/economics-finance-real-estate/footnote2/</a>)<sup>1</sup></b>	
		A. Select one of the following: 3	

HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	

B. Select one of the following: 3

AN 100	Intro to Cultural Anthropology	
AN 101	Intro Archaeology-Bio Anthro	
CA 100	Intro to Communication	
CA 211	Interpersonal Comm	
CJ 105	Introduction to Criminal Justice	
GEO 114	People, Places, Environment	
GEO 115	World Regional Geography	
GS 101	Intro to Gender Studies	
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
IS 100	Global Issues	
IST 201	Seasons of Life	
NAS 101	Intro Native American Studies	
PSC 130	Intro to US Government	
PSY 120	Introduction to Psychology	
PSY 250	Life Span Development	
SY 109	Introductory Sociology	
SY 112	Social Problems	

C. Complete the following:

ECO 215	Prin of Microeconomics	3
ECO 216	Prin of Macroeconomics	3

#### Area V 200-Level Business Core

A grade of at least C is required in each course

A. Complete the following:

ACC 211	Financial Accounting	3
ACC 212	Managerial Accounting	3

B. Complete the following:

BUS 245	Data Analytics I	3
BUS 255	Data Analytics II	3

C. Complete the following:

BUS 265	Legal Environ of Business I	3
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D. Complete the following:

CIS 250	Advanced Comp Applications	3
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**Total Hours** 59-62

#### Footnote

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 135 & HY 136).

## Graduation Plan

(122 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I	3
BUS 150	Intro to Business and Mgt	3
MA 120 or MA 125	Calculus and Its Applications or Calculus I	3-4
Fine Art	Area II <sup>1</sup>	3
History	Area IV <sup>1</sup>	3
BUS 101	Prof Experience I	1
<b>Hours</b>		<b>16-17</b>
<b>Spring</b>		
EH 102	English Composition II	3
ECO 215	Prin of Microeconomics	3
CIS 250	Advanced Comp Applications	3
Humanities or Fine Art	Area II <sup>1</sup>	3
Natural Science + Lab	Area III <sup>1</sup>	4
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
ACC 211	Financial Accounting	3
BUS 245	Data Analytics I	3
ECO 216	Prin of Macroeconomics	3
Literature	Area II <sup>1</sup>	3
Natural Science + Lab	Area III <sup>1</sup>	4
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ACC 212	Managerial Accounting	3
BUS 255	Data Analytics II	3
BUS 265	Legal Environ of Business I	3
BUS 201	Professional Experience II	1
2nd Literature or 2nd History	Area II or IV <sup>2</sup>	3
Gen Ed	Area II or IV <sup>3</sup>	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
MGT 300	Management Theory and Practice	3
MGT 305	Organizational Comm - W	3
BUS 301	Professional Experience III	1
MKT 320	Principles of Marketing	3
ECO 315	Intermediate Microeconomics	3
FIN 315	Business Finance	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ECO 316	Intermediate Macroeconomics	3
ECO Elective #1 <sup>4</sup>		3
Business Elective #1 <sup>5</sup>		3
MGT 325	Operations Management	3
ECO 453	Intro to Econometrics	3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
ECO 330	Current Global Economic Issues	3
ECO Elective #2 <sup>4</sup>		3
ECO Elective #3 <sup>4</sup>		3
FIN 343	Money Mkts and Fin Instit	3
ECO 496	Economics Internship	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ECO 491	History of Economic Thought -W	3
ECO Elective #4 <sup>4</sup>		3

Business Elective #2 <sup>5</sup>		3
MGT 485	Bus Policy in Global Eco - W	3
MGT 486	Undergraduate Comp Exam	0
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>122-123</b>

<sup>1</sup> See General Education Requirements for options.

<sup>2</sup> All students must complete either a literature or a history sequence.

<sup>3</sup> If opted for Literature sequence, need Area IV; if opted for History sequence, need Area II.

<sup>4</sup> Any Economics course above ECO 300 not used to fulfill another requirement.

<sup>5</sup> Anything in MCOB at the 300 or 400 level not used to fulfill another requirement except internship courses.

## Economics & Finance (BSBA) - Finance Concentration

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 764)		59-62
<b>Major Requirements</b>		
<i>Freshman Core</i>		
A. Complete the following:		
BUS 150	Intro to Business and Mgt (linkurl^../footnote1/^or Transfer Student Elective) <sup>1</sup>	3
<i>Upper Division Business Core</i>		
A. Complete the following:		
ECO 453	Intro to Econometrics	3
B. Complete the following:		
FIN 315	Business Finance	3
MGT 300	Management Theory and Practice	3
MGT 305	Organizational Comm - W	3
MGT 325	Operations Management	3
MKT 320	Principles of Marketing	3
<i>Experiential Learning</i>		
A. Select three hours from the following:		
BUS 101	Prof Experience I	
BUS 201	Professional Experience II	
BUS 301	Professional Experience III	
BUS 302	Professional Preparation	
B. Select one of the following:		
ACC 496	Accounting Internship	3
ECO 496	Economics Internship	
FIN 496	Finance Internship	
MGT 496	Management Internship	
MKT 496	Marketing Internship	
<i>Finance Concentration</i>		
A. Complete the following:		
ECO 315	Intermediate Microeconomics	3
FIN 350	Fin Stmt Analysis & Corp Strat	3
FIN 410	Intermediate Bus Finance	3

FIN 411	Advanced Business Finance - W	3
FIN 420	Investments	3

B. Complete the following:

FIN 332	Multinational Finance	3
or FIN 430	Derivative Securities	
FIN 343	Money Mkts and Fin Instit	3
or ECO 340	Money and Banking	

C. Select two of the following:

FIN 344	Real Estate	
FIN 345	Principles of Insurance	
FIN 370	Short-Term Financial Managemnt	
FIN 421	Sec Analy-Portfolio Mgt	
FIN 425	Student Managed Invest Fund I	
FIN 426	Student Managed Invest Fund II	
FIN 430	Derivative Securities	
FIN 445	Life and Disability Insurance	
FIN 446	Real Estate Finance & Invest	
FIN 470	Depository Institution Mgt I	
FIN 471	Depository Institutions Mgt II	
FIN 490	Special Topics	

*Business Electives*

A. Select two courses from 300-494 Electives from ACC, ECO, FIN, MGT, MKT

*Business Policy Capstone*

A. Complete the following:

MGT 485	Bus Policy in Global Eco - W	3
MGT 486	Undergraduate Comp Exam	0

**Minor Requirements**

A minor is not required for this degree program

**Total Hours** 122-125

**Notes:**

\*Transfer credit will only be awarded for courses in the Finance Concentration if the course was taken at an AACSB accredited institution.

\*\*Only one internship may be counted towards a business degree.

Internship courses may only be used to fulfill the Experiential Learning requirement and may not be used as business electives or to fulfill any other degree requirement.

**Footnote**

<sup>1</sup> BUS 150 or Transfer Student Elective for students transferring into the College with more than 45 hours. Students transferring with 46-60 hours are highly encouraged to take BUS 150.

### General Education Requirements

Code	Title	Hours
<b>Area I - Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II - Humanities &amp; Fine Arts</b>		

A. Select one of the following: (<http://bulletin.southalabama.edu/programs-az/business/economics-finance-real-estate/footnote2/>)<sup>1</sup> 3

EH 215	Brit Lit before 1785
EH 216	Brit Lit after 1785
EH 225	Am Lit before 1865
EH 226	Am Lit after 1865
EH 235	World Lit before 1650
EH 236	World Lit after 1650

B. Select one of the following: 3

ARH 100	Survey of Art
ARH 103	Art History I
ARH 123	Art History II
ARS 101	Art Appreciation
DRA 110	Introduction to Theatre
MUL 101	Introduction to Music

C. Select six hours from the following: 6

AFR 101	Intro to African Amer Studies
ARH 100	Survey of Art
ARH 103	Art History I
ARH 123	Art History II
ARH 203	Survey of Non-Western Art
ARS 101	Art Appreciation
CLA 110	Intro Anc Greek Roman Culture
CA 110	Public Speaking
DRA 110	Introduction to Theatre
EH 215	Brit Lit before 1785
EH 216	Brit Lit after 1785
EH 225	Am Lit before 1865
EH 226	Am Lit after 1865
EH 235	World Lit before 1650
EH 236	World Lit after 1650
LG 101	Introductory Latin I
LG 102	Introductory Latin II
LG 111	Introductory French I
LG 112	Introductory French II
LG 121	Introductory Chinese I
LG 122	Introductory Chinese II
LG 131	Introductory Spanish I
LG 132	Introductory Spanish II
LG 141	Intro Classical Greek I
LG 142	Intro Classical Greek II
LG 151	Introductory German I
LG 152	Introductory German II
LG 153	Accelerated Intro German
LG 171	Introductory Russian I
LG 172	Introductory Russian II
LG 173	Accelerated Intro Russian
LG 201	Intermediate Latin I
LG 202	Intermediate Latin II
LG 211	Intermediate French I
LG 212	Intermediate French II
LG 213	Accelerated Inter French - H

LG 221	Intermediate Chinese I
LG 222	Intermediate Chinese II
LG 231	Intermediate Spanish I
LG 232	Intermediate Spanish II
LG 234	Inter Spanish Accel -H
LG 241	Interm Classical Greek I
LG 242	Interm Classical Greek II
LG 251	Intermediate German I
LG 252	Intermediate German II
LG 271	Intermediate Russian I
LG 272	Intermediate Russian II
LG 273	Intensive Second Year Russian
LGS 101	Introductory Japanese I
LGS 102	Introductory Japanese II
LGS 106	Introductory Arabic I
LGS 107	Introductory Arabic II
LGS 110	Intro American Sign Language I
LGS 111	Intro American Sign Lang II
LGS 171	Introductory Korean I
LGS 172	Introductory Korean II
LGS 201	Intermediate Japanese I
LGS 202	Intermediate Japanese II
LGS 206	Intermediate Arabic I
LGS 207	Intermediate Arabic II
LGS 210	Intermediate ASL I
LGS 211	Intermediate ASL II
MUL 101	Introduction to Music
PHL 110	Introduction to Philosophy
PHL 120	Critical Thinking
PHL 121	Introduction to Logic
PHL 131	Introduction to Ethics
PHL 231	Social Ethics
PHL 240	Western Philosophy: Classical
REL 100	Intro to the Study of Religion
REL 200	Old Testament/Hebrew Bible
REL 201	Survey of the New Testament

### Area III – Natural Sciences & Mathematics

A. Complete the following:

MA 120	Calculus and Its Applications	3-4
or MA 125	Calculus I	

B. Select 8-10 hours from the following: 8-10

AN 121	Biological Anthropology	
& 121L	and Biological Anthropology Lab	
BLY 101	Life Science I	
& 101L	and Life Science I Laboratory	
or BLY 121	General Biology I	
& 121L	and General Biology I Lab	
BLY 102	Life Science II	
& 102L	and Life Science II Lab	
or BLY 122	General Biology II	
& 122L	and General Biology II Laboratory	
CH 101	Survey of Inorg and Org Chem	
& 101L	and Survey Inorg-Org Chem Lab	

CH 131 & 131L	General Chemistry I and General Chemistry I Lab
CH 132 & 132L	General Chemistry II and General Chemistry II Lab
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab
GY 111 & 111L	Physical Geology and Physical Geology Lab
GY 112 & 112L	Earth History and Earth History Lab
MAS 134 & 134L	Ocean Science and Ocean Science Lab
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab

**Area IV – History, Social & Behavioral Sciences (<http://bulletin.southalabama.edu/programs-az/business/economics-finance-real-estate/footnote2/>)<sup>1</sup>**

A. Select one of the following: 3	
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
B. Select one of the following: 3	
AN 100	Intro to Cultural Anthropology
AN 101	Intro Archaeology-Bio Anthro
CA 100	Intro to Communication
CA 211	Interpersonal Comm
CJ 105	Introduction to Criminal Justice
GEO 114	People, Places, Environment
GEO 115	World Regional Geography
GS 101	Intro to Gender Studies
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
IS 100	Global Issues
IST 201	Seasons of Life
NAS 101	Intro Native American Studies
PSC 130	Intro to US Government
PSY 120	Introduction to Psychology
PSY 250	Life Span Development
SY 109	Introductory Sociology

SY 112	Social Problems	
C. Complete the following:		
ECO 215	Prin of Microeconomics	3
ECO 216	Prin of Macroeconomics	3
<b>Area V 200-Level Business Core</b>		
A. Complete the following:		
ACC 211	Financial Accounting	3
ACC 212	Managerial Accounting	3
B. Complete the following:		
BUS 245	Data Analytics I	3
BUS 255	Data Analytics II	3
C. Complete the following:		
BUS 265	Legal Environ of Business I	3
D. Complete the following:		
CIS 250	Advanced Comp Applications	3
<b>Total Hours</b>		<b>59-62</b>

**Footnote**

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 135 & HY 136).

**Graduation Plan**

(122 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I	3
BUS 150	Intro to Business and Mgt	3
MA 120 or MA 125	Calculus and Its Applications or Calculus I	3-4
Fine Arts	Area II <sup>1</sup>	3
History	Area IV <sup>1</sup>	3
BUS 101	Prof Experience I	1
<b>Hours</b>		<b>16-17</b>
<b>Spring</b>		
EH 102	English Composition II	3
ECO 215	Prin of Microeconomics	3
CIS 250	Advanced Comp Applications	3
Humanities or Fine Art	Area II <sup>1</sup>	3
Natural Science + Lab	Area III <sup>1</sup>	4
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
ACC 211	Financial Accounting	3
BUS 245	Data Analytics I	3
ECO 216	Prin of Macroeconomics	3
Literature	Area II <sup>1</sup>	3
Natural Science + Lab	Area III <sup>1</sup>	4
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ACC 212	Managerial Accounting	3
BUS 255	Data Analytics II	3
BUS 265	Legal Environ of Business I	3
BUS 201	Professional Experience II	1

2nd Literature or 2nd History	Area II or IV <sup>2</sup>	3
FIN 315	Business Finance	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
MGT 300	Management Theory and Practice	3
MGT 305	Organizational Comm - W	3
BUS 301	Professional Experience III	1
FIN 350	Fin Stmt Analysis & Corp Strat	3
ECO 315	Intermediate Microeconomics	3
Gen Ed	Area II or IV <sup>3</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
MKT 320	Principles of Marketing	3
FIN 420	Investments	3
Business Elective #1 <sup>4</sup>		3
FIN 332	Multinational Finance	3
ECO 453	Intro to Econometrics	3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
MGT 325	Operations Management	3
FIN 410	Intermediate Bus Finance	3
FIN Elective #1 <sup>5</sup>		3
FIN 343	Money Mkts and Fin Instit	3
FIN 496	Finance Internship	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
FIN 411	Advanced Business Finance - W	3
FIN Elective #2 <sup>5</sup>		3
Business Elective #2 <sup>4</sup>		3
MGT 485	Bus Policy in Global Eco - W	3
MGT 486	Undergraduate Comp Exam	0
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>122-123</b>

<sup>1</sup> See General Education Requirements for options.

<sup>2</sup> All students must complete either a literature or a history sequence.

<sup>3</sup> If opted for Literature sequence, need Area IV; If opted for History sequence, need Area II.

<sup>4</sup> Anything in MCOB at the 300 or 400 level not used to fulfill another requirement except internship courses.

<sup>5</sup> Any finance course numbered above FIN 315 not used to fulfill another requirement.

## Economics & Finance (BSBA) - Real Estate Concentration Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 768)		59-62
<b>Major Requirements</b>		
<i>Freshman Core</i>		
A. Complete the following:		
BUS 150	Intro to Business and Mgt (linkurl^../footnote1/^or Transfer Student Elective) <sup>1</sup>	3

### Upper Division Business Core

<b>A. Complete the following:</b>		
ECO 453	Intro to Econometrics	3
<b>B. Complete the following:</b>		
FIN 315	Business Finance	3
MGT 300	Management Theory and Practice	3
MGT 305	Organizational Comm - W	3
MGT 325	Operations Management	3
MKT 320	Principles of Marketing	3
<i>Experiential Learning</i>		
<b>A. Select three hours from the following:</b>		
BUS 101	Prof Experience I	
BUS 201	Professional Experience II	
BUS 301	Professional Experience III	
BUS 302	Professional Preparation	
<b>B. Select one of the following:</b>		
ACC 496	Accounting Internship	
ECO 496	Economics Internship	
FIN 496	Finance Internship	
MGT 496	Management Internship	
MKT 496	Marketing Internship	

### Real Estate Concentration

<b>A. Complete the following:</b>		
ECO 315	Intermediate Microeconomics	3
FIN 344	Real Estate	3
FIN 444	Real Estate Valuation - W	3
FIN 446	Real Estate Finance & Invest	3
FIN 448	Real Estate Law	3
<b>B. Complete the following:</b>		
FIN 343	Money Mkts and Fin Instit	3
or ECO 340	Money and Banking	
<b>C. Select two of the following:</b>		
ECO 372	Economics of Urban Development	
FIN 345	Principles of Insurance	
FIN 442	Real Estate Dev & Prop Mgmt	
FIN 350	Fin Stmt Analysis & Corp Strat	
FIN 420	Investments	
MGT 347	Franchising	
MKT 381	Professional Selling & Sales Management	

### Business Electives

A. Select two courses from 300-494 Electives from ACC, ECO, FIN, MGT, MKT	6
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### Business Policy Capstone

<b>A. Complete the following:</b>		
MGT 485	Bus Policy in Global Eco - W	3
MGT 486	Undergraduate Comp Exam	0

### Minor Requirements

A minor is not required for this degree program	0
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<b>Total Hours</b>	<b>119-122</b>
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**Notes:**

\*Transfer credit will only be awarded for courses in the Real Estate Concentration if the course was taken at an AACSB accredited institution.

\*\*Only one internship may be counted towards a business degree. Internship courses may only be used to fulfill the Experiential Learning requirement and may not be used as business electives or to fulfill any other degree requirement.

**Footnote**

<sup>1</sup> BUS 150 or Transfer Student Elective for students transferring into the College with more than 45 hours. Students transferring with 46-60 hours are highly encouraged to take BUS 150.

**General Education Requirements**

Code	Title	Hours
<b>Area I - Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II - Humanities &amp; Fine Arts</b>		
A. Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/business/economics-finance-real-estate/footnote2/">http://bulletin.southalabama.edu/programs-az/business/economics-finance-real-estate/footnote2/</a> ) <sup>1</sup>		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
B. Select one of the following:		
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	
C. Select six hours from the following:		
AFR 101	Intro to African Amer Studies	6
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARH 203	Survey of Non-Western Art	
ARS 101	Art Appreciation	
CLA 110	Intro Anc Greek Roman Culture	
CA 110	Public Speaking	
DRA 110	Introduction to Theatre	
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	

LG 101	Introductory Latin I
LG 102	Introductory Latin II
LG 111	Introductory French I
LG 112	Introductory French II
LG 121	Introductory Chinese I
LG 122	Introductory Chinese II
LG 131	Introductory Spanish I
LG 132	Introductory Spanish II
LG 141	Intro Classical Greek I
LG 142	Intro Classical Greek II
LG 151	Introductory German I
LG 152	Introductory German II
LG 153	Accelerated Intro German
LG 171	Introductory Russian I
LG 172	Introductory Russian II
LG 173	Accelerated Intro Russian
LG 201	Intermediate Latin I
LG 202	Intermediate Latin II
LG 211	Intermediate French I
LG 212	Intermediate French II
LG 213	Accelerated Inter French - H
LG 221	Intermediate Chinese I
LG 222	Intermediate Chinese II
LG 231	Intermediate Spanish I
LG 232	Intermediate Spanish II
LG 234	Inter Spanish Accel -H
LG 241	Interm Classical Greek I
LG 242	Interm Classical Greek II
LG 251	Intermediate German I
LG 252	Intermediate German II
LG 271	Intermediate Russian I
LG 272	Intermediate Russian II
LG 273	Intensive Second Year Russian
LGS 101	Introductory Japanese I
LGS 102	Introductory Japanese II
LGS 106	Introductory Arabic I
LGS 107	Introductory Arabic II
LGS 110	Intro American Sign Language I
LGS 111	Intro American Sign Lang II
LGS 171	Introductory Korean I
LGS 172	Introductory Korean II
LGS 201	Intermediate Japanese I
LGS 202	Intermediate Japanese II
LGS 206	Intermediate Arabic I
LGS 207	Intermediate Arabic II
LGS 210	Intermediate ASL I
LGS 211	Intermediate ASL II
MUL 101	Introduction to Music
PHL 110	Introduction to Philosophy
PHL 120	Critical Thinking
PHL 121	Introduction to Logic
PHL 131	Introduction to Ethics

PHL 231	Social Ethics
PHL 240	Western Philosophy: Classical
REL 100	Intro to the Study of Religion
REL 200	Old Testament/Hebrew Bible
REL 201	Survey of the New Testament

**Area III – Natural Sciences & Mathematics**

A. Complete the following:

MA 120	Calculus and Its Applications	3-4
or MA 125	Calculus I	

B. Select 8-10 hours from the following: 8-10

AN 121 & 121L	Biological Anthropology and Biological Anthropology Lab
BLY 101 & 101L	Life Science I and Life Science I Laboratory
or BLY 121 & 121L	General Biology I and General Biology I Lab
BLY 102 & 102L	Life Science II and Life Science II Lab
or BLY 122 & 122L	General Biology II and General Biology II Laboratory
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab
CH 131 & 131L	General Chemistry I and General Chemistry I Lab
CH 132 & 132L	General Chemistry II and General Chemistry II Lab
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab
GY 111 & 111L	Physical Geology and Physical Geology Lab
GY 112 & 112L	Earth History and Earth History Lab
MAS 134 & 134L	Ocean Science and Ocean Science Lab
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab

**Area IV – History, Social & Behavioral Sciences (<http://bulletin.southalabama.edu/programs-az/business/economics-finance-real-estate/footnote2/>)<sup>1</sup>**

A. Select one of the following: 3

HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 135	US History to 1877

HY 136	US History since 1877
B. Select one of the following: 3	
AN 100	Intro to Cultural Anthropology
AN 101	Intro Archaeology-Bio Anthro
CA 100	Intro to Communication
CA 211	Interpersonal Comm
CJ 105	Introduction to Criminal Justice
GEO 114	People, Places, Environment
GEO 115	World Regional Geography
GS 101	Intro to Gender Studies
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
IS 100	Global Issues
IST 201	Seasons of Life
NAS 101	Intro Native American Studies
PSC 130	Intro to US Government
PSY 120	Introduction to Psychology
PSY 250	Life Span Development
SY 109	Introductory Sociology
SY 112	Social Problems

C. Complete the following:

ECO 215	Prin of Microeconomics	3
ECO 216	Prin of Macroeconomics	3

**Area V 200-Level Business Core**

A. Complete the following:

ACC 211	Financial Accounting	3
ACC 212	Managerial Accounting	3

B. Complete the following:

BUS 245	Data Analytics I	3
BUS 255	Data Analytics II	3

C. Complete the following:

BUS 265	Legal Environ of Business I	3
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D. Complete the following:

CIS 250	Advanced Comp Applications	3
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**Total Hours 59-62****Footnote**

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 135 & HY 136).

**Graduation Plan**

(122 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I	3
BUS 150	Intro to Business and Mgt	3
MA 120	Calculus and Its Applications	3-4
or MA 125	or Calculus I	
Fine Arts	Area II <sup>1</sup>	3

History	Area IV <sup>1</sup>	3
BUS 101	Prof Experience I	1
<b>Hours</b>		<b>16-17</b>
<b>Spring</b>		
EH 102	English Composition II	3
ECO 215	Prin of Microeconomics	3
CIS 250	Advanced Comp Applications	3
Humanities or Fine Art	Area II <sup>1</sup>	3
Natural Science + Lab	Area III <sup>1</sup>	4
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
ACC 211	Financial Accounting	3
BUS 245	Data Analytics I	3
ECO 216	Prin of Macroeconomics	3
Literature	Area II <sup>1</sup>	3
Natural Science + Lab	Area III <sup>1</sup>	4
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ACC 212	Managerial Accounting	3
BUS 255	Data Analytics II	3
BUS 265	Legal Environ of Business I	3
BUS 201	Professional Experience II	1
2nd Literature or 2nd History	Area II or IV <sup>2</sup>	3
FIN 344	Real Estate	3
FIN 346	Alabama Real Estate Law & Reg (suggested)	0-1
<b>Hours</b>		<b>16-17</b>
<b>Third Year</b>		
<b>Fall</b>		
MGT 300	Management Theory and Practice	3
MGT 305	Organizational Comm - W	3
BUS 301	Professional Experience III	1
MKT 320	Principles of Marketing	3
Gen Ed	Area II or IV <sup>3</sup>	3
FIN 315	Business Finance	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Real Estate Elective #1 <sup>4</sup>		3
FIN 444	Real Estate Valuation - W	3
Business Elective #1 <sup>5</sup>		3
MGT 325	Operations Management	3
ECO 453	Intro to Econometrics	3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
ECO 315	Intermediate Microeconomics	3
FIN 343	Money Mkts and Fin Instit	3
FIN 448	Real Estate Law	3
FIN 446	Real Estate Finance & Invest	3
FIN 496	Finance Internship	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Real Estate Elective #2 <sup>4</sup>		3
Real Estate Elective #3 <sup>4</sup>		3
Business Elective #2 <sup>5</sup>		3
MGT 486	Undergraduate Comp Exam	0
<b>Hours</b>		<b>9</b>
<b>Total Hours</b>		<b>119-121</b>

<sup>1</sup> See General Education Requirements for options.

<sup>2</sup> If opted for Literature sequence, need Area IV; if opted for History sequence, need Area II.

<sup>3</sup> All students must complete either a literature or a history sequence.

<sup>4</sup> Choose from ECO 372, FIN 345, FIN 350, FIN 420, MGT 347, MKT 381.FIN 442

<sup>5</sup> Anything in MCOB at the 300 or 400 level not used to fulfill another requirement.

## Economics for Business Majors Minor Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

Code	Title	Hours
ECO 215	Prin of Microeconomics	3
ECO 216	Prin of Macroeconomics	3
ECO 315	Intermediate Microeconomics	3
or ECO 316	Intermediate Macroeconomics	
Select nine semester hours of upper-level Economics Electives numbered 301 or above		9
<b>Total Hours</b>		<b>18</b>

## Economics for Non-Business Majors Minor Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

Code	Title	Hours
ECO 215	Prin of Microeconomics	3
ECO 216	Prin of Macroeconomics	3
ECO 315	Intermediate Microeconomics	3
or ECO 316	Intermediate Macroeconomics	
Select nine semester hours from upper-level Economics Electives numbered 301 or above		9
<b>Total Hours</b>		<b>18</b>

## Finance for Business Majors Minor Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

Code	Title	Hours
FIN 315	Business Finance	3
ECO 215	Prin of Microeconomics	3
Select 12 semester hours from upper-level Finance Electives numbered FIN 315		12
<b>Total Hours</b>		<b>18</b>

## Finance for Non-Business Majors Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

Code	Title	Hours
ACC 211	Financial Accounting	3
ECO 215	Prin of Microeconomics	3
FIN 315	Business Finance	3
FIN 420	Investments	3
Select six semester hours from upper-level Finance Electives numbered 300 or above		6
<b>Total Hours</b>		<b>18</b>

## Real Estate for Business Majors Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

Code	Title	Hours
ECO 216	Prin of Macroeconomics	3
FIN 344	Real Estate	3
FIN 442	Real Estate Dev & Prop Mgmt	3
FIN 444	Real Estate Valuation - W	3
FIN 446	Real Estate Finance & Invest	3
FIN 448	Real Estate Law	3
<b>Total Hours</b>		<b>18</b>

## Real Estate for Non-Business Majors Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

Code	Title	Hours
FIN 344	Real Estate	3
FIN 442	Real Estate Dev & Prop Mgmt	3
FIN 444	Real Estate Valuation - W	3
FIN 446	Real Estate Finance & Invest	3
FIN 448	Real Estate Law	3
Select one of the following Upper Level Electives:		3
FIN 300	Personal Finance	
FIN 343	Money Mkts and Fin Instit	
	or ECO 340 Money and Banking	
FIN 345	Principles of Insurance	

ECO 215	Prin of Microeconomics	
ECO 216	Prin of Macroeconomics	
ECO 371	Economic Development	
ECO 372	Economics of Urban Development	
ECO 390	Environmental Economics	
<b>Total Hours</b>		<b>18</b>

## Management

### Department Information

(251) 460-6411

Department of Management website  
<https://www.southalabama.edu/colleges/mcob/management/index.html> (<https://www.southalabama.edu/colleges/mcob/management/>)

Title	Name
Interim Chair	William Gillis
Professor Emeritus	Paul Pietri, Carl Moore, Robert Shearer, Donna Retzlaff-Roberts, Marjorie Icenogle, Ron Eastburn, Kelly Woodford
Professors	Finney, Gillis, Maes, Mosley, Stefanone (Brouer), Turnipseed
Associate Professor	Nelson, Smith M., Wassenaar
Assistant Professors	Wu, Zoghby
Instructor	Hunt, Smith D.

"Management is doing things right; leadership is doing the right things." - Peter Drucker

### Discover Management

A majority of our faculty has extensive practical experience in their fields. They've dealt first hand with the challenges businesses and corporations face, and have a passion for sharing their knowledge. They're committed to nurturing the professional development of students so they graduate with the skills, initiative, integrity and sense of teamwork required in the workplace.

The Department of Management has the following degree options: Entrepreneurship, General Management, and Human Resource Management. The department also manages the On-line General Business Major. Transfer credits for upper division major courses will only be accepted from AACSB accredited institutions.

### Entrepreneurship Concentration

Entrepreneurship is the key to economic growth for the United States and the Central Gulf Coast region. The Entrepreneurship concentration is designed to create an "innovation" focused mindset that produces entrepreneurs and entrepreneurial leaders in ALL sectors of the society including: starting businesses, working in financing careers, innovative educators, franchise owners, corporate entrepreneurs, economic development officials and social entrepreneurs. The concentration allows students to choose a combination of courses that best match their interests and entrepreneurial opportunities.

## General Management Concentration

The General Management concentration offers courses designed to give students a solid foundation in the field of Management and enable them to become effective managers, problem-solvers, and decision-makers in the world of business, industry, and government. Emphasis is placed upon problem solving, and managerial decision-making. The thrust of the curriculum is to give students insight into the means for improving the productivity and efficiency of modern organizations.

## Human Resource Management Concentration

Managers have become aware of the significant impact of effective utilization of the human resources in an organization. As a result, the Human Resource Manager has become a key person on the top management team. The Human Resource Management concentration provides students with the skills and knowledge to become a proficient practitioner in this leading organizational field.

## On-line General Business Major

The on-line general business major is designed for students that have completed, or are in the process of completing, the freshman and sophomore level degree requirements and who desire to complete a business degree through the on-line delivery of the junior and senior level requirements.

The program assumes the student has completed 62 credit hours of general education and sophomore level business requirements. Students enrolled in the general business on-line degree program must complete 60 credit hours of junior and senior requirements and all of these courses are available on-line each year, but not every semester.

The on-line courses curriculum allows the student to complete the program in two years or five semesters. Although the curriculum is set up for a five semester sequence, students are not required to complete the courses in the listed sequence. Additionally, students are not required to enroll in a certain number of courses each semester to participate in the on-line degree program.

For additional information about the on-line program or for academic advising, please contact the:

Office of Student Services  
Mitchell College of Business  
MCOB 110  
Phone: (251) 460-7167  
E-mail: [mcobadviser@southalabama.edu](mailto:mcobadviser@southalabama.edu)

## Degrees, Programs, or Concentrations

- Entrepreneurship for Non-Business Majors Minor (p. 780)
- General Business (BSBA) (p. 780)
- General Business for Non-Business Majors Minor (p. 783)
- Industrial-Organizational Psychology Minor (p. 783)
- Management (BSBA) (p. 784)
- Management (BSBA) - Entrepreneurship Concentration (p. 786)
- Management (BSBA) - General Management Concentration (p. 789)
- Management (BSBA) - Human Resources Concentration (p. 793)
- Management for Business Major Minor (p. 796)
- Management for Non-Business Majors Minor (p. 796)

## Courses

### Business (BUS)

#### BUS 101 Prof Experience I 1 cr

An introduction to career success tools including: personality and career interest inventories, steps to succeed basic resume preparation, business ethics, personal branding, university and community involvement and other career preparation activities. This course is designed for students in their first and second semester within the MCOB.

**Prerequisite:** EH 101 (may be taken concurrently) Minimum Grade of C or EH 102 (may be taken concurrently) Minimum Grade of C

#### BUS 150 Intro to Business and Mgt 3 cr

A survey of the field of business, including profit-seeking firms, not-for-profit organizations, and new businesses created by entrepreneurs. Emphasis on the business environment, organization and management, current economic and international issues, and career opportunities. Societal and ethical issues are also examined. Open to University of South Alabama freshmen only.

**Prerequisite:** EH 101 (may be taken concurrently) Minimum Grade of C or EH 102 (may be taken concurrently) Minimum Grade of C

#### BUS 201 Professional Experience II 1 cr

Continued introduction to Career success tools including: resume building activities, cover letter and references development, career for a day shadowing, speed branding, dress for success, networking, career fair tools for success, university and community involvement and other career preparation activities. Prerequisite: C or better in BUS 101, Sophomore standing.

**Prerequisite:** BUS 101 Minimum Grade of C

#### BUS 245 Data Analytics I 3 cr

An introduction to data analytics in business that includes analysis to make data driven business decisions. This course utilizes statistical applications in business problems solving using descriptive statistics, probability theory, sampling distributions, methods of estimation, and tests of hypotheses. The course introduces students to basic predictive business modeling, and the communication of analytical results.

**Prerequisite:** UTM 75 or MMT 080 or A02 23 or MA 112 Minimum Grade of D or MA 113 Minimum Grade of D or MA 115 Minimum Grade of D or MA 120 Minimum Grade of D or MA 121 Minimum Grade of D or MA 125 Minimum Grade of D or MA 126 Minimum Grade of D or MA 131 Minimum Grade of D or MA 132 Minimum Grade of D or MA 171 Minimum Grade of D or MA 172 Minimum Grade of D or MA 287 Minimum Grade of D

#### BUS 255 Data Analytics II 3 cr

A second course in quantitative data analytics in business decision making utilizing methods of analysis including statistical inference, predictive, modeling, forecasting, correlation and regression analysis. It further develops fundamental knowledge and skills for making data driven business decisions including the use of computer applications for problem solving. This course relies heavily on project based learning to provide students with experience of solving data based business problems.

**Prerequisite:** (BUS 245 Minimum Grade of C or ST 175 Minimum Grade of D or ST 210 Minimum Grade of D) and (UTM 75 or (MA 112 Minimum Grade of D or MA 171 Minimum Grade of D) or (MA 113 Minimum Grade of D or MA 172 Minimum Grade of D) or (MA 115 Minimum Grade of D or MA 121 Minimum Grade of D) or (MA 120 Minimum Grade of D or MA 287 Minimum Grade of D) or (MA 125 Minimum Grade of D or MA 132 Minimum Grade of D) or (MA 126 Minimum Grade of D or MA 233 Minimum Grade of D))

**BUS 265 Legal Environ of Business I 3 cr**

A study of the global legal environment in which contemporary American business functions, including a review of legal thought and ethical considerations and the foundations and impacts of governmental regulation in areas such as labor and employment, environmental concerns, consumer protection, and antitrust. Contemporary issues, domestic and international concepts and institutions, and social forces that shape the legal environment are emphasized. Requires sophomore standing

**BUS 301 Professional Experience III 1 cr**

Career success tools including: personal professional strategic plan development, mock interviewing, dining etiquette, personal and professional mentoring, job search, application, and acceptance, job search ethics, creating a career plan, university and community involvement and other career preparation activities. Prerequisite: C or better in BUS 201, Junior standing.

**Prerequisite:** BUS 201 Minimum Grade of C

**BUS 302 Professional Preparation 3 cr**

Career success tools including personal professional strategic plan development, interviewing, personal and professional mentoring, job search, application, creating a career plan, university and community involvement, and other career preparation activities. Prerequisite: Junior transfer standing. Business students only.

**BUS 305 Data Analytics III 3 cr**

A course in quantitative data analytics in business decision making utilizing methods of analysis including linear programming, network optimization, binary integer programming, nonlinear optimization, decision analysis, and deep learning. It further develops fundamental knowledge and skills for making data driven business decisions including the use of computer applications for problem solving. This course relies heavily on project based learning to provide students with the experience of solving data based business problems.

**Prerequisite:** BUS 255 Minimum Grade of C and CIS 250 Minimum Grade of D

**BUS 430 Business Data Visualization: Concepts and Applications 3 cr**

The course provides an overview of the purposes, methods, and techniques of data visualization, that includes planning, data gathering, data validation, data analysis, and visual presentation. Additionally, the course covers data mining, data storytelling, and the use of data to support decision-making.

**Prerequisite:** BUS 305 Minimum Grade of C

**BUS 440 Bus in Reg and Emerg Markets-W 3 cr**

A comprehensive analysis of the issues in starting and maintaining business in emerging and developing markets, building on data and research skills acquired in foundational international business courses.

**Prerequisite:** MKT 310 Minimum Grade of D and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (ECO 330 Minimum Grade of D or ECO 363 Minimum Grade of D or FIN 332 Minimum Grade of D or MGT 334 Minimum Grade of D or MGT 336 Minimum Grade of D)

**BUS 490 Special Topics 3 cr**

Designed to provide senior students an opportunity to study selected topics of particular interest. A student may count no more than six hours of Special Topics in the concentration. Prerequisite: Approval of Department Chair.

**BUS 496 MCOB Honors Sr Project I - H 3 cr**

Applied business project and paper prepared under the direction of a project advisor plus two other persons selected by the advisor in consultation with the student. The student must have developed a proposal for the project and paper in consultation with the advisor and received permission from the committee to proceed. In addition, the student must be entering his or her senior year and be a major in the Mitchell College of Business. The project proposal must be formulated no later than the end of the first semester of the student's senior year and the project must be completed by the student's graduation date. The student must have maintained his or her standing in the university honors program to be eligible to enroll in this course in his or her last full semester in school. The course may be counted in one of two ways: 1) as an additional course not counting towards the business degree, or 2) in special cases, as a major or business elective, to be decided by the committee.

**Prerequisite:** (HON 399 Minimum Grade of D or HON 301 Minimum Grade of D) and BUS 305 Minimum Grade of D and (FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D) and (MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D) and (MGT 305 Minimum Grade of D or MGT 324 Minimum Grade of D) and (MGT 310 Minimum Grade of D or MGT 322 Minimum Grade of D or MGT 422 Minimum Grade of D) and (MGT 325 Minimum Grade of D or MGT 396 Minimum Grade of D) and (MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D)

**BUS 497 MCOB Honors Sr Project II - H 3 cr**

Applied business project and paper prepared under the direction of a project advisor plus two other persons selected by the advisor in consultation with the student. The student must have developed a proposal for the project and paper in consultation with the advisor and received permission from the committee to proceed. In addition, the student must be entering his or her senior year and be a major in the Mitchell College of Business. The project proposal must be formulated no later than the end of the first semester of the student's senior year and the project must be completed by the student's graduation date. The student must have maintained his or her standing in the university honors program to be eligible to enroll in this course. The student will formally enroll in the course in his or her last full semester in school. The course may be counted in one or two ways: 1) as an additional course not counting towards the business degree, or 2) in special cases, as a major or business elective, to be decided by the committee. Requires completion of the business core with the exception of MGT 485.

**Prerequisite:** BUS 496 Minimum Grade of C

**BUS 498 Mitchell Scholars Sr Project 3 cr**

Applied business project and presentation prepared under the direction of the instructor in consultation with the student. This course will have irregular meetings scheduled by the instructor and will have both a classroom component and a project component. The student must have maintained his/her standing in the Mitchell Scholars program and be a senior to be eligible to enroll in this course. This class will be counted in one of three ways: 1) as a business elective, 2) as an additional course not counting towards the business degree; or 3) in special cases, as a major elective to be decided by the major department's faculty. Requires completion of the business core with the exception of MGT 485 and approval of Associate Dean.

**Prerequisite:** MCOB 10 and BUS 305 Minimum Grade of D and FIN 315 Minimum Grade of D and MGT 300 Minimum Grade of D and MGT 305 Minimum Grade of D and MGT 310 Minimum Grade of D and MGT 325 Minimum Grade of D and MKT 320 Minimum Grade of D

**BUS 555 Study Abroad 3-6 cr**

Examines issues in business administration in an international setting at the graduate level. Specific topics selected from the fields of accounting, economics, finance, information systems, management or marketing depending on the instructor's area of expertise. Part or all of the course will be conducted outside the United States. Prerequisite: Permission to enroll in a relevant Mitchell College of Business study abroad program.

**BUS 601 Sem in Org. Behavior 3 cr**

This seminar provides an introduction to established theories and emerging trends in the field of organizational behavior. The course explores the thoughts, emotions, and behaviors of individuals within the context of work, teams, organizations and society. The emphasis is an organizational theory and development.

**BUS 614 Sem in Int'l Bus 3 cr**

This course provides students with exposure to management concepts and theories that form the basis of literature separate from other seminars in the doctoral program. Given that cultural, law and politics shape the different business environments around the world, it is unsurprising that different management concepts and theories are found in other places as well. This seminar introduces doctoral students to those elements of the international business environment that have an impact on management theory and practice on other business environments.

**BUS 622 Multivar Analysis 3 cr**

The course is designed to broaden and enrich student's knowledge and understanding of statistical methodology as it pertains to the study of multivariate techniques used in behavioral research.

**BUS 628 Regress Analysis 3 cr**

A study of applications of regression analysis used in business research. Topics include: a review of basic regression concepts and applications, multiple regression, residual analysis, model building, regression limitations and assumptions, time series modeling and forecasting, and case studies using regression techniques.

**BUS 630 Struct Equ Mod 3 cr**

The course provides students with a functional understanding of the path analysis theory and procedures of structural equation modeling. Students will learn to specify, estimate, and evaluate models using AMOS software.

**BUS 700 Fund of Research 3 cr**

This course provides students with the tools and perspective necessary to succeed in the DBA program. Readings are drawn from several sources and provide participants with a better understanding of the way to approach their work.

**BUS 702 Applied Stat and Reg 3 cr**

This course provides an examination of statistical concepts used for business research. Topics include: fundamentals of probability, sampling, statistical estimation, test of hypotheses, analysis of variance, chi-square analysis and regression analysis. Emphasis is placed on the use of statistical techniques for business research applications.

**BUS 704 Multivariate Analysis 3 cr**

The course is designed to broaden and enrich a student's knowledge and understanding of statistical methodology as it pertains to the study of multivariate techniques used in behavioral research.

**BUS 705 Seminars in Business Analytics 3 cr**

This course introduces the foundations of Data Science and Business Analytics with focus on research design and data analytic methods in Accounting, Economics, Finance, Management, Marketing, and Real Estate.

**BUS 706 Research Design and Methods 3 cr**

This course focuses on the general concepts related to conducting academic research and the various research methods commonly used in business research, including quantitative and qualitative analysis.

**BUS 708 Adv Stats & App Res 6 cr****BUS 710 Struct Equation Modeling 3 cr**

This course provides students with a functional understanding of path analysis theory and procedures of structural equation modeling. Students will learn to specify, estimate, and evaluate models using software packages designed for this purpose.

**BUS 751 Python for Business Analytics 3 cr**

Python programming for Business Analytics, with applications and examples from statistics, finance economics, marketing, management, accounting, and other business-related disciplines.

**BUS 753 Applied Business Analytics I 3 cr**

This course covers a variety of concepts and applied analytical methods useful in business research and analytics, such as big data, data measurement and preparation, multi-source modeling files, data analysis and machine learning.

**BUS 754 Seminars Business Analytics II 3 cr**

This course focuses on applied analytics. Students will complete the continuum of analytics including data source identification, data prep, descriptive and exploratory analytics, confirmatory and inferential analytics.

**BUS 757 Computational Business Stats 3 cr**

This course is designed for students who seek to develop skills in statistical computing using the R programming language. Students will learn how to use R for data manipulation, data visualization, writing statistical function, and optimizing statistical functions.

**BUS 759 Machine Learning and AI 3 cr**

Advanced statistical and machine learning algorithms/techniques/methods for Business Analytics with applications from statistics, finance, economics, marketing, management, accounting, and other business-related disciplines.

**BUS 789 Res and Teaching Concepts 1 cr**

Presentations and discussions related to teaching and research concepts.

**BUS 799 Dissertation Research 1-6 cr**

Independent research by the student under the sponsorship of the graduate faculty.

**Prerequisite:** BUS 699 Minimum Grade of S

**Master of Bus Admin (MBA)****MBA 501 Analysis using Info Sys 3 cr**

Advanced management requires the ability datasets, interpret data with datasets and calculate statistics from data. This course covers all the process of building, interpreting, calculating data and finally making decisions on the outcomes of that process. A significant part of the grade in this course comes from decision making exercises.

**MBA 502 Managing Accounting Info 3 cr**

This course focuses on making decisions using Accounting information which includes how to generate relevant and appropriate data and how to use accounting analysis to enhance success in making decisions.

**Prerequisite:** ACC 211 Minimum Grade of C

**MBA 503 Managing in the Bus. Env't 3 cr**

The course evaluates managerial decisions in a business environment impacted by ethical considerations, sustainability, social responsibility and stakeholder interests. The course also focuses on developing student skills in communication.

**Prerequisite:** ECO 215 Minimum Grade of C

**MBA 504 Customers & Supply Chains 3 cr**

This MBA course focuses on the role of customers and vendors on organizations. The course uses projects and decision scenarios to address the issues that result from managing supply chains and customer relationships.

**MBA 505 Managing People 3 cr**

This MBA course emphasizes the role of people within an organization and the issues and the decisions related to managing human assets. The course develops a number of techniques and scenarios that emphasize the importance of effective human resource management.

**Prerequisite:** MGT 300 Minimum Grade of C

**MBA 506 Managing Finance and Capital 3 cr**

Business managers must have a strong grasp of the role of finance and capital in the organization. The course focuses on establishing a strong knowledge base and the key decisions needed to be a successful manager.

**Prerequisite:** FIN 315 Minimum Grade of C

**Cross-Listed:** FIN 509

**MBA 507 Managing Strategic Decisions 3 cr**

The MBA Capstone course emphasizes decision making in a strategic context and builds upon all the courses taken prior to and concurrently with the course. The course includes decisions at the strategy development and strategy execution level. The evaluation exercises include an assessment of ethical, socially, responsible, and sustainability issues.

**Corequisite:** MGT 599

**MBA 590 Special Topics 3 cr**

The MBA Program includes courses that are designed to allow students the opportunity to learn management skills and applications through non-traditional formats. This course is designed to achieve that objective. Subject to the approval of the Director of Graduate studies.

**Management (MGT)****MGT 300 Management Theory and Practice 3 cr**

Theories of organizational structures, practices, and behavior, and the effective management of organizations. Emphasis on developing patterns and strategies of organizational management in a dynamic environment as affected by the interaction of material and human resources using the technique of applied social and management sciences.

**MGT 305 Organizational Comm - W 3 cr**

A study of written and oral communication of organizations. Emphasis is given to communication theory, including organization flows and barriers to organizational communication. The preparation of neutral, negative, and persuasive written messages as well as formal written reports is covered in depth. In addition, oral presentations and employment interviews are discussed.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**MGT 306 Organizational Comm Non Bus 3 cr**

A study of written and oral communication in organizations. Emphasis is given to communication theory, including organization flows and barriers to organizational communication. The preparation of neutral, negative, and persuasive written messages as well as formal written reports is covered in depth. In addition, oral presentations and employment interviews are discussed. For non-business majors.

**Prerequisite:** EH 102 Minimum Grade of C or EH 105 Minimum Grade of C

**MGT 311 Legal Environ of Bus II 3 cr**

An advanced treatment of the law of agency, commercial transactions, business organizations, property, negotiable instruments, secured transactions, professional liability, debtor-creditor relations, including applicable sections of Uniform Commercial Code.

**Prerequisite:** BUS 265 Minimum Grade of D or (MGT 310 Minimum Grade of D or MGT 332 Minimum Grade of D or MGT 422 Minimum Grade of D)

**MGT 325 Operations Management 3 cr**

Addresses concepts, problems, and managerial approaches applicable to the management of manufacturing and service operations. The course will examine the strategic and tactical considerations that are involved in creating a systematic framework that supports the creation of competitive advantages through effective operations and the production of high quality products. Topics covered include the role of operations in the overall organization, operations strategy development and implementation, product design and process selection, location and capacity planning, facilities layout, quality management, inventory management, production planning, scheduling and control, and project management. An important component of the overall course is the incorporation of computer applications for problem solving and decision making in operations.

**Prerequisite:** (MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D) and (BUS 255 Minimum Grade of D or ST 275 Minimum Grade of D)

**MGT 334 International Mgt 3 cr**

This course exposes students to the challenges that confront the managers of organizations & individuals in global settings. Special focus is on dealing with and benefitting from the diversity that exists across international cultures, markets, economics, governments, and organizations

**Prerequisite:** MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D

**MGT 340 Organizational Behavior - W 3 cr**

A study of human and group behavior in the workplace and within society. The focus is on individual characteristics and processes such as personality, perception, and motivation; interpersonal processes such as group behavior, leadership, communication, and decision making; and organizational processes such as culture, structure, power, and change. Requires Junior Standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D) and (MGT 305 Minimum Grade of D or MGT 324 Minimum Grade of D)

**MGT 341 Organizational Behavior 3 cr**

This course provides a basic survey of the field of Organizational Behavior. Our objective is to cover important topics such as job attitudes, work motivation, group dynamics, leadership and organizational culture. For non-business majors.

**Prerequisite:** (MGT 300 Minimum Grade of D or MGT 305 Minimum Grade of D or MGT 306 Minimum Grade of D)

**Cross-Listed:** MGT 340

**MGT 345 Creativity and Innovation 3 cr**

This course provides a broad framework for understanding the nature of entrepreneurship in multiple organizational settings. The course introduces students to the innovation and idea generation process and helps students determine the most desirable educational path for them to achieve their career goals. Sophomore standing.

**MGT 347 Franchising 3 cr**

This course is designed for students who are interested in learning about the opportunities and threats that abound in the modern world of franchising. Students will study existing franchising from both a historical and theoretical context. The logic of this course is that franchising is one of the development models that minimize risk for the "small business" focused student. Some franchising oriented people may want to start a franchise and grow it rapidly. This option is often a first step into business ownership for inexperienced owners. We discuss the applicability, opportunities, challenges, and implementation of the franchising model for expanding existing businesses. The format consists of case study and lecture discussion sequenced with extensive background readings, occasional guest lecturers, and a term case-based project culminating in a transactional plan.

**MGT 351 Human Resource Management 3 cr**

Principles, policies, and practices used to develop a sound human resource management program in the business organization. Among the topics included are job analysis, employment, organization development, employee development and evaluation, wage and salary administration and labor relations.

**Prerequisite:** (MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D) and ACC 212 Minimum Grade of D and ECO 215 Minimum Grade of D and ECO 216 Minimum Grade of D and BUS 255 Minimum Grade of D and BUS 265 Minimum Grade of D and CIS 250 Minimum Grade of D

**MGT 355 Leg & Fin Aspects of Entrepren 3 cr**

This course provides an overview of the legal and financial issues most frequently encountered by entrepreneurs and others involved in start-ups and small closely held, or family businesses. The course covers various aspects of financing and entrepreneurial venture. Major topics attracting seed and growth capital from sources such as venture capital, investment banking, government, and commercial banks; creating, protecting and leveraging intellectual property. Among the issues discussed are valuing a company, going public, selling out, acquisitions, bankruptcy, different legal forms or organizations, partnerships, and taxes.

**MGT 356 Strategic Issues in Family Bus 3 cr**

This course examines a new discipline that has developed in the last ten years and focuses on the unique aspects of family businesses. Organizational behavior, law, finance, operations, and basic small business concepts are being integrated into this course. Students will have an opportunity to consult with and develop transition plans for a family firm in a live field project.

**MGT 357 Leadership 3 cr**

This course includes a review of traditional as well as current thinking in Leadership theory. Students will complete several self-assessment exercises designed to assess one's leadership style and ability as a leader. A series of successful leaders will be studied in-depth. Prerequisite: Junior or senior standing.

**MGT 390 Total Quality Management 3 cr**

Total Quality Management (TQM) is a management philosophy which emphasizes customer focus, continuous improvement, and employee involvement throughout the organization. This course is an introductory course which examines these components and their integration into a comprehensive quality management system.

**Prerequisite:** (MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D) and (MGT 325 Minimum Grade of D or MGT 396 Minimum Grade of D)

**MGT 396 DEI in Organizations 3 cr**

This course will develop students' critical thinking regarding diversity, equity, and inclusion in organizations. Topics may include age, bias, culture, discrimination, equality, equity, ethnicity, gender, identity, inclusion, power, privilege, race, and sexual orientation.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**MGT 430 Operations Research 3 cr**

Reviews selected operations research concepts; nonlinear optimization methods, linear programming; dynamic programming; model building; and simulation methods. The student is expected to understand the concepts of operations research and to be able to use computer procedure to solve problems.

**Prerequisite:** MGT 325 Minimum Grade of D or MGT 396 Minimum Grade of D

**MGT 441 Service Operations 3 cr**

This course will provide students the opportunity to learn about service operations management, including service strategies and operations considerations and imperatives for service enterprises and how service systems are structured and operated. Students will also learn about various tools and techniques for managing service operations such as how to forecast service demand, determine capacity requirements, schedule activities, coordinate operations, plan and schedule service activities, and evaluate system performance.

**Prerequisite:** (MGT 325 Minimum Grade of D or MGT 396 Minimum Grade of D)

**MGT 450 Organizational Staffing 3 cr**

A detailed study of the function of employee staffing in a modern work organization. Emphasis on job analysis, criterion development, development and use of employment tests, validation of selection techniques, and statistical methods for making fair employment decisions. Course work includes a comprehensive staffing project.

**Prerequisite:** MGT 351 Minimum Grade of D and (BUS 245 Minimum Grade of D or ST 175 Minimum Grade of D or ST 210 Minimum Grade of D)

**MGT 451 Employee Training -Development 3 cr**

An applied course which details the training and development function. Content areas of job analysis, training needs analysis, training program development and implementation, and program evaluation will be incorporated in a comprehensive training and development project.

**Prerequisite:** MGT 340 Minimum Grade of D and MGT 351 Minimum Grade of D

**MGT 452 Employment Law 3 cr**

Analysis of significant workplace torts and laws regulating the employment relationship including: Title VII, FMLA, AOA, ADEA, FLSA, OSHA and related state laws. Emphasis on federal legislation and developing case law.

**Prerequisite:** MGT 351 Minimum Grade of D and (BUS 265 Minimum Grade of D or MGT 310 Minimum Grade of D or MGT 332 Minimum Grade of D or MGT 422 Minimum Grade of D)

**MGT 454 Compensation Administration 3 cr**

A study of the fundamentals of compensation administration in organizations. Topics include job analysis, KSA determination, job evaluation, wage structure development, incentive pay systems, legal aspects of compensation and new developments in compensation. Comprehensive course project required.

**Prerequisite:** MGT 351 Minimum Grade of D

**MGT 455 Labor - Management Relations 3 cr**

An examination of the organizing, negotiation, and contract administration phases of union-management relations. Case analyses, federal legislation and case law in labor relations, significant current issues, and a collective bargaining simulation are featured.

**Prerequisite:** MGT 351 Minimum Grade of D

**MGT 456 Strategic Issues on Family Bus 3 cr**

This course examines a new discipline that has developed in the last ten years and focuses on the unique aspects of family businesses. Organizational behavior, law, finance, operations, and basic small business concepts are being integrated into this course. Students will have an opportunity to consult with and develop transition plans for a family firm in a live field project.

**Prerequisite:** MGT 345 Minimum Grade of C

**MGT 460 Organiz Development and Change 3 cr**

Provides insight into the theory and practice of organization change and development. It bridges the gap between theory and practice and emphasizes the process of improving both organizations and individuals. Topics covered encompass understanding organizations and how they change, intervention strategies and methods for improving organizations, quality of work-life approaches and strategic considerations in system-wide change.

**Prerequisite:** MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D

**MGT 462 Negotiatn/Disp Resolutn in Bus 3 cr**

This course provides theoretical background and practical applications in business negotiation, conflict management, and alternative dispute resolution. Areas covered include positional and interest-based bargaining, business and employment arbitration, organizational conflict management strategies, mediation, and effective communications for negotiators and ADR participants.

**Prerequisite:** (MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D)

**MGT 465 New Venture Creation 3 cr**

How new businesses are organized and planned. Objectives are 1) understanding the knowledge, skills and abilities required of entrepreneurs, 2) creating and developing opportunities for new ventures, and 3) planning resources to convert those opportunities into businesses. Students work in teams to develop a business plan for a new venture they have chosen.

**Prerequisite:** MGT 345 Minimum Grade of C or MGT 355 Minimum Grade of C

**MGT 470 High Performance Organizations 3 cr**

Course examines the role of organization culture, leadership, employee involvement, work teams, and human resource practices in developing and sustaining high performance organizations that practice the principles of total quality management. Senior Standing.

**Prerequisite:** (MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D)

**MGT 475 Strategic HRM 3 cr**

This is a capstone course in human resource management that reviews essential human resource management topics to prepare students for the SHRM Assurance of Learning Exam. Topics covered include strategic HR, ethics, recruiting and selection, employee and organizational development, performance management, employment law, compensation administration, workplace safety, employee relations, labor relations, and general management topics including motivation, individual differences, organizational culture, and leadership. In addition, the course covers state of the art issues in human resource management, which are new and not well developed in existing texts.

**Prerequisite:** MGT 351 Minimum Grade of D and (MGT 340 Minimum Grade of D or MGT 320 Minimum Grade of D)

**MGT 483 Social Entrepreneurship 3 cr**

The course provides a broad theoretical perspective and practical framework for understanding social entrepreneurs and the social ventures they create ranging from local social organizations to large international social ventures leading global change. The course introduces students to the possibilities of social entrepreneurship and an introduction to the entire social venture creation process and life cycle. This course is a service-learning based and all students will participate in term-based community-based projects with local non-profit organizations. Extensive work outside of the normal classroom hours is required for this course.

**MGT 485 Bus Policy in Global Eco - W 3 cr**

The culmination course in business and management education. Interdisciplinary and global in nature, the course uses the case method to develop a top management perspective in which all business disciplines are integrated into the organization's effective total functioning.

**Prerequisites:** Seniors who have completed all core courses, have petitioned for graduation and are beginning the final semester.

**Prerequisite:** (BUS 305 Minimum Grade of D or MGT 350 Minimum Grade of D or ECO 453 Minimum Grade of D) and (FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D) and (MGT 305 Minimum Grade of D or MGT 324 Minimum Grade of D) and (MGT 310 Minimum Grade of D or BUS 265 Minimum Grade of D or MGT 332 Minimum Grade of D or MGT 422 Minimum Grade of D) and (MGT 325 Minimum Grade of D or MGT 396 Minimum Grade of D) and (MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D)

**Corequisite:** MGT 486

**MGT 486 Undergraduate Comp Exam 0 cr**

Comprehensive exam

**Corequisite:** MGT 485

**MGT 490 Special Topics 3 cr**

Designed to provide senior students an opportunity to study selected topics of particular interest. A student may count no more than six hours of Special Topics in the concentration. **Prerequisite:** Approval of Department Chair.

**MGT 492 Management Analysis & Consult 3 cr**

Designed to help students bridge the gap between management theory and the realities involved in the practice of management. Topics include (1) development of the human, social, and political skills of the student as an individual, (2) business ethics, (3) global management issues, and (4) current trends in society that affect business and management. Assignments include a project with a local organization to identify critical management issues, analyze alternatives, and present specific recommended solutions to company managers. Senior standing.

**Prerequisite:** (MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D) and (MGT 320 Minimum Grade of D or MGT 340 Minimum Grade of D) and MGT 351 Minimum Grade of D

**MGT 494 Dir St in Management 1-3 cr**

Primarily designed to give superior students an opportunity to study some phase of management of particular interest. Conferences, a bibliography, and a formal research report are required. Junior or senior standing, a cumulative GPA of 2.5 or better, and approval of the department chair following the evaluation of a written proposal.

**MGT 496 Management Internship 3 cr**

The internship program is designed to give students practical experience in their field of study. Students complete directed projects under the supervision of Department Chair. No more than three hours of internship credit may be counted toward a degree in the Mitchell College of Business. Prerequisites: Junior or Senior standing, declared major in management, overall GPA of at least 2.5, and Internship Agreement signed by department Chair.

**MGT 510 Legal Environment of Business 3 cr**

Detailed analysis of laws & regulations affecting contemporary business organizations. Emphasis on legal aspects of employment and labor relations, regulatory agencies, sales, warranties, products liability, consumer protection, anti-trust, securities, creditors' rights, and ethical considerations.

**Prerequisite:** MBA P

**MGT 521 Data Analy for Bus Decisions 3 cr**

An examination of basic statistical concepts used in business analysis. Topics include fundamental probability, sampling, statistical estimation, test of hypothesis, analysis of variance, and regression analysis. Emphasis is placed on the use of statistical techniques for business decision making.

**MGT 522 Supply Chain & Operations Mgmt 3 cr**

An integrative approach to the processes, operations, and information required to produce and transform resources into value-added outputs that maximize customer satisfaction. Particular emphasis is placed on strategic supply chain management, operations strategy, value chain analysis, demand management, process mapping, quality assurance, customer fulfillment strategies, order fulfillment processes, relationship and information management in supply networks, measuring operational performance, and analytical tools for managing operations and supply systems.

**MGT 532 Legal & Ethical Environ of Bus 3 cr**

Legal and Ethical Environment of Business is designed to develop an in-depth analytical understanding of selected legal/ethical issues and trends and their impact on management and other business functions. Students will analyze the legal and ethical implications of issues including products liability, professional regulations, corporate responsibility, workplace discrimination and harassment, privacy, workplace safety, restraints on trade, land use regulation, international law, and alternative dispute resolution.

**MGT 562 MBA Exec Lect I 0 cr**

The MBA Executive Lecture series exposes students to the thinking and analysis of distinguished visiting executives on such topics as economics and finance, strategic management, marketing, international business, and entrepreneurship. Seminars are held during fall and spring semesters.

**Prerequisite:** MGT 521 (may be taken concurrently) Minimum Grade of C or MGT 532 (may be taken concurrently) Minimum Grade of C

**MGT 564 MBA Exec Lect II 0 cr**

The MBA Executive Lecture series exposes students to the thinking and analysis of distinguished visiting executives on such topics as economics and finance, strategic management, marketing, international business, and entrepreneurship. Seminars are held during fall and spring semesters.

**Prerequisite:** ECO 506 (may be taken concurrently) Minimum Grade of C or MGT 530 (may be taken concurrently) Minimum Grade of C

**MGT 570 MBA Exec Lect III 0 cr**

The MBA Executive Lecture series exposes students to the thinking and analysis of distinguished visiting executives on such topics as economics and finance, strategic management, marketing, international business, and entrepreneurship. Seminars are held during fall and spring semesters.

**Prerequisite:** ACC 501 (may be taken concurrently) Minimum Grade of C or MKT 541 (may be taken concurrently) Minimum Grade of C

**MGT 572 MBA Exec Lect IV 0 cr**

The MBA Executive Lecture series exposes students to the thinking and analysis of distinguished visiting executives on such topics as economics and finance, strategic management, marketing, international business, and entrepreneurship. Seminars are held during fall and spring semesters.

**Prerequisite:** MGT 522 (may be taken concurrently) Minimum Grade of C or ACC 502 (may be taken concurrently) Minimum Grade of C

**MGT 590 Sp Top - 3 cr**

Designed to provide graduate students an opportunity to study selected topics. Approval of Department Chair. A student may count no more than three hours if Special Topics in the MBA degree program.

**Prerequisite:** MBA P

**MGT 594 Independent Study - Management 3 cr**

Readings and research on selected topics. Conferences and formal research report required. Prerequisites: Approval of Department Chair.

**MGT 599 MBA Comprehensive Exam 0 cr**

A corequisite course with MGT 580 with no credit hours which includes a graduate comprehensive business exam.

**MGT 701 Sem in Org Behavior 3 cr**

This seminar provides an introduction to established theories and emerging trends in the field of organizational behavior. The course explores the thoughts, emotions, and behaviors of individuals within the context of work, teams, organizations, and society. The emphasis is on organizational theory and development.

**MGT 703 Seminar in Org Theory & Change 3 cr**

This is a foundational overview seminar. The purposes of the seminar are to 1) provide an in-depth understanding of the dominant theoretical approaches used in organizational theory, 2) give a historical overview of the theories of organization change, and 3) develop student skills in evaluating, extending, and communicating ideas about organizational theory and/or change as it relates to the student's research.

**MGT 705 Leadership 3 cr**

This course includes a review of traditional as well as current thinking in leadership theory with a special emphasis on emotional and social intelligence and organizational citizenship behavior.

**MGT 707 Strategic Management 3 cr**

The course is designed to develop a thorough understanding of the primary frameworks of competitive strategy and corporate strategy. Topics covered in the course include: industry and competitive analysis, resource-based view of the firm, value chain analysis, competitive strategies, business models, scope of the firm, strategic alliances, and offensive and defensive strategies.

**MGT 709 Sem. Sp. Topics 3 cr**

This course will cover two broad areas. The first is a reprise and extension of Structural Equation Modeling (SEM). The second is an introduction to Game Theory (GT) and applications thereof.

**MGT 799 Dissertation Research 1-6 cr**

Independent Scholarship working with committee.

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
FINNEY, TREENA LYNN GILLESPIE (tgillespie@southalabama.edu)	Management	Professor	BA, Clemson University MS, Clemson University PHD, Depaul University
GILLIS, WILLIAM E. (gillis@southalabama.edu)	Management	Professor	BS, US Air Force Academy MBA, University of West Florida PHD, Florida State University
HUNT, JAMES A. (jayhunt@southalabama.edu)	Management	Instructor	BA, University of South Alabama MA, University of South Alabama MBA, University of South Alabama
MAES, JEANNE DELONEY (jmaes@southalabama.edu)	Management	Professor	BS, State University of New York MBA, University of South Alabama PHD, University of Southern Miss
MOSLEY, DONALD CRUMPTON (dcmosley@southalabama.edu)	Management	Professor	BA, Millsaps College MBA, University of South Alabama PHD, Mississippi State University
NELSON, THOMAS E. (thomasnelson@southalabama.edu)	Management	Associate Professor	BS, Ball State University MBA, Ball State University PHD, University of Louisville
SMITH, DAVID J. (djsmith@southalabama.edu)	Management	Instructor	BBA, University of Notre Dame MBA, Stetson University
SMITH, MICKEY BRANDON (mbsmith@southalabama.edu)	Management	Associate Professor	BA, University of South Alabama MA, University of West Florida PHD, Oklahoma State University
STEFANONE, ROBYN LEA (brouer@southalabama.edu)	Management	Professor	BA, University of Georgia BS, University of Georgia MSM, University of Central Florida PHD, Florida State University
STUPAVSKY, JANA (jstupavsky@southalabama.edu)	Management	Instructor	BSBA, University of South Alabama MBA, University of South Alabama
TURNIPSEED, DAVID L. (turnipseed@southalabama.edu)	Management	Professor	BS, University of Alabama MBA, University of Alabama PHD, University of Alabama
WASSENAAR, CHRISTINA L. (cwassenaar@southalabama.edu)	Management	Associate Professor	BS, California State Polytech-Pom MBA, Claremont Graduate University  PHD, Claremont Graduate University
WELDY, TERESA GAY (tweldy@southalabama.edu)	Management	Associate Professor	BS, University of South Alabama MBA, University of South Alabama PHD, University of South Alabama
WU, I-HENG (i-hengwu@southalabama.edu)	Management	Assistant Professor	BBA, Tamkang University MBA, National Chung-Hsing University MA, University of Minn-Twin Cities PHD, University of Iowa

# Entrepreneurship for Non-Business Majors Minor

## Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

Code	Title	Hours
MGT 345	Creativity and Innovation	3
MGT 355	Leg & Fin Aspects of Entrepren	3
MGT 465	New Venture Creation	3
MGT 483	Social Entrepreneurship	3
Select two elective courses from the following:		6
MGT 300	Management Theory and Practice	
MKT 320	Principles of Marketing	
MGT 347	Franchising	
MGT 356	Strategic Issues in Family Bus	
MKT 350	Digital Marketing	
MKT 381	Professional Selling & Sales Management	
MGT 462	Negotiatn/Disp Resolutn in Bus	
<b>Total Hours</b>		<b>18</b>

## General Business (BSBA)

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 780)		59-62
<b>Major Requirements</b>		
<i>Freshman Core</i>		
A. Complete the following:		
BUS 150	Intro to Business and Mgt (linkurl^../footnote1/^or Transfer Student Elective ) <sup>1</sup>	3
<i>Upper Division Business Core</i>		
A. Complete the following:		
BUS 305	Data Analytics III	3
or ECO 453	Intro to Econometrics	
B. Complete the following:		
FIN 315	Business Finance	3
MGT 300	Management Theory and Practice	3
MGT 305	Organizational Comm - W	3
MGT 325	Operations Management	3
MKT 320	Principles of Marketing	3
Experiential Learning ( <a href="http://bulletin.southalabama.edu/programs-az/business/management/footnote1/">http://bulletin.southalabama.edu/programs-az/business/management/footnote1/</a> ) <sup>2</sup>		
A. Select three hours from the following:		3
BUS 101	Prof Experience I	
BUS 201	Professional Experience II	
BUS 301	Professional Experience III	
BUS 302	Professional Preparation	
B. Select one of the following:		3

ACC 496	Accounting Internship	
ECO 496	Economics Internship	
FIN 496	Finance Internship	
MGT 496	Management Internship	
MKT 496	Marketing Internship	

#### General Business Major Courses

A. Complete the following:

MGT 340	Organizational Behavior - W	3
MGT 351	Human Resource Management	3
MKT 385	Services Marketing	3
FIN 343	Money Mkts and Fin Instit	3
ECO 318	Prin of Managerial Economics	3
ACC 380	Cost Accounting for Managers	3

B. Select three of the following:

ECO 330	Current Global Economic Issues	3
FIN 300	Personal Finance	3
FIN 344	Real Estate	3
MGT 311	Legal Environ of Bus II	3
MGT 390	Total Quality Management	3
MGT 441	Service Operations	3
MKT 350	Digital Marketing	3
MKT 380	Integrated Mkt Communications	3
ACC 331	Taxation of Individuals	3

#### Business Electives

A. Select two courses from 300-494 Electives from ACC, ECO, FIN, MGT, MKT

#### Business Policy Capstone

A. Complete the following:

MGT 485	Bus Policy in Global Eco - W	3
MGT 486	Undergraduate Comp Exam	0

#### Minor Requirements

A minor is not required for this degree program

**Total Hours** **122-125**

### Footnote

<sup>1</sup> BUS 150 or Transfer Student Elective for students transferring into the College with more than 45 hours. Students transferring with 46-60 hours are highly encouraged to take BUS 150.

<sup>2</sup> Only 1 internship may be counted toward a business degree. Internship courses may only be used to fulfill the Experiential Learning requirement and may not be used as business electives or to fulfill any other degree requirements.

#### Notes:

- Course substitutions are possible with approval of the student's advisor or the Dean.
- Transfer credits for General Business Major Courses will only be accepted from AACSB-accredited institutions.

### General Education Requirements

Code	Title	Hours
<b>Area I - Written Composition</b>		
A. Complete the following:		

EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II - Humanities &amp; Fine Arts</b>		
A. Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/business/management/footnote2/">http://bulletin.southalabama.edu/programs-az/business/management/footnote2/</a> ) <sup>1</sup>		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
B. Select one of the following:		
ARH 100	Survey of Art	3
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	
C. Select six hours from the following:		
AFR 101	Intro to African Amer Studies	6
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARH 203	Survey of Non-Western Art	
ARS 101	Art Appreciation	
CLA 110	Intro Anc Greek Roman Culture	
CA 110	Public Speaking	
DRA 110	Introduction to Theatre	
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
LG 101	Introductory Latin I	
LG 102	Introductory Latin II	
LG 111	Introductory French I	
LG 112	Introductory French II	
LG 121	Introductory Chinese I	
LG 122	Introductory Chinese II	
LG 131	Introductory Spanish I	
LG 132	Introductory Spanish II	
LG 141	Intro Classical Greek I	
LG 142	Intro Classical Greek II	
LG 151	Introductory German I	
LG 152	Introductory German II	
LG 153	Accelerated Intro German	
LG 171	Introductory Russian I	
LG 172	Introductory Russian II	
LG 173	Accelerated Intro Russian	
LG 201	Intermediate Latin I	

LG 202	Intermediate Latin II	
LG 211	Intermediate French I	
LG 212	Intermediate French II	
LG 213	Accelerated Inter French - H	
LG 221	Intermediate Chinese I	
LG 222	Intermediate Chinese II	
LG 231	Intermediate Spanish I	
LG 232	Intermediate Spanish II	
LG 234	Inter Spanish Accel -H	
LG 241	Interm Classical Greek I	
LG 242	Interm Classical Greek II	
LG 251	Intermediate German I	
LG 252	Intermediate German II	
LG 271	Intermediate Russian I	
LG 272	Intermediate Russian II	
LG 273	Intensive Second Year Russian	
LGS 101	Introductory Japanese I	
LGS 102	Introductory Japanese II	
LGS 106	Introductory Arabic I	
LGS 107	Introductory Arabic II	
LGS 110	Intro American Sign Language I	
LGS 111	Intro American Sign Lang II	
LGS 171	Introductory Korean I	
LGS 172	Introductory Korean II	
LGS 201	Intermediate Japanese I	
LGS 202	Intermediate Japanese II	
LGS 206	Intermediate Arabic I	
LGS 207	Intermediate Arabic II	
LGS 210	Intermediate ASL I	
LGS 211	Intermediate ASL II	
MUL 101	Introduction to Music	
PHL 110	Introduction to Philosophy	
PHL 120	Critical Thinking	
PHL 121	Introduction to Logic	
PHL 131	Introduction to Ethics	
PHL 231	Social Ethics	
PHL 240	Western Philosophy: Classical	
REL 100	Intro to the Study of Religion	
REL 200	Old Testament/Hebrew Bible	
REL 201	Survey of the New Testament	

**Area III – Natural Sciences & Mathematics**

A. Complete the following:

MA 120	Calculus and Its Applications	3-4
or MA 125	Calculus I	

B. Select 8-10 hours from the following: 8-10

AN 121	Biological Anthropology	
& 121L	and Biological Anthropology Lab	
BLY 101	Life Science I	
& 101L	and Life Science I Laboratory	
or BLY 121	General Biology I	
& 121L	and General Biology I Lab	
BLY 102	Life Science II	
& 102L	and Life Science II Lab	

or BLY 122 & 122L	General Biology II and General Biology II Laboratory
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab
CH 131 & 131L	General Chemistry I and General Chemistry I Lab
CH 132 & 132L	General Chemistry II and General Chemistry II Lab
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab
GY 111 & 111L	Physical Geology and Physical Geology Lab
GY 112 & 112L	Earth History and Earth History Lab
MAS 134 & 134L	Ocean Science and Ocean Science Lab
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab

**Area IV – History, Social & Behavioral Sciences (<http://bulletin.southalabama.edu/programs-az/business/management/footnote2/>)<sup>1</sup>**

A. Select one of the following:		3
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
B. Select one of the following:		3
AN 100	Intro to Cultural Anthropology	
AN 101	Intro Archaeology-Bio Anthro	
CA 100	Intro to Communication	
CA 211	Interpersonal Comm	
CJ 105	Introduction to Criminal Justice	
GEO 114	People, Places, Environment	
GEO 115	World Regional Geography	
GS 101	Intro to Gender Studies	
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
IS 100	Global Issues	
IST 201	Seasons of Life	
NAS 101	Intro Native American Studies	
PSC 130	Intro to US Government	

PSY 120	Introduction to Psychology	
PSY 250	Life Span Development	
SY 109	Introductory Sociology	
SY 112	Social Problems	
C. Complete the following:		
ECO 215	Prin of Microeconomics	3
ECO 216	Prin of Macroeconomics	3
<b>Area V 200-Level Business Core</b>		
A. Complete the following:		
ACC 211	Financial Accounting	3
ACC 212	Managerial Accounting	3
B. Complete the following:		
BUS 245	Data Analytics I	3
BUS 255	Data Analytics II	3
C. Complete the following:		
BUS 265	Legal Environ of Business I	3
D. Complete the following:		
CIS 250	Advanced Comp Applications	3

**Total Hours** **59-62**

### Footnote

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 135 & HY 136).

## Graduation Plan

(122 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I	3
BUS 150	Intro to Business and Mgt	3
MA 120 or MA 125	Calculus and Its Applications or Calculus I	3-4
Fine Art	Area II <sup>1</sup>	3
History	Area IV <sup>1</sup>	3
BUS 101	Prof Experience I	1
<b>Hours</b>		<b>16-17</b>
<b>Spring</b>		
EH 102	English Composition II	3
ECO 215	Prin of Microeconomics	3
CIS 250	Advanced Comp Applications	3
Humanities or Fine Art	Area II <sup>1</sup>	3
Natural Science + Lab	Area III <sup>1</sup>	4
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
ACC 211	Financial Accounting	3
BUS 245	Data Analytics I	3
ECO 216	Prin of Macroeconomics	3
Literature	Area II <sup>1</sup>	3
Natural Science + Lab	Area III <sup>1</sup>	4
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ACC 212	Managerial Accounting	3
BUS 255	Data Analytics II	3

BUS 265	Legal Environ of Business I	3
BUS 201	Professional Experience II	1
2nd literature or 2nd History	Area II or IV <sup>2</sup>	3
MGT 300	Management Theory and Practice	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
BUS 305 or ECO 453	Data Analytics III or Intro to Econometrics	3
MGT 305	Organizational Comm - W	3
MGT 325	Operations Management	3
MKT 320	Principles of Marketing	3
FIN 315	Business Finance	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
ACC 380	Cost Accounting for Managers	3
MGT 340	Organizational Behavior - W	3
ECO 318	Prin of Managerial Economics	3
General Business Major Elective #1 <sup>3</sup>		3
MGT 351	Human Resource Management	3
BUS 301	Professional Experience III	1
<b>Hours</b>		<b>16</b>
<b>Fourth Year</b>		
<b>Fall</b>		
MKT 385	Services Marketing	3
General Business Major #2 <sup>3</sup>		3
FIN 343	Money Mkts and Fin Instit	3
Business Elective #1 <sup>4</sup>		3
MGT 496	Management Internship <sup>5</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
General Business Major Elective #3 <sup>3</sup>		3
MGT 492	Management Analysis & Consult	3
Business Elective #2 <sup>4</sup>		3
MGT 485	Bus Policy in Global Eco - W <sup>6</sup>	3
MGT 486	Undergraduate Comp Exam <sup>6</sup>	0
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>122-123</b>

<sup>1</sup> See General Education Requirements for options

<sup>2</sup> All students must complete either a literature or a history sequence

<sup>3</sup> ECO 330, FIN 300, FIN 344, MGT 311, MGT 390, MGT 441, MKT 350, MKT 380, or ACC 331

<sup>4</sup> Anything in MCOB at the 300 or 400 level not used to fulfill another requirement except internship courses

<sup>5</sup> May be MKT, ACC, FIN, or ECO 496.

<sup>6</sup> MGT 485/MGT 486 only offered online in summer; taken the last semester of graduation

#### Notes:

- If opted for Literature sequence, need Area IV; if opted for History sequence, need Area II

## General Business for Non-Business Majors Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

Code	Title	Hours
ACC 211	Financial Accounting	3
ECO 215	Prin of Microeconomics	3
MGT 300	Management Theory and Practice	3
MKT 320	Principles of Marketing	3
Select three semester hours from MGT electives, and three semesters hours of Business Electives, numbered 300 or above for which the student meets the pre-requisite		6
<b>Total Hours</b>		<b>18</b>

## Industrial-Organizational Psychology Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

Code	Title	Hours
PSYALL	Introduction to Psychology	3
REGISTRATION SCHEDULES RELEASED IF 100% OF BALANCE[1] IS NOT PAID OR STUDENT IS NOT PARTICIPATING IN THE PAYMENT PLAN (AVOID THE VOID)120/121		
PSY 220	Res Design and Analysis I	3
MGT 306	Organizational Comm Non Bus (for non-business majors)	3
or MGT 305	Organizational Comm - W	
Select three of the following: (Students must complete at least one course from psychology and one course from management)		9
PSY 320	Res Design-Analysis II-W	
PSY 425	Mental Health and Law	
PSY 435	Social Psychology	
PSY 440	Psychology of Personality	
PSY 460	Industrial Psychology	
MGT 340	Organizational Behavior - W	
MGT 341	Organizational Behavior (for non-business majors)	
MGT 345	Creativity and Innovation	
MGT 351	Human Resource Management	

MGT 357	Leadership	
MGT 451	Employee Training -Development	
<b>Total Hours</b>		<b>18</b>

## Management (BSBA)

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 784)		59-62
<b>Major Requirements</b>		
<i>Freshman Core</i>		
A. Complete the following:		
BUS 150	Intro to Business and Mgt (linkurl^../footnote1/^or Transfer Student Elective) <sup>1</sup>	3
<i>Upper Division Business Core</i>		
A. Complete the following:		
BUS 305	Data Analytics III	3
	or ECO 453 Intro to Econometrics	
B. Complete the following:		
FIN 315	Business Finance	3
MGT 300	Management Theory and Practice	3
MGT 305	Organizational Comm - W	3
MGT 325	Operations Management	3
MKT 320	Principles of Marketing	3
Experiential Learning ( <a href="http://bulletin.southalabama.edu/programs-az/business/management/footnote1/">http://bulletin.southalabama.edu/programs-az/business/management/footnote1/</a> ) <sup>3</sup>		
A. Select three hours from the following: 3		
BUS 101	Prof Experience I	
BUS 201	Professional Experience II	
BUS 301	Professional Experience III	
BUS 302	Professional Preparation	
B. Select one of the following: 3		
ACC 496	Accounting Internship	
ECO 496	Economics Internship	
FIN 496	Finance Internship	
MGT 496	Management Internship	
MKT 496	Marketing Internship	
Management Core ( <a href="http://bulletin.southalabama.edu/programs-az/business/management/footnote1/">http://bulletin.southalabama.edu/programs-az/business/management/footnote1/</a> ) <sup>2</sup>		
A. Complete the following:		
MGT 334	International Mgt	3
MGT 351	Human Resource Management	3
MGT 340	Organizational Behavior - W	3
MGT 492	Management Analysis & Consult	3
General Management Concentration ( <a href="http://bulletin.southalabama.edu/programs-az/business/management/footnote1/">http://bulletin.southalabama.edu/programs-az/business/management/footnote1/</a> ) <sup>2</sup>		
A. Select five of the following: 15		
MGT 311	Legal Environ of Bus II	
MGT 345	Creativity and Innovation	
MGT 347	Franchising	
MGT 355	Leg & Fin Aspects of Entrepren	

MGT 356	Strategic Issues in Family Bus	
MGT 357	Leadership	
MGT 390	Total Quality Management	
MGT 430	Operations Research	
MGT 441	Service Operations	
MGT 450	Organizational Staffing	
MGT 451	Employee Training -Development	
MGT 452	Employment Law	
MGT 454	Compensation Administration	
MGT 455	Labor - Management Relations	
MGT 460	Organiz Development and Change	
MGT 462	Negotiatn/Disp Resolutn in Bus	
MGT 470	High Performance Organizations	
MGT 483	Social Entrepreneurship	

#### *Business Electives*

A. Select two courses from 300-494 Electives from ACC, ECO, FIN, MGT, MKT	6
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#### *Business Policy Capstone*

A. Complete the following:

MGT 485	Bus Policy in Global Eco - W	3
	or MGT 486 Undergraduate Comp Exam	

#### **Minor Requirements**

A minor is not required for this degree program	0
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<b>Total Hours</b>	<b>122-125</b>
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### Footnote

<sup>1</sup> BUS 150 or Transfer Student Elective for students transferring into the College with more than 45 hours. Students transferring with 46-60 hours are highly encouraged to take BUS 150.

<sup>2</sup> Transfer credits for the Management Core and General Management Concentration courses will only be accepted from AACSB- accredited institutions.

<sup>3</sup> Only 1 internship may be counted toward a business degree. Internship courses may only be used to fulfill the Experiential Learning requirement and may not be used as business electives or to fulfill any other degree requirements.

### General Education Requirements

Code	Title	Hours
<b>Area I - Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II - Humanities &amp; Fine Arts</b>		
A. Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/business/management/footnote2/">http://bulletin.southalabama.edu/programs-az/business/management/footnote2/</a> ) <sup>1</sup>		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	

## B. Select one of the following: 3

ARH 100	Survey of Art
ARH 103	Art History I
ARH 123	Art History II
ARS 101	Art Appreciation
DRA 110	Introduction to Theatre
MUL 101	Introduction to Music

## C. Select six hours from the following: 6

AFR 101	Intro to African Amer Studies
ARH 100	Survey of Art
ARH 103	Art History I
ARH 123	Art History II
ARH 203	Survey of Non-Western Art
ARS 101	Art Appreciation
CLA 110	Intro Anc Greek Roman Culture
CA 110	Public Speaking
DRA 110	Introduction to Theatre
EH 215	Brit Lit before 1785
EH 216	Brit Lit after 1785
EH 225	Am Lit before 1865
EH 226	Am Lit after 1865
EH 235	World Lit before 1650
EH 236	World Lit after 1650
LG 101	Introductory Latin I
LG 102	Introductory Latin II
LG 111	Introductory French I
LG 112	Introductory French II
LG 121	Introductory Chinese I
LG 122	Introductory Chinese II
LG 131	Introductory Spanish I
LG 132	Introductory Spanish II
LG 141	Intro Classical Greek I
LG 142	Intro Classical Greek II
LG 151	Introductory German I
LG 152	Introductory German II
LG 153	Accelerated Intro German
LG 171	Introductory Russian I
LG 172	Introductory Russian II
LG 173	Accelerated Intro Russian
LG 201	Intermediate Latin I
LG 202	Intermediate Latin II
LG 211	Intermediate French I
LG 212	Intermediate French II
LG 213	Accelerated Inter French - H
LG 221	Intermediate Chinese I
LG 222	Intermediate Chinese II
LG 231	Intermediate Spanish I
LG 232	Intermediate Spanish II
LG 234	Inter Spanish Accel -H
LG 241	Interm Classical Greek I
LG 242	Interm Classical Greek II
LG 251	Intermediate German I

LG 252	Intermediate German II
LG 271	Intermediate Russian I
LG 272	Intermediate Russian II
LG 273	Intensive Second Year Russian
LGS 101	Introductory Japanese I
LGS 102	Introductory Japanese II
LGS 106	Introductory Arabic I
LGS 107	Introductory Arabic II
LGS 110	Intro American Sign Language I
LGS 111	Intro American Sign Lang II
LGS 171	Introductory Korean I
LGS 172	Introductory Korean II
LGS 201	Intermediate Japanese I
LGS 202	Intermediate Japanese II
LGS 206	Intermediate Arabic I
LGS 207	Intermediate Arabic II
LGS 210	Intermediate ASL I
LGS 211	Intermediate ASL II
MUL 101	Introduction to Music
PHL 110	Introduction to Philosophy
PHL 120	Critical Thinking
PHL 121	Introduction to Logic
PHL 131	Introduction to Ethics
PHL 231	Social Ethics
PHL 240	Western Philosophy: Classical
REL 100	Intro to the Study of Religion
REL 200	Old Testament/Hebrew Bible
REL 201	Survey of the New Testament

**Area III – Natural Sciences & Mathematics**

## A. Complete the following:

MA 120	Calculus and Its Applications	3-4
or MA 125	Calculus I	

## B. Select 8-10 hours from the following: 8-10

AN 121 & 121L	Biological Anthropology and Biological Anthropology Lab
BLY 101 & 101L	Life Science I and Life Science I Laboratory
or BLY 121 & 121L	General Biology I and General Biology I Lab
BLY 102 & 102L	Life Science II and Life Science II Lab
or BLY 122 & 122L	General Biology II and General Biology II Laboratory
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab
CH 131 & 131L	General Chemistry I and General Chemistry I Lab
CH 132 & 132L	General Chemistry II and General Chemistry II Lab
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab

GY 111 & 111L	Physical Geology and Physical Geology Lab
GY 112 & 112L	Earth History and Earth History Lab
MAS 134 & 134L	Ocean Science and Ocean Science Lab
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab

**Area IV – History, Social & Behavioral Sciences (<http://bulletin.southalabama.edu/programs-az/business/management/footnote2/>)<sup>1</sup>**

A. Select one of the following:	3
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
B. Select one of the following:	3
AN 100	Intro to Cultural Anthropology
AN 101	Intro Archaeology-Bio Anthro
CA 100	Intro to Communication
CA 211	Interpersonal Comm
CJ 105	Introduction to Criminal Justice
GEO 114	People, Places, Environment
GEO 115	World Regional Geography
GS 101	Intro to Gender Studies
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
IS 100	Global Issues
IST 201	Seasons of Life
NAS 101	Intro Native American Studies
PSC 130	Intro to US Government
PSY 120	Introduction to Psychology
PSY 250	Life Span Development
SY 109	Introductory Sociology
SY 112	Social Problems

C. Complete the following:		
ECO 215	Prin of Microeconomics	3
ECO 216	Prin of Macroeconomics	3

**Area V 200-Level Business Core**

A. Complete the following:		
ACC 211	Financial Accounting	3
ACC 212	Managerial Accounting	3

B. Complete the following:		
BUS 245	Data Analytics I	3
BUS 255	Data Analytics II	3
C. Complete the following:		
BUS 265	Legal Environ of Business I	3
D. Complete the following:		
CIS 250	Advanced Comp Applications	3
<b>Total Hours</b>		<b>59-62</b>

**Footnote**

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 135 & HY 136).

## Management (BSBA) - Entrepreneurship Concentration Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 787)		59-62
<b>Major Requirements</b>		
<i>Freshman Core</i>		
A. Complete the following:		
BUS 150	Intro to Business and Mgt (linkurl^../footnote1/^or Transfer Student Elective ) <sup>1</sup>	3
<i>Upper Division Business Core</i>		
A. Complete the following:		
BUS 305	Data Analytics III	3
or ECO 453	Intro to Econometrics	
B. Complete the following:		
FIN 315	Business Finance	3
MGT 300	Management Theory and Practice	3
MGT 305	Organizational Comm - W	3
MGT 325	Operations Management	3
MKT 320	Principles of Marketing	3
Experiential Learning ( <a href="http://bulletin.southalabama.edu/programs-az/business/management/footnote1/">http://bulletin.southalabama.edu/programs-az/business/management/footnote1/</a> ) <sup>3</sup>		
A. Select three hours from the following:		3
BUS 101	Prof Experience I	
BUS 201	Professional Experience II	
BUS 301	Professional Experience III	
BUS 302	Professional Preparation	
B. Select one of the following:		3
ACC 496	Accounting Internship	
ECO 496	Economics Internship	
FIN 496	Finance Internship	
MGT 496	Management Internship	
MKT 496	Marketing Internship	
Management Core ( <a href="http://bulletin.southalabama.edu/programs-az/business/management/footnote1/">http://bulletin.southalabama.edu/programs-az/business/management/footnote1/</a> ) <sup>2</sup>		
A. Complete the following:		

MGT 334	International Mgt	3
MGT 351	Human Resource Management	3
MGT 340	Organizational Behavior - W	3
MGT 492	Management Analysis & Consult	3
Entrepreneurship Concentration ( <a href="http://bulletin.southalabama.edu/programs-az/business/management/footnote1/">http://bulletin.southalabama.edu/programs-az/business/management/footnote1/</a> ) <sup>2</sup>		
A. Complete the following:		
MGT 345	Creativity and Innovation	3
MGT 355	Leg & Fin Aspects of Entrepren	3
MGT 465	New Venture Creation	3
MGT 483	Social Entrepreneurship	3
B. Select two of the following:		
MGT 347	Franchising	6
MGT 356	Strategic Issues in Family Bus	
MGT 462	Negotiatn/Disp Resolutn in Bus	
MKT 350	Digital Marketing	
MKT 381	Professional Selling & Sales Management	
MKT 384	Market Research	
FIN 370	Short-Term Financial Managemnt	
<i>Business Electives</i>		
A. Select two courses from 300-494 Electives from ACC, ECO, FIN, MGT, MKT		
<i>Business Policy Capstone</i>		
A. Complete the following:		
MGT 485	Bus Policy in Global Eco - W	3
or MGT 486	Undergraduate Comp Exam	
<b>Minor Requirements</b>		
A minor is not required for this degree program		
<b>Total Hours</b>		<b>125-128</b>

## Footnote

<sup>1</sup> BUS 150 or Transfer Student Elective for students transferring into the College with more than 45 hours. Students transferring with 46-60 hours are highly encouraged to take BUS 150.

<sup>2</sup> Transfer credits for the Management Core and Entrepreneurship Concentration courses will only be accepted from AACSB-accredited institutions.

<sup>3</sup> Only 1 internship may be counted toward a business degree. Internship courses may only be used to fulfill the Experiential Learning requirement and may not be used as business electives or to fulfill any other degree requirements.

## General Education Requirements

Code	Title	Hours
<b>Area I - Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II - Humanities &amp; Fine Arts</b>		
A. Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/business/management/footnote2/">http://bulletin.southalabama.edu/programs-az/business/management/footnote2/</a> ) <sup>1</sup>		
EH 215	Brit Lit before 1785	

EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
B. Select one of the following:		3
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	
C. Select six hours from the following:		6
AFR 101	Intro to African Amer Studies	
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARH 203	Survey of Non-Western Art	
ARS 101	Art Appreciation	
CLA 110	Intro Anc Greek Roman Culture	
CA 110	Public Speaking	
DRA 110	Introduction to Theatre	
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
LG 101	Introductory Latin I	
LG 102	Introductory Latin II	
LG 111	Introductory French I	
LG 112	Introductory French II	
LG 121	Introductory Chinese I	
LG 122	Introductory Chinese II	
LG 131	Introductory Spanish I	
LG 132	Introductory Spanish II	
LG 141	Intro Classical Greek I	
LG 142	Intro Classical Greek II	
LG 151	Introductory German I	
LG 152	Introductory German II	
LG 153	Accelerated Intro German	
LG 171	Introductory Russian I	
LG 172	Introductory Russian II	
LG 173	Accelerated Intro Russian	
LG 201	Intermediate Latin I	
LG 202	Intermediate Latin II	
LG 211	Intermediate French I	
LG 212	Intermediate French II	
LG 213	Accelerated Inter French - H	
LG 221	Intermediate Chinese I	
LG 222	Intermediate Chinese II	
LG 231	Intermediate Spanish I	

LG 232	Intermediate Spanish II
LG 234	Inter Spanish Accel -H
LG 241	Interm Classical Greek I
LG 242	Interm Classical Greek II
LG 251	Intermediate German I
LG 252	Intermediate German II
LG 271	Intermediate Russian I
LG 272	Intermediate Russian II
LG 273	Intensive Second Year Russian
LGS 101	Introductory Japanese I
LGS 102	Introductory Japanese II
LGS 106	Introductory Arabic I
LGS 107	Introductory Arabic II
LGS 110	Intro American Sign Language I
LGS 111	Intro American Sign Lang II
LGS 171	Introductory Korean I
LGS 172	Introductory Korean II
LGS 201	Intermediate Japanese I
LGS 202	Intermediate Japanese II
LGS 206	Intermediate Arabic I
LGS 207	Intermediate Arabic II
LGS 210	Intermediate ASL I
LGS 211	Intermediate ASL II
MUL 101	Introduction to Music
PHL 110	Introduction to Philosophy
PHL 120	Critical Thinking
PHL 121	Introduction to Logic
PHL 131	Introduction to Ethics
PHL 231	Social Ethics
PHL 240	Western Philosophy: Classical
REL 100	Intro to the Study of Religion
REL 200	Old Testament/Hebrew Bible
REL 201	Survey of the New Testament

**Area III – Natural Sciences & Mathematics**

A. Complete the following:

MA 120	Calculus and Its Applications	3-4
or MA 125	Calculus I	

B. Select 8-10 hours from the following: 8-10

AN 121 & 121L	Biological Anthropology and Biological Anthropology Lab
BLY 101 & 101L	Life Science I and Life Science I Laboratory
or BLY 121 & 121L	General Biology I and General Biology I Lab
BLY 102 & 102L	Life Science II and Life Science II Lab
or BLY 122 & 122L	General Biology II and General Biology II Laboratory
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab
CH 131 & 131L	General Chemistry I and General Chemistry I Lab

CH 132 & 132L	General Chemistry II and General Chemistry II Lab
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab
GY 111 & 111L	Physical Geology and Physical Geology Lab
GY 112 & 112L	Earth History and Earth History Lab
MAS 134 & 134L	Ocean Science and Ocean Science Lab
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab

**Area IV – History, Social & Behavioral Sciences (<http://bulletin.southalabama.edu/programs-az/business/management/footnote2/>)<sup>1</sup>**

A. Select one of the following: 3

HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 135	US History to 1877
HY 136	US History since 1877

B. Select one of the following: 3

AN 100	Intro to Cultural Anthropology
AN 101	Intro Archaeology-Bio Anthro
CA 100	Intro to Communication
CA 211	Interpersonal Comm
CJ 105	Introduction to Criminal Justice
GEO 114	People, Places, Environment
GEO 115	World Regional Geography
GS 101	Intro to Gender Studies
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
IS 100	Global Issues
IST 201	Seasons of Life
NAS 101	Intro Native American Studies
PSC 130	Intro to US Government
PSY 120	Introduction to Psychology
PSY 250	Life Span Development
SY 109	Introductory Sociology
SY 112	Social Problems

C. Complete the following:

ECO 215	Prin of Microeconomics	3
ECO 216	Prin of Macroeconomics	3
<b>Area V 200-Level Business Core</b>		
A. Complete the following:		
ACC 211	Financial Accounting	3
ACC 212	Managerial Accounting	3
B. Complete the following:		
BUS 245	Data Analytics I	3
BUS 255	Data Analytics II	3
C. Complete the following:		
BUS 265	Legal Environ of Business I	3
D. Complete the following:		
CIS 250	Advanced Comp Applications	3
<b>Total Hours</b>		<b>59-62</b>

### Footnote

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 135 & HY 136).

## Graduation Plan

(122 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I	3
BUS 150	Intro to Business and Mgt	3
MA 120 or MA 125	Calculus and Its Applications or Calculus I	3-4
Fine Art	Area II <sup>1</sup>	3
History	Area IV <sup>1</sup>	3
BUS 101	Prof Experience I	1
<b>Hours</b>		<b>16-17</b>
<b>Spring</b>		
EH 102	English Composition II	3
ECO 215	Prin of Microeconomics	3
CIS 250	Advanced Comp Applications	3
Humanities or Fine Art	Area II <sup>1</sup>	3
Natural Science + Lab	Area III <sup>1</sup>	4
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
ACC 211	Financial Accounting	3
BUS 245	Data Analytics I	3
ECO 216	Prin of Macroeconomics	3
Literature	Area II <sup>1</sup>	3
Natural Science + Lab	Area III <sup>1</sup>	4
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ACC 212	Managerial Accounting	3
BUS 255	Data Analytics II	3
BUS 265	Legal Environ of Business I	3
BUS 201	Professional Experience II	1
2nd Literature or 2nd History	Area II or IV <sup>2</sup>	3
Gen Ed	Area II or IV <sup>3</sup>	3
<b>Hours</b>		<b>16</b>

<b>Third Year</b>		
<b>Fall</b>		
MGT 300	Management Theory and Practice	3
MGT 305	Organizational Comm - W	3
BUS 301	Professional Experience III	1
MKT 320	Principles of Marketing	3
FIN 315	Business Finance	3
MGT 345	Creativity and Innovation	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
MGT 351	Human Resource Management	3
MGT 340	Organizational Behavior - W	3
BUS 305 or ECO 453	Data Analytics III or Intro to Econometrics	3
MGT 325	Operations Management	3
MGT 355	Leg & Fin Aspects of Entrepren	3
<b>Hours</b>		<b>15</b>

<b>Fourth Year</b>		
<b>Fall</b>		
MGT 483	Social Entrepreneurship	3
Entrepreneurship Elective #1 <sup>4</sup>		3
MGT 334	International Mgt	3
Business Elective #1 <sup>5</sup>		3
MGT 496	Management Internship	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
MGT 465	New Venture Creation	3
Entrepreneurship Elective #2 <sup>4</sup>		3
Business Elective #2 <sup>5</sup>		3
MGT 485	Bus Policy in Global Eco - W	3
MGT 486	Undergraduate Comp Exam	0
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>122-123</b>

<sup>1</sup> See General Education Requirements for options.

<sup>2</sup> All students must complete either literature or a history sequence.

<sup>3</sup> If opted for Literature sequence, need Area IV; if opted for History sequence, need Area II.

<sup>4</sup> Choose from MGT 347, MGT 356, MKT 384, MKT 350, MKT 381, MGT 462, FIN 370.

<sup>5</sup> Anything in MCOB at the 300 or 400 level not used to fulfill another requirement except internship courses.

## Management (BSBA) - General Management Concentration Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 790)		59-62
<b>Major Requirements</b>		
<i>Freshman Core</i>		
A. Complete the following:		
BUS 150	Intro to Business and Mgt (linkurl^../footnote1/^or Transfer Student Elective) <sup>1</sup>	3
<i>Upper Division Business Core</i>		
A. Complete the following:		
BUS 305	Data Analytics III	3

or ECO 453	Intro to Econometrics	
<b>B. Complete the following:</b>		
FIN 315	Business Finance	3
MGT 300	Management Theory and Practice	3
MGT 305	Organizational Comm - W	3
MGT 325	Operations Management	3
MKT 320	Principles of Marketing	3
<i>Experiential Learning</i>		
<b>A. Select three hours from the following:</b> 3		
BUS 101	Prof Experience I	
BUS 201	Professional Experience II	
BUS 301	Professional Experience III	
BUS 302	Professional Preparation	
<b>B. Select one of the following:</b> 3		
ACC 496	Accounting Internship	
ECO 496	Economics Internship	
FIN 496	Finance Internship	
MGT 496	Management Internship	
MKT 496	Marketing Internship	
<i>Management Core</i>		
<b>A. Complete the following:</b>		
MGT 334	International Mgt	3
MGT 351	Human Resource Management	3
MGT 340	Organizational Behavior - W	3
MGT 492	Management Analysis & Consult	3
<i>General Management Concentration</i>		
<b>A. Select 15 hours from the following:</b> 15		
MGT 311	Legal Environ of Bus II	
MGT 345	Creativity and Innovation	
MGT 347	Franchising	
MGT 355	Leg & Fin Aspects of Entrepren	
MGT 356	Strategic Issues in Family Bus	
MGT 357	Leadership	
MGT 390	Total Quality Management	
MGT 430	Operations Research	
MGT 441	Service Operations	
MGT 450	Organizational Staffing	
MGT 451	Employee Training -Development	
MGT 452	Employment Law	
MGT 454	Compensation Administration	
MGT 455	Labor - Management Relations	
MGT 460	Organiz Development and Change	
MGT 462	Negotiatn/Disp Resolutn in Bus	
MGT 470	High Performance Organizations	
MGT 483	Social Entrepreneurship	
<i>Business Electives</i>		
<b>A. Select two courses from 300-494 Electives from ACC, ECO, FIN, MGT, MKT</b> 6		
<i>Business Policy Capstone</i>		
<b>A. Complete the following:</b>		
MGT 485	Bus Policy in Global Eco - W	3
or MGT 486	Undergraduate Comp Exam	

**Minor Requirements**

A minor is not required for this degree program	0
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<b>Total Hours</b>	<b>122-125</b>
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**Footnote**

<sup>1</sup> BUS 150 or Transfer Student Elective for students transferring into the College with more than 45 hours. Students transferring with 46-60 hours are highly encouraged to take BUS 150.

**Notes:**

- Transfer credits for the Management Core and General Management Concentration courses will only be accepted from AACSB- accredited institutions.
- Only 1 internship may be counted toward a business degree. Internship courses may only be used to fulfill the Experiential Learning

**General Education Requirements**

Code	Title	Hours
<b>Area I - Written Composition</b>		
<b>A. Complete the following:</b>		
EH 101	English Composition I	3
<b>B. Complete the following:</b>		
EH 102	English Composition II	3
<b>Area II - Humanities &amp; Fine Arts</b>		
<b>A. Select one of the following: (<a href="http://bulletin.southalabama.edu/programs-az/business/management/footnote2/">http://bulletin.southalabama.edu/programs-az/business/management/footnote2/</a>)<sup>1</sup></b> 3		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
<b>B. Select one of the following:</b> 3		
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	
<b>C. Select six hours from the following:</b> 6		
AFR 101	Intro to African Amer Studies	
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARH 203	Survey of Non-Western Art	
ARS 101	Art Appreciation	
CLA 110	Intro Anc Greek Roman Culture	
CA 110	Public Speaking	
DRA 110	Introduction to Theatre	
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	

EH 226	Am Lit after 1865
EH 235	World Lit before 1650
EH 236	World Lit after 1650
LG 101	Introductory Latin I
LG 102	Introductory Latin II
LG 111	Introductory French I
LG 112	Introductory French II
LG 121	Introductory Chinese I
LG 122	Introductory Chinese II
LG 131	Introductory Spanish I
LG 132	Introductory Spanish II
LG 141	Intro Classical Greek I
LG 142	Intro Classical Greek II
LG 151	Introductory German I
LG 152	Introductory German II
LG 153	Accelerated Intro German
LG 171	Introductory Russian I
LG 172	Introductory Russian II
LG 173	Accelerated Intro Russian
LG 201	Intermediate Latin I
LG 202	Intermediate Latin II
LG 211	Intermediate French I
LG 212	Intermediate French II
LG 213	Accelerated Inter French - H
LG 221	Intermediate Chinese I
LG 222	Intermediate Chinese II
LG 231	Intermediate Spanish I
LG 232	Intermediate Spanish II
LG 234	Inter Spanish Accel -H
LG 241	Interm Classical Greek I
LG 242	Interm Classical Greek II
LG 251	Intermediate German I
LG 252	Intermediate German II
LG 271	Intermediate Russian I
LG 272	Intermediate Russian II
LG 273	Intensive Second Year Russian
LGS 101	Introductory Japanese I
LGS 102	Introductory Japanese II
LGS 106	Introductory Arabic I
LGS 107	Introductory Arabic II
LGS 110	Intro American Sign Language I
LGS 111	Intro American Sign Lang II
LGS 171	Introductory Korean I
LGS 172	Introductory Korean II
LGS 201	Intermediate Japanese I
LGS 202	Intermediate Japanese II
LGS 206	Intermediate Arabic I
LGS 207	Intermediate Arabic II
LGS 210	Intermediate ASL I
LGS 211	Intermediate ASL II
MUL 101	Introduction to Music
PHL 110	Introduction to Philosophy

PHL 120	Critical Thinking
PHL 121	Introduction to Logic
PHL 131	Introduction to Ethics
PHL 231	Social Ethics
PHL 240	Western Philosophy: Classical
REL 100	Intro to the Study of Religion
REL 200	Old Testament/Hebrew Bible
REL 201	Survey of the New Testament

### Area III – Natural Sciences & Mathematics

A. Complete the following:

MA 120	Calculus and Its Applications	3-4
or MA 125	Calculus I	

B. Select 8-10 hours from the following: 8-10

AN 121 & 121L	Biological Anthropology and Biological Anthropology Lab
BLY 101 & 101L	Life Science I and Life Science I Laboratory
or BLY 121 & 121L	General Biology I and General Biology I Lab
BLY 102 & 102L	Life Science II and Life Science II Lab
or BLY 122 & 122L	General Biology II and General Biology II Laboratory
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab
CH 131 & 131L	General Chemistry I and General Chemistry I Lab
CH 132 & 132L	General Chemistry II and General Chemistry II Lab
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab
GY 111 & 111L	Physical Geology and Physical Geology Lab
GY 112 & 112L	Earth History and Earth History Lab
MAS 134 & 134L	Ocean Science and Ocean Science Lab
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab

### Area IV – History, Social & Behavioral Sciences (<http://bulletin.southalabama.edu/programs-az/business/management/footnote2/>)<sup>1</sup>

A. Select one of the following:

3

HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
B. Select one of the following:		3
AN 100	Intro to Cultural Anthropology	
AN 101	Intro Archaeology-Bio Anthro	
CA 100	Intro to Communication	
CA 211	Interpersonal Comm	
CJ 105	Introduction to Criminal Justice	
GEO 114	People, Places, Environment	
GEO 115	World Regional Geography	
GS 101	Intro to Gender Studies	
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
IS 100	Global Issues	
IST 201	Seasons of Life	
NAS 101	Intro Native American Studies	
PSC 130	Intro to US Government	
PSY 120	Introduction to Psychology	
PSY 250	Life Span Development	
SY 109	Introductory Sociology	
SY 112	Social Problems	
C. Complete the following:		
ECO 215	Prin of Microeconomics	3
ECO 216	Prin of Macroeconomics	3
<b>Area V 200-Level Business Core</b>		
A. Complete the following:		
ACC 211	Financial Accounting	3
ACC 212	Managerial Accounting	3
B. Complete the following:		
BUS 245	Data Analytics I	3
BUS 255	Data Analytics II	3
C. Complete the following:		
BUS 265	Legal Environ of Business I	3
D. Complete the following:		
CIS 250	Advanced Comp Applications	3
<b>Total Hours</b>		<b>59-62</b>

**Footnote**

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 135 & HY 136).

**Graduation Plan**

(122 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I	3
BUS 150	Intro to Business and Mgt	3
MA 120 or MA 125	Calculus and Its Applications or Calculus I	3-4
Fine Art	Area II <sup>1</sup>	3
History	Area IV <sup>1</sup>	3
BUS 101	Prof Experience I	1
<b>Hours</b>		<b>16-17</b>
<b>Spring</b>		
EH 102	English Composition II	3
ECO 215	Prin of Microeconomics	3
CIS 250	Advanced Comp Applications	3
Humanities or Fine Art	Area II <sup>1</sup>	3
Natural Science + Lab	Area III <sup>1</sup>	4
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
ACC 211	Financial Accounting	3
BUS 245	Data Analytics I	3
ECO 216	Prin of Macroeconomics	3
Literature	Area II <sup>1</sup>	3
Natural Science + Lab	Area III <sup>1</sup>	4
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ACC 212	Managerial Accounting	3
BUS 255	Data Analytics II	3
BUS 265	Legal Environ of Business I	3
BUS 201	Professional Experience II	1
2nd Literature or 2nd History	Area II or IV <sup>2</sup>	3
MGT 300	Management Theory and Practice	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
MGT 300 or ECO 453	Management Theory and Practice or Intro to Econometrics	3
MGT 305	Organizational Comm - W	3
BUS 301	Professional Experience III	1
MKT 320	Principles of Marketing	3
FIN 315	Business Finance	3
Gen Ed	Area II or IV <sup>3</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
MGT 351	Human Resource Management	3
MGT 340	Organizational Behavior - W	3
MGT 325	Operations Management	3
MGT 334	International Mgt	3
Management Elective #1 <sup>4</sup>		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
Management Elective #2 <sup>4</sup>		3
Management Elective #3 <sup>4</sup>		3
Management Elective #4 <sup>4</sup>		3
Business Elective #1 <sup>5</sup>		3
MGT 496	Management Internship	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Management Elective #5 <sup>4</sup>		3

MGT 492	Management Analysis & Consult	3
Business Elective #2 <sup>5</sup>		3
MGT 485	Bus Policy in Global Eco - W	3
MGT 486	Undergraduate Comp Exam	0
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>122-123</b>

<sup>1</sup> See General Education Requirements for options.

<sup>2</sup> All students must complete either a literature or a history sequence.

<sup>3</sup> If opted for Literature sequence, need Area IV; if opted for History sequence, need Area II.

<sup>4</sup> Anything in MGT at the 300 or 400 level not used to fulfill another requirement as scheduling and prerequisites allow.

<sup>5</sup> Anything in MCOB at the 300 or 400 level not used to fulfill another requirement except internship courses.

## Management (BSBA) - Human Resources Concentration

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 793)		59-62

#### Major Requirements

##### Freshman Core

A. Complete the following:

BUS 150	Intro to Business and Mgt (linkurl^../footnote1/^or Transfer Student Elective) <sup>1</sup>	3
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##### Upper Division Business Core

A. Complete the following:

BUS 305	Data Analytics III	3
or ECO 453	Intro to Econometrics	

B. Complete the following:

FIN 315	Business Finance	3
MGT 300	Management Theory and Practice	3
MGT 305	Organizational Comm - W	3
MGT 325	Operations Management	3
MKT 320	Principles of Marketing	3

##### Experiential Learning

A. Select three hours from the following:

BUS 101	Prof Experience I	3
BUS 201	Professional Experience II	
BUS 301	Professional Experience III	
BUS 302	Professional Preparation	

B. Select one of the following:

ACC 496	Accounting Internship	3
ECO 496	Economics Internship	
FIN 496	Finance Internship	
MGT 496	Management Internship	
MKT 496	Marketing Internship	

##### Management Core

A. Complete the following:

MGT 334	International Mgt	3
MGT 351	Human Resource Management	3

MGT 340	Organizational Behavior - W	3
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##### Human Resources Concentration

A. Complete the following:

MGT 450	Organizational Staffing	3
MGT 452	Employment Law	3
MGT 454	Compensation Administration	3
MGT 475	Strategic HRM	3

B. Select two of the following:

MGT 357	Leadership	6
MGT 451	Employee Training -Development	
MGT 455	Labor - Management Relations	
MGT 460	Organiz Development and Change	
MGT 462	Negotiatn/Disp Resolutn in Bus	
MGT 470	High Performance Organizations	

##### Business Policy Capstone

A. Complete the following:

MGT 485	Bus Policy in Global Eco - W	3
MGT 486	Undergraduate Comp Exam	0

##### Minor Requirements

A minor is not required for this degree program

**Total Hours** **116-119**

### Footnote

<sup>1</sup> BUS 150 or Transfer Student Elective for students transferring into the College with more than 45 hours. Students transferring with 46-60 hours are highly encouraged to take BUS 150.

### Notes:

- Transfer credits for the Management Core and Human Resources Concentration courses will only be accepted from AACSB- accredited institutions.
- Only 1 internship may be counted toward a business degree. Internship courses may only be used to fulfill the Experiential Learning requirement and may not be used as business electives or to fulfill any other degree requirements.

### General Education Requirements

Code	Title	Hours
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#### Area I - Written Composition

A. Complete the following:

EH 101	English Composition I	3
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B. Complete the following:

EH 102	English Composition II	3
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#### Area II - Humanities & Fine Arts

A. Select one of the following: (<http://bulletin.southalabama.edu/programs-az/business/management/footnote2/>)<sup>1</sup>

EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	

B. Select one of the following:

3

ARH 100	Survey of Art		
ARH 103	Art History I		
ARH 123	Art History II		
ARS 101	Art Appreciation		
DRA 110	Introduction to Theatre		
MUL 101	Introduction to Music		
C. Select six hours from the following:		6	
AFR 101	Intro to African Amer Studies		
ARH 100	Survey of Art		
ARH 103	Art History I		
ARH 123	Art History II		
ARH 203	Survey of Non-Western Art		
ARS 101	Art Appreciation		
CLA 110	Intro Anc Greek Roman Culture		
CA 110	Public Speaking		
DRA 110	Introduction to Theatre		
EH 215	Brit Lit before 1785		
EH 216	Brit Lit after 1785		
EH 225	Am Lit before 1865		
EH 226	Am Lit after 1865		
EH 235	World Lit before 1650		
EH 236	World Lit after 1650		
LG 101	Introductory Latin I		
LG 102	Introductory Latin II		
LG 111	Introductory French I		
LG 112	Introductory French II		
LG 121	Introductory Chinese I		
LG 122	Introductory Chinese II		
LG 131	Introductory Spanish I		
LG 132	Introductory Spanish II		
LG 141	Intro Classical Greek I		
LG 142	Intro Classical Greek II		
LG 151	Introductory German I		
LG 152	Introductory German II		
LG 153	Accelerated Intro German		
LG 171	Introductory Russian I		
LG 172	Introductory Russian II		
LG 173	Accelerated Intro Russian		
LG 201	Intermediate Latin I		
LG 202	Intermediate Latin II		
LG 211	Intermediate French I		
LG 212	Intermediate French II		
LG 213	Accelerated Inter French - H		
LG 221	Intermediate Chinese I		
LG 222	Intermediate Chinese II		
LG 231	Intermediate Spanish I		
LG 232	Intermediate Spanish II		
LG 234	Inter Spanish Accel -H		
LG 241	Interm Classical Greek I		
LG 242	Interm Classical Greek II		
LG 251	Intermediate German I		
LG 252	Intermediate German II		
LG 271	Intermediate Russian I		
LG 272	Intermediate Russian II		
LG 273	Intensive Second Year Russian		
LGS 101	Introductory Japanese I		
LGS 102	Introductory Japanese II		
LGS 106	Introductory Arabic I		
LGS 107	Introductory Arabic II		
LGS 110	Intro American Sign Language I		
LGS 111	Intro American Sign Lang II		
LGS 171	Introductory Korean I		
LGS 172	Introductory Korean II		
LGS 201	Intermediate Japanese I		
LGS 202	Intermediate Japanese II		
LGS 206	Intermediate Arabic I		
LGS 207	Intermediate Arabic II		
LGS 210	Intermediate ASL I		
LGS 211	Intermediate ASL II		
MUL 101	Introduction to Music		
PHL 110	Introduction to Philosophy		
PHL 120	Critical Thinking		
PHL 121	Introduction to Logic		
PHL 131	Introduction to Ethics		
PHL 231	Social Ethics		
PHL 240	Western Philosophy: Classical		
REL 100	Intro to the Study of Religion		
REL 200	Old Testament/Hebrew Bible		
REL 201	Survey of the New Testament		
<b>Area III – Natural Sciences &amp; Mathematics</b>			
A. Complete the following:			
MA 120	Calculus and Its Applications		3-4
or MA 125	Calculus I		
B. Select 8-10 hours from the following: 8-10			
AN 121	Biological Anthropology		
& 121L	and Biological Anthropology Lab		
BLY 101	Life Science I		
& 101L	and Life Science I Laboratory		
or BLY 121	General Biology I		
& 121L	and General Biology I Lab		
BLY 102	Life Science II		
& 102L	and Life Science II Lab		
or BLY 122	General Biology II		
& 122L	and General Biology II Laboratory		
CH 101	Survey of Inorg and Org Chem		
& 101L	and Survey Inorg-Org Chem Lab		
CH 131	General Chemistry I		
& 131L	and General Chemistry I Lab		
CH 132	General Chemistry II		
& 132L	and General Chemistry II Lab		
GEO 101	Environmental Geography		
& 101L	and Environmental Geography Lab		
GEO 102	Earth and the Environment		
& 102L	and Earth and the Environment Lab		
GY 111	Physical Geology		
& 111L	and Physical Geology Lab		

GY 112 & 112L	Earth History and Earth History Lab	
MAS 134 & 134L	Ocean Science and Ocean Science Lab	
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab	
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory	
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab	
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab	
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	

**Area IV – History, Social & Behavioral Sciences (<http://bulletin.southalabama.edu/programs-az/business/management/footnote2/>)<sup>1</sup>**

A. Select one of the following:		3
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
B. Select one of the following:		3
AN 100	Intro to Cultural Anthropology	
AN 101	Intro Archaeology-Bio Anthro	
CA 100	Intro to Communication	
CA 211	Interpersonal Comm	
CJ 105	Introduction to Criminal Justice	
GEO 114	People, Places, Environment	
GEO 115	World Regional Geography	
GS 101	Intro to Gender Studies	
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
IS 100	Global Issues	
IST 201	Seasons of Life	
NAS 101	Intro Native American Studies	
PSC 130	Intro to US Government	
PSY 120	Introduction to Psychology	
PSY 250	Life Span Development	
SY 109	Introductory Sociology	
SY 112	Social Problems	
C. Complete the following:		
ECO 215	Prin of Microeconomics	3
ECO 216	Prin of Macroeconomics	3

**Area V 200-Level Business Core**

A. Complete the following:		
ACC 211	Financial Accounting	3
ACC 212	Managerial Accounting	3
B. Complete the following:		
BUS 245	Data Analytics I	3

BUS 255	Data Analytics II	3
C. Complete the following:		
BUS 265	Legal Environ of Business I	3
D. Complete the following:		
CIS 250	Advanced Comp Applications	3
<b>Total Hours</b>		<b>59-62</b>

**Footnote**

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 135 & HY 136).

**Graduation Plan**

(122 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I	3
BUS 150	Intro to Business and Mgt	3
MA 120 or MA 125	Calculus and Its Applications or Calculus I	3-4
Fine Art	Area II <sup>1</sup>	3
History	Area IV <sup>1</sup>	3
BUS 101	Prof Experience I	1
<b>Hours</b>		<b>16-17</b>
<b>Spring</b>		
EH 102	English Composition II	3
ECO 215	Prin of Microeconomics	3
CIS 250	Advanced Comp Applications	3
Humanities or Fine Art	Area II <sup>1</sup>	3
Natural Science + Lab	Area III <sup>1</sup>	4
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
ACC 211	Financial Accounting	3
BUS 245	Data Analytics I	3
ECO 216	Prin of Macroeconomics	3
Literature	Area II <sup>1</sup>	3
Natural Science + Lab	Area III <sup>1</sup>	4
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ACC 212	Managerial Accounting	3
BUS 255	Data Analytics II	3
BUS 265	Legal Environ of Business I	3
BUS 201	Professional Experience II	1
2nd Literature or 2nd History	Area II or IV <sup>2</sup>	3
Gen Ed	Area II or IV <sup>3</sup>	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
MGT 300	Management Theory and Practice	3
MGT 305	Organizational Comm - W	3
BUS 301	Professional Experience III	1
MKT 320	Principles of Marketing	3
BUS 305	Data Analytics III	3
Business Elective #1 <sup>4</sup>		3
<b>Hours</b>		<b>16</b>

Spring		
MGT 351	Human Resource Management	3
MGT 340	Organizational Behavior - W	3
FIN 315	Business Finance	3
MGT 325	Operations Management	3
MGT 334	International Mgt	3
<b>Hours</b>		<b>15</b>
Fourth Year		
Fall		
MGT 450	Organizational Staffing	3
MGT 454	Compensation Administration	3
MGT 462	Negotiatn/Disp Resolutn in Bus (HR Elective #1)	3
Business Elective #2 <sup>4</sup>		3
MGT 496	Management Internship	3
<b>Hours</b>		<b>15</b>
Spring		
MGT 452	Employment Law	3
MGT 451	Employee Training -Development (HR Elective #2)	3
MGT 475	Strategic HRM	3
MGT 485	Bus Policy in Global Eco - W	3
MGT 486	Undergraduate Comp Exam	0
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>122-123</b>

<sup>1</sup> See General Education Requirements for options.

<sup>2</sup> All students must complete either a literature or a history sequence.

<sup>3</sup> If opted for Literature sequence, need Area IV; if opted for History sequence, need Area II.

<sup>4</sup> Anything in MCOB at the 300 or 400 level not used to fulfill another requirement except internship courses.

## Management for Business Major Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

Code	Title	Hours
MGT 300	Management Theory and Practice	3
MGT 325	Operations Management	3
Select four additional MGT courses at the 300 or 400 level ( <a href="http://bulletin.southalabama.edu/programs-az/business/management/footnote1/">http://bulletin.southalabama.edu/programs-az/business/management/footnote1/</a> ) <sup>1</sup>		12
<b>Total Hours</b>		<b>18</b>

### Footnote

<sup>1</sup> Except MGT 305 and MGT 485/MGT 486

## Management for Non-Business Majors Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

Code	Title	Hours
MGT 300	Management Theory and Practice	3
MGT 341	Organizational Behavior	3
MGT 306	Organizational Comm Non Bus	3
MGT 351	Human Resource Management	3
Select six semester hours from MGT electives, numbered 300 or above for which the student meets the pre-requisites		6
<b>Total Hours</b>		<b>18</b>

## Marketing and Quantitative Methods Department Information

(251) 460-6412

Department of Marketing and Quantitative Methods website  
<https://www.southalabama.edu/colleges/mcob/marketing/index.html>  
[\(https://www.southalabama.edu/colleges/mcob/marketing/\)](https://www.southalabama.edu/colleges/mcob/marketing/)

Title	Name
Interim Chair	Matthew Howard
Distinguished Professor of Marketing	Williams, Hair
Professor Emeritus	Lynn Robinson, Julie Sneath
Professors	Finney, Sharland, Chow
Associate Professors	Dadzie, Howard
Assistant Professors	Sabol, Loes, Simonson
Instructor	Tashbin

Office of Student Services Mitchell College of Business MCOB 110  
 Phone: (251) 460-7167  
 E-mail: [mcobadviser@southalabama.edu](mailto:mcobadviser@southalabama.edu)

"Business has only two functions - marketing and innovation." - Milan Kundera

### Discover Marketing

Marketing is a dynamic process that creates and delivers value in competitive environments through customer-focused and market-driven actions. The Marketing major provides an integrative and substantive approach to marketing strategy development and implementation based on learning experiences that combine concepts and managerial practice. A well-designed, market-based curriculum allows students to experience the core of marketing through interactive courses, internships, directed study programs, and special topics courses designed to focus on specific areas of marketing interest. These goals are achieved through the Marketing Management, International Business, and Professional Sales concentrations.

## Marketing Management Concentration

The Marketing Management concentration offers a holistic view of the marketing function, with special focus on consumer analysis, value creation and delivery, marketing segmentation, and marketing strategy development and execution, within the context of changing and competitive business environments. The Marketing Management concentration prepares students for career in sales, advertising and marketing communication, retailing, supply chain management, market research and related areas. It is good preparation for positions in health care marketing, sports marketing, tourism and hospitality, non-profit marketing, financial services marketing and a host of other growth industries.

## Professional Sales Concentration

In globally-competitive organizations, sales professionals are increasingly responsible for market growth, value creation, customer relationship management, branding, and communication of product, service, and organizational benefits. The sales function is the engine that propels every aspect of the organization. The Professional Sales Concentration prepares students for rewarding careers in sales and related areas. Students completing this concentration have some proficiency in relationship selling, buyer behavior, value creation and delivery, prospecting, sales call planning, communications skills, negotiating win/win solutions, and customer relationship management.

## International Business Major

A degree in International Business prepares students for management positions in U.S. based companies that serve global markets and foreign based companies that provide products and services in the U.S. and other countries. Students will learn how conducting business on a global scale differs from domestic operations and will develop sensitivity and understanding of cultural differences and business etiquette to allow them to effectively negotiate and conduct business in a variety of cultures. The curriculum requires proficiency in a foreign language and includes courses in management, marketing, economics, finance, accounting, and business law to prepare students for a variety of jobs in multinational companies.

Students majoring in International Business are strongly encouraged to participate in a study abroad experience. Short-term study abroad immersion experiences are available, including the British Studies Program in London and the Asia-Pacific Business course in Australia, in addition to longer-term study abroad programs at one of our partner universities, accredited by the AACSB.

International exposure is a critical success factor for International Business majors. However, approved alternatives, including research with a major international component, projects with substantial international content, or other options suggested by the International Business faculty advisor, will be considered.

Students must complete an internship with an international focus. This is accomplished by completing an internship with a multinational company operating in the U.S. or by completing an internship with an U.S. or foreign based firm operating in another country.

## Proficiency in a Second Language

Students majoring in International Business are required to demonstrate introductory-level proficiency in a second language by passing a foreign language proficiency examination as administered by the University of South Alabama Department of Foreign Languages and Literature

or by successfully completing the second semester of any approved elementary sequence in a foreign language.

## Supply Chain & Logistics Management Major

The Supply Chain and Logistics Management (SCLM) major is designed to equip students with the skill sets necessary for successful careers in supply chain-related fields. As supply chain management becomes more seminal in competitive strategy, it is important for business leaders to have a strong appreciation for and understanding of the mechanics of supply chain and logistics management and the resulting impact on organizational performance. Given the global nature of supply chains, talent is needed to ensure the proper planning, implementation, and assessment of market-centered, adaptive, and agile supply chains worldwide.

Supply chain and logistics management employment opportunities are wide and varied. The following represents a small sampling of the specific types of jobs available to program graduates: procurement specialists; sourcing analysts; materials manager; sourcing commodity specialists; logistics customer service; transportation sourcing specialists; material coordinator; operations manager; inventory control; production scheduling; warehouse manager; logistics analysts; and quality manager.

Upon completion of the BSBA degree program in SCLM, students will be prepared to enter a wide-range of sectors, including manufacturing, distribution, services, and government. Additionally, the program provides a solid foundation for general MBA programs, as well as specialized programs in supply chain management, logistics management, production and operations management, distribution management, transportation, marketing, and related areas.

## Degrees, Programs, or Concentrations

- Data Analytics Minor (p. 801)
- International Business (BSBA) (p. 801)
- Marketing (BSBA) (p. 805)
- Marketing (BSBA) - Marketing Management Concentration (p. 805)
- Marketing (BSBA) - Professional Sales Concentration (p. 808)
- Marketing for Business Majors Minor (p. 812)
- Marketing for Non-Business Majors Minor (p. 812)
- Supply Chain & Logistics Management (BSBA) (p. 812)

## Courses

### Marketing (MKT)

#### MKT 310 Intro International Business 3 cr

This course focuses on exploring the terminology, scope, status and evolving patterns of international business. Specifically, the course addresses the role of cultural, political, ethical, technological, and economic factors in the international business context and how businesses deal with uncertainty and risk. The course examines the impact of global forces on businesses at home and abroad, the role of governments in promoting and protecting business interests, the role of international agencies in the business environment.

#### MKT 320 Principles of Marketing 3 cr

Study of the institutions involved in creating transactions necessary to satisfy the needs of households, businesses and government and international customers. Topics include marketing planning, market segmentation, societal and ethical obligations, strategies for product, promotion and channel decisions.

**MKT 336 International Marketing 3 cr**

Examination of cultural, economic, and political factors that affect marketing of goods and services worldwide. Emphasis is placed on developing global marketing strategies of multinational corporations within existing trade structure and regulations. Both product and service flows between countries and regions are discussed.

**Prerequisite:** (MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D)

**MKT 340 Marketing Analytics 3 cr**

Contemporary marketers acquire large amounts of data. Marketing Analytics explains a) the most common marketing metrics, and b) how to compute and interpret these metrics to improve decision making.

**Prerequisite:** MKT 320 Minimum Grade of D and BUS 245 Minimum Grade of D

**MKT 345 Real Estate 3 cr**

Introduction to the tools used to make intelligent decisions regarding real estate as a wealth-building asset. Topics include legal rights, valuation, financial analysis, contracts, and brokerage with practical applications. Emphasis is given to local supply and demand conditions and property location and their impact on typical consumer decisions.

**Prerequisite:** (FIN 315 (may be taken concurrently) Minimum Grade of D or BMS 341 Minimum Grade of D or FIN 341 Minimum Grade of D)

**Cross-Listed:** FIN 346

**MKT 346 Ala Real Estate Law and Reg 1 cr**

Course required for students planning to take the Alabama Real Estate License Examination. Topics include current Alabama Real Estate License Law, Administrative Rules and Regulations, Consumer Guides, State Court Cases and relevant readings in Real Estate Risk Management. Prerequisite: Completion or current enrollment in MKT 345 and consent of instructor.

**Prerequisite:** MKT 345 (may be taken concurrently) Minimum Grade of D

**MKT 348 Real Estate Valuation 3 cr**

Emphasis is given to the valuation process and the analysis that leads to valid estimates of value. The cost, sales comparison, and income approaches to value are examined and illustrated within the Uniform Standards of Professional Appraisal Practice requirements. Typical valuation reports are discussed and illustrated.

**Prerequisite:** (MKT 345 Minimum Grade of D or FIN 346 Minimum Grade of D)

**Cross-Listed:** FIN 446

**MKT 350 Digital Marketing 3 cr**

Examination of the interactive processes and transactions involved in satisfying the needs of consumers, businesses, and government. Involves the study of marketing planning, consumer research, segmentation, and implementation of marketing strategies.

**Prerequisite:** (MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D)

**MKT 355 Customer Relationship Mgt 3 cr**

The course provides a comprehensive business model integrating customers and suppliers along the value chain. The focus is on the methodologies, tools, and techniques required for customer acquisition, retention, and profitability in competitive buyer/supplier environments.

**Prerequisite:** MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D

**MKT 374 Consumer Behavior 3 cr**

Study of the contributions of the behavioral sciences to the interpretation of market information. Involves the use of behavioral information which pertain to the analysis of consumers and organizational buyers in both domestic and international settings.

**Prerequisite:** MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D

**MKT 376 Business to Business Marketing 3 cr**

Study of the participants, channels, and relationships that govern the behavior of industrial buyers and marketers.

**Prerequisite:** MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D

**MKT 377 Pricing Strategies 3 cr**

Pricing strategies encompass the design and monitoring of an integrative framework for making pricing decisions. The purpose of this course is to synthesize economic and behavioral principles with marketing, accounting, and financial information, and to analyze the various pricing options within legal, market, and corporate constraints. This course covers both theory and application of pricing strategies for national and multinational concerns organized as either a profit or non-profit entity.

**Prerequisite:** (MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D)

**MKT 379 Retailing 3 cr**

Study of the management of retail operations. Topics include store location and layout, merchandise buying and planning, legal and ethical issues, promotion, pricing, human resource management, financial planning, information systems and customer services.

**Prerequisite:** MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D

**MKT 380 Integrated Mkt Communications 3 cr**

Study of the fundamentals of marketing communications from a strategic perspective. Examines the roles of and relationships between a variety of marketing communication elements including advertising, direct marketing, database marketing, interactive marketing, media planning, public relations, sales promotion, and personal selling.

**Prerequisite:** (MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D)

**MKT 381 Professional Selling & Sales Management 3 cr**

An integrative course focusing on the role of personal selling in achieving marketing success through building relationships and creating value, while highlighting the importance of sales management processes - recruiting, selecting, training, compensating, and evaluating sales professionals.

**Prerequisite:** MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D

**MKT 382 Brand Management 3 cr**

Systematic examination of strategies involved in tangible and intangible product decisions. Issues and strategies involved in identifying and implementing the development of new goods and services for both domestic and international markets are examined in-depth, as well as the management of mature products.

**Prerequisite:** (MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D)

**MKT 384 Market Research 3 cr**

Study of information gathering techniques, research methods and procedures used to solve marketing problems in consumer and organizational in both domestic and international markets.

**Prerequisite:** (BUS 255 Minimum Grade of D or ST 275 Minimum Grade of D) and (MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D)

**MKT 385 Services Marketing 3 cr**

Study of the unique features of services marketing and the service sector. Examines the strategies and activities of organizations and industries whose core product is service, such as sports, hospitality, healthcare, financial services, information technology, and event marketing.

**Prerequisite:** (MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D)

**MKT 445 Real Estate Fin and Investments 3 cr**

Analysis of income property debt and equity instruments, financing documents, financial analysis and risk scenarios of different property types, and relevant local, state, and federal laws and court cases.

**Prerequisite:** (MKT 345 Minimum Grade of D or FIN 346 Minimum Grade of D)

**MKT 448 Real Estate Law 3 cr**

A detailed examination of the contracts, documents, and instruments used in a transaction on one or more of the real property rights, and relevant local, state, and federal laws and court cases.

**Prerequisite:** (MKT 345 Minimum Grade of D or FIN 346 Minimum Grade of D) or MKT 346 Minimum Grade of D

**MKT 477 Export-Import Management 3 cr**

Study of exporting and importing strategies used by both domestic and multinational firms including a concentration in the areas of international pricing, governmental assistance, and channel selection. Emphasis is placed on the best practices and procedures of packing and documentation.

**Prerequisite:** (MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D) and (MKT 336 Minimum Grade of D or MKT 383 Minimum Grade of D)

**MKT 479 Marketing Policy - W 3 cr**

The capstone course for marketing majors. Integration and application of marketing concepts requiring analysis of both domestic and international marketing problems.

**Prerequisite:** (MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D) and MKT 374 Minimum Grade of D and (MKT 373 Minimum Grade of D or MKT 384 Minimum Grade of D or MKT 474 Minimum Grade of D)

**MKT 490 Special Topics 3 cr**

Designed to provide senior students an opportunity to study selected topics of particular interest. A student may count no more than six hours of Special Topics in the concentration. Prerequisite: Approval of Department Chair.

**Prerequisite:** MKT 320 Minimum Grade of D

**MKT 492 Applications in International Business 3 cr**

This course may take several formats to allow students who have achieved senior status the best method of applying concepts learned in other courses to the international business environment. The formats include a case-based course, a lecture-based course, a experiential course or mixture of those and other alternatives.

**Prerequisite:** MKT 320 Minimum Grade of D and MKT 310 Minimum Grade of D

**MKT 494 Directed Study in Marketing 1-3 cr**

Primarily designed to give superior students an opportunity to study selected topics of particular interest. Conferences, a bibliography, and a formal research report are required. Grades are awarded on a satisfactory/unsatisfactory basis. Prerequisites: Junior or senior standing, a cumulative GPA of 2.5 or better, and approval of the department chair following the evaluation of a written proposal.

**MKT 496 Marketing Internship 3 cr**

The internship program is designed to give students practical experience in their field of study. Students complete directed projects under the supervision of Department Chair. No more than three hours of internship credit may be counted toward a degree in the Mitchell College of Business. Prerequisites: Junior or Senior standing, declared major in marketing, overall GPA of at least 2.5, and Internship Agreement signed by department Chair.

**MKT 590 Special Topics - 3 cr**

Designed to provide graduate students an opportunity to study selected topics. A student may count no more than 3 hours of Special Topics in the MBA degree program. Approval of Department Chair

**MKT 594 Independent Study 3 cr**

Readings and research on selected topics. Conferences and formal research report required. Approval of Department Chair

**MKT 701 Marketing Management 3 cr**

This seminar examines the theory underpinning the study of Marketing. The seminar uses the classic research in Marketing to frame modern theoretical developments and provide students with a strong fundamental platform for their future studies.

**MKT 703 Supply Chain & Logistics 3 cr**

The course examines the theory and applied research in the field of business to business logistics and supply chain management.

**MKT 705 Sem. Marketing Communications 3 cr**

This seminar investigates the theoretical and applied research in the field of marketing communications.

**MKT 707 Seminar in Marketing Strategy 3 cr**

Study of consumption behavior with an emphasis on underlying theories and relevant literature within the framework of both marketing and psychology. Examination of the influences on behaviors and the process of consumer decision making from conceptual and managerial perspectives.

**MKT 709 Marketing: Sp Topic- 3 cr**

This seminar focuses on special applications of Marketing. The instructor will develop an in-depth analysis on several contemporary areas of study.

**MKT 799 Dissertation Research 1-6 cr**

Independent Scholarship working with committee

**Supply Chain & Logistics (SCL)****SCL 300 Supply Chain Management 3 cr**

This course encompasses the design and management of the supply chain that collectively provides for the exchange of title, physical movement, and storage activities in marketing, including the use of new technologies. This course examines the role of manufacturers and intermediaries in channel strategies including scope, methods, problems, and opportunities of total supply chain coordination.

**Prerequisite:** MKT 320 Minimum Grade of D

**SCL 350 Intro to Business Logistics 3 cr**

An integrative approach highlighting the supply chain component encompassing the flow of goods, services, and information in manufacturing and services organizations, that deliver consistent value to a range of upstream and downstream customers.

**Prerequisite:** (MKT 320 Minimum Grade of D and SCL 300 Minimum Grade of D)

**SCL 351 Strategic Sourcing & Supply Mgt 3 cr**

An integrative approach combining both strategic and operational components in planning for and acquiring the necessary inputs and resources for organizational success. Focal points include creating and delivering value through astute purchasing and supply management, across a range of organizations, including services, manufacturing, governmental, and non-profits.

**Prerequisite:** MKT 320 Minimum Grade of D and SCL 300 Minimum Grade of D

**SCL 352 Port Management 3 cr**

A comprehensive overview of global port management practices, including the associated economic, regulatory, financial, commercial, socio-political, and data environments influencing port operations.

**Prerequisite:** MKT 320 Minimum Grade of D and SCL 300 Minimum Grade of D

**SCL 353 Distribution Center Mgt 3 cr**

An integrative perspective of distribution center management and materials handling, encompassing distribution planning and control, warehousing management, replenishment strategies, and the design of storage and handling systems.

**Prerequisite:** MKT 320 Minimum Grade of D and SCL 300 Minimum Grade of D

**SCL 400 Supply Chain Analytics 3 cr**

A comprehensive overview of the analytical tools and techniques necessary to enhance supply chain efficiency and effectiveness to ensure customer satisfaction. Focal points will include data analysis, performance measurement, big data, forecasting, and tactical, sales and operations planning, and network management.

**Prerequisite:** MKT 320 Minimum Grade of D and SCL 300 Minimum Grade of D

**SCL 405 Curr Issues in Sup Chain Mgt 3 cr**

An integrative course highlighting the major managerial challenges in key components of the supply chain, including sourcing, production, and logistics, with special emphasis on supply chain integration, customer value and performance measurement.

**Prerequisite:** (MKT 320 Minimum Grade of D and SCL 300 Minimum Grade of D)

**SCL 490 Special Topics 3 cr**

Designed to provide senior students an opportunity to study selected topics of particular interest. A student may count no more than six hours of Special Topics in the concentration. Prerequisite: Approval of Department Chair.

**Prerequisite:** (MKT 320 Minimum Grade of D)

**SCL 494 Directed Study 3 cr**

Primarily designed to give superior students an opportunity to study selected topics of particular interest. Conferences, a bibliography, and a formal research report are required. Grades are awarded on a satisfactory/unsatisfactory basis. Prerequisites: Junior or senior standing, a cumulative GPA of 2.5 or better, and approval of the department chair following evaluation of a written proposal.

**Prerequisite:** (MKT 320 Minimum Grade of D)

**SCL 496 Sup Chain Logistics Internship 3 cr**

The internship program is designed to give students practical experience in their field of study. Students complete directed projects under the supervision of Department Chair. No more than three hours of internship credit may be counted toward a degree in the Mitchell College of Business. Must have an overall GPA of at least 2.0 and an Internship Agreement signed by Department Chair.

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
<b>C</b>	Marketing/Quantitative Methods	Professor	BBA, Mississippi State University MBA, Georgia State University PHD, Mississippi State University
CAPELLA, MICHAEL LOUIS (mcapella@southalabama.edu)			
CHOW, ALAN FIELD (alchow@southalabama.edu)	Marketing/Quantitative Methods	Associate Professor	BS, Louisiana State University MS, Louisiana State University PHD, University of South Alabama
<b>D</b>	Marketing/Quantitative Methods	Associate Professor	AB, University of Georgia MH, Cornell U-Ny St Statutory Cols PHD, University of North Texas
DADZIE, CHARLENE AMA (cdadzie@southalabama.edu)			
<b>F</b>	Marketing/Quantitative Methods	Professor	BS, Auburn University MBA, University of Mississippi PHD, University of Alabama
FINNEY, ROBERT ZACHARY (zfinney@southalabama.edu)			
<b>H</b>	Marketing/Quantitative Methods	Professor	BA, University of Florida MA, University of Florida PHD, University of Florida
HAIR, JOSEPH F (jhair@southalabama.edu)			
HOWARD, MATTHEW C (mhoward@southalabama.edu)	Marketing/Quantitative Methods	Associate Professor	BA, Virginia Polytechnic Inst and BS, Virginia Polytechnic Inst and MS, Pennsylvania State University PHD, Pennsylvania State University

<b>L</b>	Marketing/Quantitative Methods	Instructor	BSBA, University of South Alabama MBA, Auburn University
LOES, MARIANNE C. (mloes@southalabama.edu)			
<b>S</b>	Marketing/Quantitative Methods	Assistant Professor	BS, University of New Orleans MA, University of Alabama DBA, University of Dallas
SABOL, MISTY ANNE (msabol@southalabama.edu)			
SHARLAND, ALEXANDER P. (asharland@southalabama.edu)	Marketing/Quantitative Methods	Professor	BA, University of Stirling MBA, Virginia Polytechnic Inst and PHD, Florida State University
SIMONSON, PETER DOUGLAS (psimonson@southalabama.edu)	Marketing/Quantitative Methods	Assistant Professor	BSBA, University of Arizona MBA, North Dakota St University PHD, North Dakota St University
<b>T</b>	Marketing/Quantitative Methods	Instructor	BS, Spring Hill College MBA, Spring Hill College
TASHBIN, GHOLAMREZA (gtashbin@southalabama.edu)			
<b>W</b>	Marketing/Quantitative Methods	Professor	BSBA, University of Southern Miss MA, University of Alabama PHD, University of Arkansas- Fayette
WILLIAMS, ALVIN JEROME (awilliams@southalabama.edu)			
<b>Z</b>	Marketing/Quantitative Methods	Part-Time Instructor	BA, Catholic University of America MPA, University of South Alabama PHD, University of South Alabama
ZOGHBY, JENNIFER CHRISTINE (zoghby@southalabama.edu)			

## Data Analytics Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

Code	Title	Hours
BUS 305	Data Analytics III (see footnote table below (p. 801)) <sup>1</sup>	3
BUS 430	Business Data Visualization: Concepts and Applications	3
Select four of the following:		12
ECO 451	Mathematical Economics	
ECO 453	Intro to Econometrics (see footnote table below (p. 801)) <sup>1</sup>	
MGT 390	Total Quality Management	
MGT 430	Operations Research	
MKT 340	Marketing Analytics	
MKT 384	Market Research	
HI 410	Health Informatics	
ISC 305	Info Systems-Technology	
ISC 353	Info Sys Appl Development	
ST 335	Applied Regression Analysis	
<b>Total Hours</b>		<b>18</b>

### Footnote

<sup>1</sup> Business majors may count either BUS 305 or ECO 453 towards both their upper division business core and the minor. Business majors may count their two business electives towards both the major and the minor. Business students may not count major specific courses to both the major and the minor.

A maximum of 6 hours may be taken from outside MCOB

## International Business (BSBA)

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 802)		59-62
<b>Major Requirements</b>		
<i>Freshman Core</i>		
A. Complete the following:		
BUS 150	Intro to Business and Mgt (linkurl^../footnote1/^or Transfer Student Elective) <sup>1</sup>	3
<i>Upper Division Business Core</i>		
A 2.0 GPA is required in the Upper Division Business Core		
A. Complete the following:		
BUS 305	Data Analytics III	3
or ECO 453	Intro to Econometrics	
B. Complete the following:		

FIN 315	Business Finance	3
MGT 300	Management Theory and Practice	3
MGT 305	Organizational Comm - W	3
MGT 325	Operations Management	3
MKT 320	Principles of Marketing	3

*Experiential Learning*

A. Select three hours from the following: 3

BUS 101	Prof Experience I	
BUS 201	Professional Experience II	
BUS 301	Professional Experience III	
BUS 302	Professional Preparation	

B. Select one of the following: (<http://bulletin.southalabama.edu/programs-az/business/marketing-quantitative-methods/footnote1/>)<sup>2</sup> 3

ACC 496	Accounting Internship	
ECO 496	Economics Internship	
FIN 496	Finance Internship	
MGT 496	Management Internship	
MKT 496	Marketing Internship	

*International Business Major*

A 2.0 GPA is required for all courses counted towards the major

A. Complete the following:

MKT 310	Intro International Business	3
MGT 334	International Mgt	3
MKT 336	International Marketing	3
BUS 440	Bus in Reg and Emerg Markets-W	3
MKT 492	Applications in International Business	3

B. Complete the following:

MGT 462	Negotiatn/Disp Resolutn in Bus	3
SCL 300	Supply Chain Management	3

C. Complete two of the following: 6

ECO 330	Current Global Economic Issues	
ECO 363	International Economics	
FIN 332	Multinational Finance	

*Business Electives*

A. Select two courses from 300-494 Electives from ACC, ECO, FIN, MGT, MKT 6

*Business Policy Capstone*

A. Complete the following:

MGT 485	Bus Policy in Global Eco - W	3
MGT 486	Undergraduate Comp Exam	0

**Minor Requirements**

A minor is not required for this degree program 0

**Total Hours** 122-125**Footnote**<sup>1</sup> BUS 150 or Transfer Student Elective for students transferring into the College with more than 45 hours. Students transferring with 46-60 hours are highly encouraged to take BUS 150.<sup>2</sup> **International Internship Requirement:** Students must complete an internship with an international focus. This is accomplished by completing an internship with a multinational company operating in the U.S. or by completing an internship with an U.S. or foreign based

firm operating in another country. Only one internship may be counted towards a business degree. Internship courses may only be used to fulfill the Experiential Learning requirement and may not be used as business electives or to fulfill any other degree requirement.

<sup>3</sup> **Transfer Credits:** Transfer credits for International Business Major courses will only be accepted from AACSB-accredited institutions.**Notes:****No Study Abroad Requirement:** Students majoring in International Business are encouraged to participate in a study abroad experience. Short-term study abroad immersion experiences are available in the May semester and summer semester and students may also choose longer-term study abroad experiences for one or more semesters at one of our partner universities, which are accredited by the AACSB.**General Education Requirements**

Code	Title	Hours
<b>Area I - Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II - Humanities &amp; Fine Arts</b>		
A. Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/business/marketing-quantitative-methods/footnote2/">http://bulletin.southalabama.edu/programs-az/business/marketing-quantitative-methods/footnote2/</a> ) <sup>1</sup> 3		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
B. Select one of the following: 3		
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	
C. Select six hours from the following: 6		
AFR 101	Intro to African Amer Studies	
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARH 203	Survey of Non-Western Art	
ARS 101	Art Appreciation	
CLA 110	Intro Anc Greek Roman Culture	
CA 110	Public Speaking	
DRA 110	Introduction to Theatre	
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	

EH 236	World Lit after 1650		
LG 101	Introductory Latin I		
LG 102	Introductory Latin II		
LG 111	Introductory French I		
LG 112	Introductory French II		
LG 121	Introductory Chinese I		
LG 122	Introductory Chinese II		
LG 131	Introductory Spanish I		
LG 132	Introductory Spanish II		
LG 141	Intro Classical Greek I		
LG 142	Intro Classical Greek II		
LG 151	Introductory German I		
LG 152	Introductory German II		
LG 153	Accelerated Intro German		
LG 171	Introductory Russian I		
LG 172	Introductory Russian II		
LG 173	Accelerated Intro Russian		
LG 201	Intermediate Latin I		
LG 202	Intermediate Latin II		
LG 211	Intermediate French I		
LG 212	Intermediate French II		
LG 213	Accelerated Inter French - H		
LG 221	Intermediate Chinese I		
LG 222	Intermediate Chinese II		
LG 231	Intermediate Spanish I		
LG 232	Intermediate Spanish II		
LG 234	Inter Spanish Accel -H		
LG 241	Inter Classical Greek I		
LG 242	Inter Classical Greek II		
LG 251	Intermediate German I		
LG 252	Intermediate German II		
LG 271	Intermediate Russian I		
LG 272	Intermediate Russian II		
LG 273	Intensive Second Year Russian		
LGS 101	Introductory Japanese I		
LGS 102	Introductory Japanese II		
LGS 106	Introductory Arabic I		
LGS 107	Introductory Arabic II		
LGS 110	Intro American Sign Language I		
LGS 111	Intro American Sign Lang II		
LGS 171	Introductory Korean I		
LGS 172	Introductory Korean II		
LGS 201	Intermediate Japanese I		
LGS 202	Intermediate Japanese II		
LGS 206	Intermediate Arabic I		
LGS 207	Intermediate Arabic II		
LGS 210	Intermediate ASL I		
LGS 211	Intermediate ASL II		
MUL 101	Introduction to Music		
PHL 110	Introduction to Philosophy		
PHL 120	Critical Thinking		
PHL 121	Introduction to Logic		
PHL 131	Introduction to Ethics		
PHL 231	Social Ethics		
PHL 240	Western Philosophy: Classical		
REL 100	Intro to the Study of Religion		
REL 200	Old Testament/Hebrew Bible		
REL 201	Survey of the New Testament		
<b>Area III – Natural Sciences &amp; Mathematics</b>			
A. Choose the following:			
MA 120	Calculus and Its Applications		3-4
or MA 125	Calculus I		
B. Select 8-10 hours from the following: 8-10			
AN 121	Biological Anthropology		
& 121L	and Biological Anthropology Lab		
BLY 101	Life Science I		
& 101L	and Life Science I Laboratory		
or BLY 121	General Biology I		
& 121L	and General Biology I Lab		
BLY 102	Life Science II		
& 102L	and Life Science II Lab		
or BLY 122	General Biology II		
& 122L	and General Biology II Laboratory		
CH 101	Survey of Inorg and Org Chem		
& 101L	and Survey Inorg-Org Chem Lab		
CH 131	General Chemistry I		
& 131L	and General Chemistry I Lab		
CH 132	General Chemistry II		
& 132L	and General Chemistry II Lab		
GEO 101	Environmental Geography		
& 101L	and Environmental Geography Lab		
GEO 102	Earth and the Environment		
& 102L	and Earth and the Environment Lab		
GY 111	Physical Geology		
& 111L	and Physical Geology Lab		
GY 112	Earth History		
& 112L	and Earth History Lab		
MAS 134	Ocean Science		
& 134L	and Ocean Science Lab		
PH 101	Introduction to Astronomy		
& 101L	and Introduction to Astronomy Lab		
PH 104	Concepts of Physics		
& 104L	and Concepts of Physics Laboratory		
PH 114	Physics with Algebra-Trig I		
& 114L	and Alg-Trig Based Physics I Lab		
PH 115	Physics with Algebra -Trig II		
& 115L	and Alg-Trig Based Physics II Lab		
PH 201	Calculus-Based Physics I		
& 201L	and Calculus-Based Physics I Lab		
PH 202	Calculus-Based Physics II		
& 202L	and Calculus-Based Physics II Lab		
<b>Area IV – History, Social &amp; Behavioral Sciences (<a href="http://bulletin.southalabama.edu/programs-az/business/marketing-quantitative-methods/footnote2/">http://bulletin.southalabama.edu/programs-az/business/marketing-quantitative-methods/footnote2/</a>)<sup>1</sup></b>			
A. Select one of the following: 3			
HY 101	HY of Western Civilization I		
HY 102	HY of Western Civilization II		

HY 135	US History to 1877	
HY 136	US History since 1877	
B. Select one of the following:		3
AN 100	Intro to Cultural Anthropology	
AN 101	Intro Archaeology-Bio Anthro	
CA 100	Intro to Communication	
CA 211	Interpersonal Comm	
CJ 105	Introduction to Criminal Justice	
GEO 114	People, Places, Environment	
GEO 115	World Regional Geography	
GS 101	Intro to Gender Studies	
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
IS 100	Global Issues	
IST 201	Seasons of Life	
NAS 101	Intro Native American Studies	
PSC 130	Intro to US Government	
PSY 120	Introduction to Psychology	
PSY 250	Life Span Development	
SY 109	Introductory Sociology	
SY 112	Social Problems	

C. Complete the following:		
ECO 215	Prin of Microeconomics	3
ECO 216	Prin of Macroeconomics	3

**Area V 200-Level Business Core**

A grade of at least C is required in each course

A. Complete the following:		
ACC 211	Financial Accounting	3
ACC 212	Managerial Accounting	3
B. Complete the following:		
BUS 245	Data Analytics I	3
BUS 255	Data Analytics II	3
C. Complete the following:		
BUS 265	Legal Environ of Business I	3
D. Complete the following:		
CIS 250	Advanced Comp Applications	3

**Total Hours 59-62**

**Footnote**

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 135 & HY 136).

**Graduation Plan**

(122 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I	3
BUS 150	Intro to Business and Mgt	3

MA 120	Calculus and Its Applications	3-4
or MA 125	or Calculus I	
Foreign Language Series Course 1	<sup>1,2</sup>	3
History	Area IV <sup>3</sup>	3
BUS 101	Prof Experience I	1
<b>Hours</b>		<b>16-17</b>

<b>Spring</b>		
EH 102	English Composition II	3
ECO 215	Prin of Microeconomics	3
CIS 250	Advanced Comp Applications	3
Foreign Language Series Course 2	<sup>1,2</sup>	3
Natural Science + Lab	Area III <sup>3</sup>	4
<b>Hours</b>		<b>16</b>

<b>Second Year</b>		
<b>Fall</b>		
ACC 211	Financial Accounting	3
BUS 245	Data Analytics I	3
ECO 216	Prin of Macroeconomics	3
Literature	Area II <sup>3</sup>	3
Natural Science + Lab	Area III <sup>3</sup>	4
<b>Hours</b>		<b>16</b>

<b>Spring</b>		
ACC 212	Managerial Accounting	3
BUS 255	Data Analytics II	3
BUS 265	Legal Environ of Business I	3
BUS 201	Professional Experience II	1
2nd History	Area IV <sup>4</sup>	3
Fine Art	Area II <sup>3</sup>	3
<b>Hours</b>		<b>16</b>

<b>Third Year</b>		
<b>Fall</b>		
MGT 300	Management Theory and Practice	3
MGT 305	Organizational Comm - W	3
BUS 301	Professional Experience III	1
MKT 320	Principles of Marketing	3
FIN 315	Business Finance	3
MKT 310	Intro International Business	3
<b>Hours</b>		<b>16</b>

<b>Spring</b>		
Business Elective #1	<sup>5</sup>	3
BUS 305	Data Analytics III	3
or ECO 453	or Intro to Econometrics	
ECO 330	Current Global Economic Issues (Complete 2)	6
or ECO 363	or International Economics	
or FIN 332	or Multinational Finance	
MGT 325	Operations Management	3
<b>Hours</b>		<b>15</b>

<b>Fourth Year</b>		
<b>Fall</b>		
MGT 334	International Mgt	3
MKT 336	International Marketing	3
MGT 462	Negotiatn/Disp Resolutn in Bus	3
MKT 496	Marketing Internship (must have international focus)	3
SCL 300	Supply Chain Management	3
<b>Hours</b>		<b>15</b>

<b>Spring</b>		
BUS 440	Bus in Reg and Emerg Markets-W	3
MKT 492	Applications in International Business	3
Business Elective #2	<sup>5</sup>	3

MGT 486	Undergraduate Comp Exam	0
	<b>Hours</b>	<b>9</b>
	<b>Total Hours</b>	<b>119-120</b>

<sup>1</sup> See Area II for Foreign Language (LG) series options.

<sup>2</sup> Students majoring in International Business are required to demonstrate introductory-level proficiency in a second language by passing a foreign language proficiency examination as administered by the University of South Alabama Department of Foreign Languages and Literature or by successfully completing the second semester of any approved elementary sequence in a foreign language.

<sup>3</sup> See General Education Requirements for options.

<sup>4</sup> All students must complete either a literature or a history sequence. However, because International Business students are required to take a two course foreign language series fulfilling the Area II humanities requirements, International Business majors should elect the history sequence in Area IV unless they fulfill the foreign language proficiency through testing.

<sup>5</sup> Anything in MCOB at the 300 or 400 level not used to fulfill another requirement except internship courses.

## Marketing (BSBA) Degree Requirements

### Marketing Concentrations

Two concentrations are available within the Marketing major: Marketing Management and Professional Sales. The Marketing Department also manages the International Business major and Supply Chain Management major.

#### Marketing Management Concentration

The Marketing Management Concentration prepares students for entry-level positions in sales and sales management, supply chain management, retailing, advertising, and market research.

To graduate, students complete a minimum of 122 semester hours with an overall institution grade-point average (GPA) of 2.0 (38 hours of general education requirements and 84 hours of business courses). In addition, a grade of at least C is required in each of the Basic Business Techniques courses and a 2.0 GPA is required in the 300-level business core courses, and a 2.0 GPA is required for all courses counted in the Marketing major.

#### Professional Sales Concentration

Professional selling is one of the most rewarding career fields in business. Few careers allow for the flexibility, financial rewards, personal satisfaction and overall sense of achievement enjoyed by sales professionals. A high percentage of marketing and business graduates identify the sales field as a career of choice upon graduation.

In globally-competitive organizations, sales professionals are increasingly responsible for market growth, value creation, customer relationship management, branding, and communication of product, service, and organizational benefits. The sales function is the engine that propels every aspect of the organization.

After completing the sales concentration, students are competitively positioned for jobs in a cross-section of firms across the globe. Specifically, you can 'market' yourself to organizations as having some degree of proficiency in relationship selling, buyer behavior, value creation and delivery, prospecting, sales call planning, presenting the core sales message, communications skills, negotiating win/win solutions,

customer relationship management, management of high-impact sales teams, and understanding of sales force performance. These skill sets are among the most widely sought of any among successful professional marketers.

To graduate, students complete a minimum of 122 semester hours with an overall institution grade-point average (GPA) of 2.0 (38 hours of general education requirements and 84 hours of business courses). In addition, a grade of at least C is required in each of the Basic Business Techniques courses and a 2.0 GPA is required in the 300-level business core courses, and a 2.0 GPA is required for all courses counted in the Marketing major.

## Marketing (BSBA) - Marketing Management Concentration Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 806)		59-62
<b>Major Requirements</b>		
<i>Freshman Core</i>		
A. Complete the following:		
BUS 150	Intro to Business and Mgt (linkurl^../footnote1/^or Transfer Student Elective ) <sup>1</sup>	3
<i>Upper Division Business Core</i>		
A 2.0 GPA is required in the Upper Division Business Core		
A. Complete the following:		
BUS 305	Data Analytics III	3
or ECO 453	Intro to Econometrics	
B. Complete the following:		
FIN 315	Business Finance	3
MGT 300	Management Theory and Practice	3
MGT 305	Organizational Comm - W	3
MGT 325	Operations Management	3
MKT 320	Principles of Marketing	3
<i>Experiential Learning</i>		
A. Select three hours from the following:		3
BUS 101	Prof Experience I	
BUS 201	Professional Experience II	
BUS 301	Professional Experience III	
BUS 302	Professional Preparation	
B. Select one of the following:		3
ACC 496	Accounting Internship	
ECO 496	Economics Internship	
FIN 496	Finance Internship	
MGT 496	Management Internship	
MKT 496	Marketing Internship	
<i>Marketing Management Concentration</i>		
A 2.0 GPA is required for all courses counted towards the major		
A. Complete the following:		
MKT 336	International Marketing	3
MKT 374	Consumer Behavior	3
MKT 380	Integrated Mkt Communications	3

MKT 382	Brand Management	3
MKT 384	Market Research	3
MKT 385	Services Marketing	3
MKT 479	Marketing Policy - W	3
SCL 300	Supply Chain Management	3
B. Select one of the following:		3
MKT 340	Marketing Analytics	
MKT 350	Digital Marketing	
MKT 376	Business to Business Marketing	
MKT 379	Retailing	
MKT 381	Professional Selling & Sales Management	
<i>Business Electives</i>		
A. Select two courses from 300-494 Electives from ACC, ECO, FIN, MGT, MKT		6
<i>Business Policy Capstone</i>		
A. Complete the following:		
MGT 485	Bus Policy in Global Eco - W	3
or MGT 486	Undergraduate Comp Exam	
<b>Minor Requirements</b>		
A minor is not required for this degree program		0
<b>Total Hours</b>		<b>122-125</b>

## Footnote

<sup>1</sup> BUS 150 or Transfer Student Elective for students transferring into the College with more than 45 hours. Students transferring with 46-60 hours are highly encouraged to take BUS 150.

## Notes:

- **Transfer credit will only be awarded for courses in the Marketing Management Concentration if the course was taken at an AACSB accredited institution.**
- **Only one internship may be counted towards a business degree. Internship courses may only be used to fulfill the Experiential Learning requirement and may not be used as business electives or to fulfill any other degree requirement.**

## General Education Requirements

Code	Title	Hours
<b>Area I - Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II - Humanities &amp; Fine Arts</b>		
A. Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/business/marketing-quantitative-methods/footnote2/">http://bulletin.southalabama.edu/programs-az/business/marketing-quantitative-methods/footnote2/</a> ) <sup>1</sup>		3
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	

B. Select one of the following:		3
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	
C. Select six hours from the following:		6
AFR 101	Intro to African Amer Studies	
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARH 203	Survey of Non-Western Art	
ARS 101	Art Appreciation	
CLA 110	Intro Anc Greek Roman Culture	
CA 110	Public Speaking	
DRA 110	Introduction to Theatre	
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
LG 101	Introductory Latin I	
LG 102	Introductory Latin II	
LG 111	Introductory French I	
LG 112	Introductory French II	
LG 121	Introductory Chinese I	
LG 122	Introductory Chinese II	
LG 131	Introductory Spanish I	
LG 132	Introductory Spanish II	
LG 141	Intro Classical Greek I	
LG 142	Intro Classical Greek II	
LG 151	Introductory German I	
LG 152	Introductory German II	
LG 153	Accelerated Intro German	
LG 171	Introductory Russian I	
LG 172	Introductory Russian II	
LG 173	Accelerated Intro Russian	
LG 201	Intermediate Latin I	
LG 202	Intermediate Latin II	
LG 211	Intermediate French I	
LG 212	Intermediate French II	
LG 213	Accelerated Inter French - H	
LG 221	Intermediate Chinese I	
LG 222	Intermediate Chinese II	
LG 231	Intermediate Spanish I	
LG 232	Intermediate Spanish II	
LG 234	Inter Spanish Accel -H	
LG 241	Interm Classical Greek I	
LG 242	Interm Classical Greek II	
LG 251	Intermediate German I	

LG 252	Intermediate German II
LG 271	Intermediate Russian I
LG 272	Intermediate Russian II
LG 273	Intensive Second Year Russian
LGS 101	Introductory Japanese I
LGS 102	Introductory Japanese II
LGS 106	Introductory Arabic I
LGS 107	Introductory Arabic II
LGS 110	Intro American Sign Language I
LGS 111	Intro American Sign Lang II
LGS 171	Introductory Korean I
LGS 172	Introductory Korean II
LGS 201	Intermediate Japanese I
LGS 202	Intermediate Japanese II
LGS 206	Intermediate Arabic I
LGS 207	Intermediate Arabic II
LGS 210	Intermediate ASL I
LGS 211	Intermediate ASL II
MUL 101	Introduction to Music
PHL 110	Introduction to Philosophy
PHL 120	Critical Thinking
PHL 121	Introduction to Logic
PHL 131	Introduction to Ethics
PHL 231	Social Ethics
PHL 240	Western Philosophy: Classical
REL 100	Intro to the Study of Religion
REL 200	Old Testament/Hebrew Bible
REL 201	Survey of the New Testament

### Area III – Natural Sciences & Mathematics

A. Select one of the following:

MA 120	Calculus and Its Applications	3-4
or MA 125	Calculus I	

B. Select 8-10 hours from the following: 8-10

AN 121 & 121L	Biological Anthropology and Biological Anthropology Lab
BLY 101 & 101L	Life Science I and Life Science I Laboratory
or BLY 121 & 121L	General Biology I and General Biology I Lab
BLY 102 & 102L	Life Science II and Life Science II Lab
or BLY 122 & 122L	General Biology II and General Biology II Laboratory
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab
CH 131 & 131L	General Chemistry I and General Chemistry I Lab
CH 132 & 132L	General Chemistry II and General Chemistry II Lab
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab

GY 111 & 111L	Physical Geology and Physical Geology Lab
GY 112 & 112L	Earth History and Earth History Lab
MAS 134 & 134L	Ocean Science and Ocean Science Lab
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab

### Area IV – History, Social & Behavioral Sciences (<http://bulletin.southalabama.edu/programs-az/business/marketing-quantitative-methods/footnote2/>)<sup>1</sup>

A. Select one of the following: 3

HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 135	US History to 1877
HY 136	US History since 1877

B. Select one of the following: 3

AN 100	Intro to Cultural Anthropology
AN 101	Intro Archaeology-Bio Anthro
CA 100	Intro to Communication
CA 211	Interpersonal Comm
CJ 105	Introduction to Criminal Justice
GEO 114	People, Places, Environment
GEO 115	World Regional Geography
GS 101	Intro to Gender Studies
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
IS 100	Global Issues
IST 201	Seasons of Life
NAS 101	Intro Native American Studies
PSC 130	Intro to US Government
PSY 120	Introduction to Psychology
PSY 250	Life Span Development
SY 109	Introductory Sociology
SY 112	Social Problems

C. Complete the following:

ECO 215	Prin of Microeconomics	3
ECO 216	Prin of Macroeconomics	3

### Area V 200-Level Business Core

A grade of at least C is required for each course

A. Complete the following:

ACC 211	Financial Accounting	3
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ACC 212	Managerial Accounting	3
<b>B. Complete the following:</b>		
BUS 245	Data Analytics I	3
BUS 255	Data Analytics II	3
<b>C. Complete the following:</b>		
BUS 265	Legal Environ of Business I	3
<b>D. Complete the following:</b>		
CIS 250	Advanced Comp Applications	3
<b>Total Hours</b>		<b>59-62</b>

**Footnote**

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 135 & HY 136).

**Graduation Plan**

(122 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I	3
BUS 150	Intro to Business and Mgt	3
MA 120	Calculus and Its Applications	3-4
	or MA 125	
Fine Art	Area II <sup>1</sup>	3
History	Area IV <sup>1</sup>	3
BUS 101	Prof Experience I	1
<b>Hours</b>		<b>16-17</b>
<b>Spring</b>		
EH 102	English Composition II	3
ECO 215	Prin of Microeconomics	3
CIS 250	Advanced Comp Applications	3
Humanities or Fine Art	Area II <sup>1</sup>	3
Natural Science + Lab	Area III <sup>1</sup>	4
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
ACC 211	Financial Accounting	3
BUS 245	Data Analytics I	3
ECO 216	Prin of Macroeconomics	3
Literature	Area II <sup>1</sup>	3
Natural Science + Lab	Area III <sup>1</sup>	4
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ACC 212	Managerial Accounting	3
BUS 255	Data Analytics II	3
BUS 265	Legal Environ of Business I	3
BUS 201	Professional Experience II	1
2nd History	Area IV <sup>2</sup>	3
Fine Art	Area II <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
MGT 300	Management Theory and Practice	3
MGT 305	Organizational Comm - W	3
BUS 301	Professional Experience III	1
MKT 320	Principles of Marketing	3

FIN 315	Business Finance	3
<b>Business Elective #1 <sup>3</sup></b>		
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
MKT 336	International Marketing	3
MKT 374	Consumer Behavior	3
MKT 384	Market Research	3
BUS 305	Data Analytics III	3
	or ECO 453	
	or Intro to Econometrics	
MGT 325	Operations Management	3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
SCL 300	Supply Chain Management	3
MKT 380	Integrated Mkt Communications	3
MKT 381	Professional Selling & Sales Management	3
MKT 340	Marketing Analytics	3
	or MKT 385	
	or Services Marketing	
MKT 496	Marketing Internship	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
MKT 479	Marketing Policy - W	3
Select one MKT Elective #1 from the following:		
MKT 340	Marketing Analytics	
MKT 350	Digital Marketing	
MKT 376	Business to Business Marketing	
MKT 379	Retailing	
<b>Business Elective #2 <sup>3</sup></b>		
MGT 485	Bus Policy in Global Eco - W	3
MGT 486	Undergraduate Comp Exam	0
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>122-123</b>

**Footnote**

- <sup>1</sup> See General Education Requirements for options.
- <sup>2</sup> All students must complete either a literature or a history sequence. However, because International Business students are required to take two course foreign language series fulfilling the Area II humanities requirements, International Business majors should elect the history sequence in Area IV unless they fulfill the foreign language proficiency through testing.
- <sup>3</sup> Anything in MCOB at the 300 or 400 level not used to fulfill another requirement except internship courses.

**Marketing (BSBA) - Professional Sales Concentration**

**Degree Requirements**

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 809)		59-62
<b>Major Requirements</b>		
<i>Freshman Core</i>		
A. Complete the following:		
BUS 150	Intro to Business and Mgt (linkurl^../footnote1/^or Transfer Student Elective) <sup>1</sup>	3
<i>Upper Division Business Core</i>		

A 2.0 GPA is required in the Upper Division Business Core

A. Complete the following:

BUS 305	Data Analytics III	3
or ECO 453	Intro to Econometrics	

B. Complete the following:

FIN 315	Business Finance	3
MGT 300	Management Theory and Practice	3
MGT 305	Organizational Comm - W	3
MGT 325	Operations Management	3
MKT 320	Principles of Marketing	3

#### Experiential Learning

A. Select three hours from the following: 3

BUS 101	Prof Experience I	
BUS 201	Professional Experience II	
BUS 301	Professional Experience III	
BUS 302	Professional Preparation	

B. Select one of the following: 3

ACC 496	Accounting Internship	
ECO 496	Economics Internship	
FIN 496	Finance Internship	
MGT 496	Management Internship	
MKT 496	Marketing Internship	

#### Professional Sales Concentration

A. Complete the following:

MKT 336	International Marketing	3
MKT 374	Consumer Behavior	3
MKT 376	Business to Business Marketing	3
MKT 381	Professional Selling & Sales Management	3
MKT 384	Market Research	3
MKT 479	Marketing Policy - W	3

B. Select three of the following: 9

MKT 340	Marketing Analytics	
MKT 355	Customer Relationship Mgt	
MKT 379	Retailing	
MKT 380	Integrated Mkt Communications	
MKT 382	Brand Management	
MKT 385	Services Marketing	

#### Business Electives

A. Select two courses from 300-494 Electives from ACC, ECO, FIN, MGT, MKT 6

#### Business Policy Capstone

A. Complete the following:

MGT 485	Bus Policy in Global Eco - W	3
or MGT 486	Undergraduate Comp Exam	

#### Minor Requirements

A minor is not required for this degree program 0

**Total Hours 122-125**

## Footnote

<sup>1</sup> BUS 150 or Transfer Student Elective for students transferring into the College with more than 45 hours. Students transferring with 46-60 hours are highly encouraged to take BUS 150.

## Notes:

- **Transfer credit will only be awarded for courses in the Professional Sales Concentration if the course was taken at an AACSB accredited institution.**
- **Only one internship may be counted towards a business degree. Internship courses may only be used to fulfill the Experiential Learning requirement and may not be used as business electives or to fulfill any other degree requirement.**

## General Education Requirements

Code	Title	Hours
<b>Area I - Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II - Humanities &amp; Fine Arts</b>		
A. Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/business/marketing-quantitative-methods/footnote2/">http://bulletin.southalabama.edu/programs-az/business/marketing-quantitative-methods/footnote2/</a> ) <sup>1</sup>		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
B. Select one of the following: 3		
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	
C. Select six hours from the following: 6		
AFR 101	Intro to African Amer Studies	
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARH 203	Survey of Non-Western Art	
ARS 101	Art Appreciation	
CLA 110	Intro Anc Greek Roman Culture	
CA 110	Public Speaking	
DRA 110	Introduction to Theatre	
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	

EH 236	World Lit after 1650		
LG 101	Introductory Latin I		
LG 102	Introductory Latin II		
LG 111	Introductory French I		
LG 112	Introductory French II		
LG 121	Introductory Chinese I		
LG 122	Introductory Chinese II		
LG 131	Introductory Spanish I		
LG 132	Introductory Spanish II		
LG 141	Intro Classical Greek I		
LG 142	Intro Classical Greek II		
LG 151	Introductory German I		
LG 152	Introductory German II		
LG 153	Accelerated Intro German		
LG 171	Introductory Russian I		
LG 172	Introductory Russian II		
LG 173	Accelerated Intro Russian		
LG 201	Intermediate Latin I		
LG 202	Intermediate Latin II		
LG 211	Intermediate French I		
LG 212	Intermediate French II		
LG 213	Accelerated Inter French - H		
LG 221	Intermediate Chinese I		
LG 222	Intermediate Chinese II		
LG 231	Intermediate Spanish I		
LG 232	Intermediate Spanish II		
LG 234	Inter Spanish Accel -H		
LG 241	Inter Classical Greek I		
LG 242	Inter Classical Greek II		
LG 251	Intermediate German I		
LG 252	Intermediate German II		
LG 271	Intermediate Russian I		
LG 272	Intermediate Russian II		
LG 273	Intensive Second Year Russian		
LGS 101	Introductory Japanese I		
LGS 102	Introductory Japanese II		
LGS 106	Introductory Arabic I		
LGS 107	Introductory Arabic II		
LGS 110	Intro American Sign Language I		
LGS 111	Intro American Sign Lang II		
LGS 171	Introductory Korean I		
LGS 172	Introductory Korean II		
LGS 201	Intermediate Japanese I		
LGS 202	Intermediate Japanese II		
LGS 206	Intermediate Arabic I		
LGS 207	Intermediate Arabic II		
LGS 210	Intermediate ASL I		
LGS 211	Intermediate ASL II		
MUL 101	Introduction to Music		
PHL 110	Introduction to Philosophy		
PHL 120	Critical Thinking		
PHL 121	Introduction to Logic		
PHL 131	Introduction to Ethics		
PHL 231	Social Ethics		
PHL 240	Western Philosophy: Classical		
REL 100	Intro to the Study of Religion		
REL 200	Old Testament/Hebrew Bible		
REL 201	Survey of the New Testament		
<b>Area III – Natural Sciences &amp; Mathematics</b>			
A. Complete the following:			
MA 120	Calculus and Its Applications		3-4
or MA 125	Calculus I		
B. Select 8-10 hours from the following: 8-10			
AN 121	Biological Anthropology		
& 121L	and Biological Anthropology Lab		
BLY 101	Life Science I		
& 101L	and Life Science I Laboratory		
or BLY 121	General Biology I		
& 121L	and General Biology I Lab		
BLY 102	Life Science II		
& 102L	and Life Science II Lab		
or BLY 122	General Biology II		
& 122L	and General Biology II Laboratory		
CH 101	Survey of Inorg and Org Chem		
& 101L	and Survey Inorg-Org Chem Lab		
CH 131	General Chemistry I		
& 131L	and General Chemistry I Lab		
CH 132	General Chemistry II		
& 132L	and General Chemistry II Lab		
GEO 101	Environmental Geography		
& 101L	and Environmental Geography Lab		
GEO 102	Earth and the Environment		
& 102L	and Earth and the Environment Lab		
GY 111	Physical Geology		
& 111L	and Physical Geology Lab		
GY 112	Earth History		
& 112L	and Earth History Lab		
MAS 134	Ocean Science		
& 134L	and Ocean Science Lab		
PH 101	Introduction to Astronomy		
& 101L	and Introduction to Astronomy Lab		
PH 104	Concepts of Physics		
& 104L	and Concepts of Physics Laboratory		
PH 114	Physics with Algebra-Trig I		
& 114L	and Alg-Trig Based Physics I Lab		
PH 115	Physics with Algebra -Trig II		
& 115L	and Alg-Trig Based Physics II Lab		
PH 201	Calculus-Based Physics I		
& 201L	and Calculus-Based Physics I Lab		
PH 202	Calculus-Based Physics II		
& 202L	and Calculus-Based Physics II Lab		
<b>Area IV – History, Social &amp; Behavioral Sciences (<a href="http://bulletin.southalabama.edu/programs-az/business/marketing-quantitative-methods/footnote2/">http://bulletin.southalabama.edu/programs-az/business/marketing-quantitative-methods/footnote2/</a>)<sup>1</sup></b>			
A. Select one of the following: 3			
HY 101	HY of Western Civilization I		
HY 102	HY of Western Civilization II		

HY 135	US History to 1877	
HY 136	US History since 1877	
B. Select one of the following:		3
AN 100	Intro to Cultural Anthropology	
AN 101	Intro Archaeology-Bio Anthro	
CA 100	Intro to Communication	
CA 211	Interpersonal Comm	
CJ 105	Introduction to Criminal Justice	
GEO 114	People, Places, Environment	
GEO 115	World Regional Geography	
GS 101	Intro to Gender Studies	
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
IS 100	Global Issues	
IST 201	Seasons of Life	
NAS 101	Intro Native American Studies	
PSC 130	Intro to US Government	
PSY 120	Introduction to Psychology	
PSY 250	Life Span Development	
SY 109	Introductory Sociology	
SY 112	Social Problems	

C. Complete the following:		
ECO 215	Prin of Microeconomics	3
ECO 216	Prin of Macroeconomics	3

**Area V 200-Level Business Core**

A. Complete the following:		
ACC 211	Financial Accounting	3
ACC 212	Managerial Accounting	3

B. Complete the following:		
BUS 245	Data Analytics I	3
BUS 255	Data Analytics II	3

C. Complete the following:		
BUS 265	Legal Environ of Business I	3

D. Complete the following:		
CIS 250	Advanced Comp Applications	3

**Total Hours 59-62**

**Footnote**

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 135 & HY 136).

**Graduation Plan**

(122 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I	3
BUS 150	Intro to Business and Mgt	3

MA 120 or MA 125	Calculus and Its Applications or Calculus I	3-4
Fine Art	Area II <sup>1</sup>	3
History	Area IV <sup>1</sup>	3
BUS 101	Prof Experience I	1
<b>Hours</b>		<b>16-17</b>

<b>Spring</b>		
EH 102	English Composition II	3
ECO 215	Prin of Microeconomics	3
CIS 250	Advanced Comp Applications	3
Humanities or Fine Art	Area II <sup>1</sup>	3
Natural Science + Lab	Area III <sup>1</sup>	4
<b>Hours</b>		<b>16</b>

<b>Second Year</b>		
<b>Fall</b>		
ACC 211	Financial Accounting	3
BUS 245	Data Analytics I	3
ECO 216	Prin of Macroeconomics	3
Literature	Area II <sup>1</sup>	3
Natural Science + Lab	Area III <sup>1</sup>	4
<b>Hours</b>		<b>16</b>

<b>Spring</b>		
ACC 212	Managerial Accounting	3
BUS 255	Data Analytics II	3
BUS 265	Legal Environ of Business I	3
BUS 201	Professional Experience II	1
2nd Literature or 2nd History	Area II or IV <sup>2</sup>	3
Gen Ed	Area II or IV <sup>3</sup>	3
<b>Hours</b>		<b>16</b>

<b>Third Year</b>		
<b>Fall</b>		
MGT 300	Management Theory and Practice	3
MGT 305	Organizational Comm - W	3
BUS 301	Professional Experience III	1
MKT 320	Principles of Marketing	3
FIN 315	Business Finance	3
Business Elective #1 <sup>4</sup>		3
<b>Hours</b>		<b>16</b>

<b>Spring</b>		
MKT 336	International Marketing	3
MKT 374	Consumer Behavior	3
MKT 376	Business to Business Marketing	3
BUS 305 or ECO 453	Data Analytics III or Intro to Econometrics	3
MGT 325	Operations Management	3
<b>Hours</b>		<b>15</b>

<b>Fourth Year</b>		
<b>Fall</b>		
MKT 381	Professional Selling & Sales Management	3
MKT 384	Market Research	3
Select two MKT Electives from the following:		6
MKT 340	Marketing Analytics	
MKT 350	Digital Marketing	
MKT 375		
MKT 379	Retailing	
MKT 380	Integrated Mkt Communications	
MKT 382	Brand Management	
MKT 385	Services Marketing	
MKT 496	Marketing Internship	3
<b>Hours</b>		<b>15</b>

Spring		
MKT 479	Marketing Policy - W	3
Select one MKT Elective from the following:		3
MKT 340	Marketing Analytics	
MKT 350	Digital Marketing	
MKT 375		
MKT 379	Retailing	
MKT 380	Integrated Mkt Communications	
MKT 382	Brand Management	
MKT 385	Services Marketing	
Business Elective #2 <sup>4</sup>		3
MGT 485	Bus Policy in Global Eco - W	3
MGT 486	Undergraduate Comp Exam	0
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>122-123</b>

<sup>1</sup> See General Education Requirements for options.

<sup>2</sup> All students must complete either a literature or a history sequence.

<sup>3</sup> If opted for literature sequence, need Area IV; if opted for History sequence, need Area II.

<sup>4</sup> Anything in MCOB at the 300 or 400 level not used to fulfill another requirement except internship courses.

## Marketing for Business Majors Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

Code	Title	Hours
MKT 320	Principles of Marketing	3
BUS 305	Data Analytics III	3
Select four additional MKT courses; 3 courses must be 300 or 400 level		12
<b>Total Hours</b>		<b>18</b>

## Marketing for Non-Business Majors Minor

### Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

Code	Title	Hours
MKT 320	Principles of Marketing	3
Select 15 hours in MKT courses numbered 300 or above for which the student meets the prerequisites ( <a href="http://bulletin.southalabama.edu/programs-az/business/marketing-quantitative-methods/footnote1/">http://bulletin.southalabama.edu/programs-az/business/marketing-quantitative-methods/footnote1/</a> ) <sup>1</sup>		15
<b>Total Hours</b>		<b>18</b>

### Footnote

<sup>1</sup> With exception of the following courses: MKT 479, MKT 490, MKT 494, MKT 496.

## Supply Chain & Logistics Management (BSBA)

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 813)		59-62

#### Major Requirements

<i>Freshman Core</i>		
A. Complete the following:		
BUS 150	Intro to Business and Mgt (linkurl^../footnote1/^or Transfer Student Elective) <sup>1</sup>	3
<i>Upper Division Business Core</i>		
A 2.0 GPA is required in the Upper Division Business Core		
A. Select one of the following:		
BUS 305	Data Analytics III	3
	or ECO 453 Intro to Econometrics	
B. Complete the following:		
FIN 315	Business Finance	3
MGT 300	Management Theory and Practice	3
MGT 305	Organizational Comm - W	3
MGT 325	Operations Management	3
MKT 320	Principles of Marketing	3
<i>Experiential Learning</i>		
A. Select three hours from the following:		
BUS 101	Prof Experience I	3
BUS 201	Professional Experience II	
BUS 301	Professional Experience III	
BUS 302	Professional Preparation	
B. Select one of the following:		
ACC 496	Accounting Internship	
ECO 496	Economics Internship	
FIN 496	Finance Internship	
MGT 496	Management Internship	
MKT 496	Marketing Internship	
<i>Supply Chain &amp; Logistics Management Major</i>		
A 2.0 GPA is required for all courses counted towards the major		
A. Complete the following:		
SCL 300	Supply Chain Management	3
SCL 350	Intro to Business Logistics	3
SCL 351	Strategic Sourcing & Supply Mgt	3
SCL 352	Port Management	3
SCL 353	Distribution Center Mgt	3
SCL 400	Supply Chain Analytics	3
SCL 405	Curr Issues in Sup Chain Mgt	3
B. Select one of the following:		
MKT 340	Marketing Analytics	3

or MKT 355	Customer Relationship Mgt	
C. Select one of the following:		3
MKT 379	Retailing	
MGT 441	Service Operations	
MGT 462	Negotiatn/Disp Resolutn in Bus	
<i>Business Electives</i>		
A. Select two courses from 300-494 Electives from ACC, ECO, FIN, MGT, MKT		6
<i>Business Policy Capstone</i>		
A. Select one of the following:		
MGT 485	Bus Policy in Global Eco - W	3
or MGT 486	Undergraduate Comp Exam	
<b>Minor Requirements</b>		
A minor is not required for this degree program		0
<b>Total Hours</b>		<b>122-125</b>

## Footnote

<sup>1</sup> BUS 150 or Transfer Student Elective for students transferring into the College with more than 45 hours. Students transferring with 46-60 hours are highly encouraged to take BUS 150.

## Notes:

- Transfer credits for Supply Chain & Logistics Management major courses will only be accepted from AACSB-accredited institutions.
- Only one internship may be counted towards a business degree. Internship courses may only be used to fulfill the Experiential Learning requirement and may not be used as business electives or to fulfill any other degree requirement.

## General Education Requirements

Code	Title	Hours
<b>Area I - Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II - Humanities &amp; Fine Arts</b>		
A. Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/business/marketing-quantitative-methods/footnote2/">http://bulletin.southalabama.edu/programs-az/business/marketing-quantitative-methods/footnote2/</a> ) <sup>1</sup>		3
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
B. Select one of the following:		3
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	

C. Select six hours from the following:		6
AFR 101	Intro to African Amer Studies	
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARH 203	Survey of Non-Western Art	
ARS 101	Art Appreciation	
CLA 110	Intro Anc Greek Roman Culture	
CA 110	Public Speaking	
DRA 110	Introduction to Theatre	
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
LG 101	Introductory Latin I	
LG 102	Introductory Latin II	
LG 111	Introductory French I	
LG 112	Introductory French II	
LG 121	Introductory Chinese I	
LG 122	Introductory Chinese II	
LG 131	Introductory Spanish I	
LG 132	Introductory Spanish II	
LG 141	Intro Classical Greek I	
LG 142	Intro Classical Greek II	
LG 151	Introductory German I	
LG 152	Introductory German II	
LG 153	Accelerated Intro German	
LG 171	Introductory Russian I	
LG 172	Introductory Russian II	
LG 173	Accelerated Intro Russian	
LG 201	Intermediate Latin I	
LG 202	Intermediate Latin II	
LG 211	Intermediate French I	
LG 212	Intermediate French II	
LG 213	Accelerated Inter French - H	
LG 221	Intermediate Chinese I	
LG 222	Intermediate Chinese II	
LG 231	Intermediate Spanish I	
LG 232	Intermediate Spanish II	
LG 234	Inter Spanish Accel -H	
LG 241	Interm Classical Greek I	
LG 242	Interm Classical Greek II	
LG 251	Intermediate German I	
LG 252	Intermediate German II	
LG 271	Intermediate Russian I	
LG 272	Intermediate Russian II	
LG 273	Intensive Second Year Russian	
LGS 101	Introductory Japanese I	
LGS 102	Introductory Japanese II	
LGS 106	Introductory Arabic I	

LGS 107	Introductory Arabic II	
LGS 110	Intro American Sign Language I	
LGS 111	Intro American Sign Lang II	
LGS 171	Introductory Korean I	
LGS 172	Introductory Korean II	
LGS 201	Intermediate Japanese I	
LGS 202	Intermediate Japanese II	
LGS 206	Intermediate Arabic I	
LGS 207	Intermediate Arabic II	
LGS 210	Intermediate ASL I	
LGS 211	Intermediate ASL II	
MUL 101	Introduction to Music	
PHL 110	Introduction to Philosophy	
PHL 120	Critical Thinking	
PHL 121	Introduction to Logic	
PHL 131	Introduction to Ethics	
PHL 231	Social Ethics	
PHL 240	Western Philosophy: Classical	
REL 100	Intro to the Study of Religion	
REL 200	Old Testament/Hebrew Bible	
REL 201	Survey of the New Testament	
<b>Area III – Natural Sciences &amp; Mathematics</b>		
A. Select one of the following:		
MA 120	Calculus and Its Applications	3-4
or MA 125	Calculus I	
B. Select 8-10 hours from the following: 8-10		
AN 121 & 121L	Biological Anthropology and Biological Anthropology Lab	
BLY 101 & 101L	Life Science I and Life Science I Laboratory	
or BLY 121 & 121L	General Biology I and General Biology I Lab	
BLY 102 & 102L	Life Science II and Life Science II Lab	
or BLY 122 & 122L	General Biology II and General Biology II Laboratory	
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab	
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab	
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab	
GY 111 & 111L	Physical Geology and Physical Geology Lab	
GY 112 & 112L	Earth History and Earth History Lab	
MAS 134 & 134L	Ocean Science and Ocean Science Lab	
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab	

PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory	
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab	
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab	
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	

**Area IV – History, Social & Behavioral Sciences (<http://bulletin.southalabama.edu/programs-az/business/marketing-quantitative-methods/footnote2/>)<sup>1</sup>**

A. Select one of the following:		3
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
B. Select one of the following:		3
AN 100	Intro to Cultural Anthropology	
AN 101	Intro Archaeology-Bio Anthro	
CA 100	Intro to Communication	
CA 211	Interpersonal Comm	
CJ 105	Introduction to Criminal Justice	
GEO 114	People, Places, Environment	
GEO 115	World Regional Geography	
GS 101	Intro to Gender Studies	
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
IS 100	Global Issues	
IST 201	Seasons of Life	
NAS 101	Intro Native American Studies	
PSC 130	Intro to US Government	
PSY 120	Introduction to Psychology	
PSY 250	Life Span Development	
SY 109	Introductory Sociology	
SY 112	Social Problems	
C. Complete the following:		
ECO 215	Prin of Microeconomics	3
ECO 216	Prin of Macroeconomics	3

**Area V 200-Level Business Core**

A grade of at least C is required in each course

A. Complete the following:		
ACC 211	Financial Accounting	3
ACC 212	Managerial Accounting	3
B. Complete the following:		
BUS 245	Data Analytics I	3
BUS 255	Data Analytics II	3
C. Complete the following:		
BUS 265	Legal Environ of Business I	3
D. Complete the following:		

CIS 250	Advanced Comp Applications	3
<b>Total Hours</b>		<b>59-62</b>

### Footnote

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 135 & HY 136).

## Graduation Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I	3
BUS 150	Intro to Business and Mgt	3
MA 120 or MA 125	Calculus and Its Applications or Calculus I	3-4
Fine Art	Area II <sup>1</sup>	3
History	Area IV <sup>1</sup>	3
BUS 101	Prof Experience I	1
<b>Hours</b>		<b>16-17</b>
<b>Spring</b>		
EH 102	English Composition II	3
ECO 215	Prin of Microeconomics	3
CIS 250	Advanced Comp Applications	3
Humanities or Fine Art	Area II <sup>1</sup>	3
Natural Science + Lab	Area III <sup>1</sup>	4
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
ACC 211	Financial Accounting	3
BUS 245	Data Analytics I	3
ECO 216	Prin of Macroeconomics	3
Literature	Area II <sup>1</sup>	3
Natural Science + Lab	Area III <sup>1</sup>	4
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ACC 212	Managerial Accounting	3
BUS 255	Data Analytics II	3
BUS 265	Legal Environ of Business I	3
BUS 201	Professional Experience II	1
2nd Literature or 2nd History	Area II or IV <sup>2</sup>	3
Gen Ed	Area II or IV <sup>3</sup>	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
MGT 300	Management Theory and Practice	3
MGT 305	Organizational Comm - W	3
BUS 301	Professional Experience III	1
MKT 320	Principles of Marketing	3
FIN 315	Business Finance	3
SCL 350	Intro to Business Logistics	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
Business Elective #1 <sup>4</sup>		3
BUS 305 or ECO 453	Data Analytics III or Intro to Econometrics	3
MGT 325	Operations Management	3
SCL 300	Supply Chain Management	3

SCL 352	Port Management	3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
SCL 351	Strategic Sourcing & Supply Mg	3
SCL 353	Distribution Center Mgt	3
MKT 336	International Marketing	3
MGT 462	Negotiatn/Disp Resolutn in Bus (or MKT Elective) <sup>5</sup>	3
MKT 496	Marketing Internship	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
SCL 400	Supply Chain Analytics	3
SCL 405	Curr Issues in Sup Chain Mgt	3
Business Elective #2 <sup>4</sup>		3
MGT 486	Undergraduate Comp Exam	0
<b>Hours</b>		<b>9</b>
<b>Total Hours</b>		<b>119-120</b>

<sup>1</sup> See General Education Requirements

<sup>2</sup> All students must complete either a literature or a history sequence.

<sup>3</sup> If opted for Literature sequence, need Area IV; if opted for History sequence, need Area II.

<sup>4</sup> Anything in MCOB at the 300 or 400 level not used to fulfill another requirement except internship courses.

<sup>5</sup> Select from: MKT 340, MKT 355, MKT 381, MKT 385.

## MCOB Graduate Programs

### Department Information Graduate

If a situation is not addressed below, the Graduate School will determine the regulations governing that situation.

### Master of Business Administration

The Mitchell MBA degree is accredited by the Association for the Advancement of Collegiate Schools of Business. It is a professional degree designed to enable individuals to study advanced business, industry, and government operations concepts. The business environment is constantly changing, and the coursework in the MBA program is designed to facilitate decision-making under ambiguous and changing conditions. The program requires ten (10) courses, each carrying three semester hours of credit.

### The Master of Accounting Degree Program

Students may earn a Master of Accounting degree in the Mitchell College of Business. The admissions requirements, academic regulations, and general degree requirements are similar to those required for the MBA Degree.

Students seeking the Master of Accounting degree must complete any foundation courses designated by the Director of Graduate Studies. In addition, students must complete six (6) graduate accounting courses, two (2) general business courses, and two (2) elective courses. The entire program is online. Admission to the MAcc program is automatically approved upon application for USA Accounting graduates with an overall GPA of 3.0 and a GPA in the major of 3.0. These applicants may apply for a waiver of the GMAT exam.

## Admission Requirements for MBA and MAcc Programs

The Mitchell MBA has a Fall-only admission policy. The MAcc program will consider admissions at other times of the academic year.

To be admitted to the graduate programs within the Mitchell College of Business, the following are required:

1. A bachelor's degree from an institution accredited by the appropriate United States accrediting agency or equivalent for international institutions;
2. A grade point average 3.0 is required for regular admission to the MBA program. Grade point averages below 3.0 will be considered on a case-by-case basis and are subject to the approval of the MCOB Director of Graduate Programs.
3. Three (3) reference letters attest to the applicant's qualifications for graduate business study.
4. A personal statement from the applicant explaining his/her career ambitions and the reasons for the applicant's application to the Mitchell College of Business.
5. International students must meet or exceed the University's standard for language proficiency.

There is a "non-degree seeking" category for registration. Students in this category must obtain permission from the Director of Graduate Studies before registering for any graduate courses at the Mitchell College of Business. A student must reapply if no coursework has been completed within one year after admission into the Master of Accounting or Master of Business Administration programs.

## MBA Prerequisite Requirements

Four courses in the MBA program are suggested for prospective students without sufficient prior academic training to complete preparation materials:

- MBA 502 requires ACC 211 or an equivalent course;
- MBA 503 requires ECO 215 or an equivalent course;
- MBA 505 requires MGT 300 or an equivalent course, and
- MBA 506 requires FIN 315 or an equivalent course.

We strongly recommend that all applicants, especially those without a business background or training, complete the prerequisite requirements. Applicants may fulfill the prerequisite requirements by completing the undergraduate or self-study courses from the University Bookstore. All applicants should check with the MCOB Office of Graduate Programs for clarification.

## Academic Regulations

The following regulations apply to all graduate students and encompass all work taken as a graduate student, including all graduate degree courses (core, elective, concentration, business, and accounting).

1. All students must earn an overall GPA of 3.0 or better
2. A maximum of one course with a grade of "C" may be counted toward a degree program.
3. No D Grades will be awarded
4. Students may not drop (WD) from any course more than once.
5. Students may not repeat a course more than one time.

## Transient Approval

Students enrolled in the Master of Business Administration and the Master of Accounting Program must complete all University of South

Alabama requirements. Once enrolled at USA, students are expected to complete the degree requirements at USA. Transient student requests will be approved only under the following conditions:

1. The student is graduating, and the specific course requirement is not offered at the University of South Alabama during that term.
2. The student is moving from the Mobile area and can complete the degree requirements at another AACSB-accredited institution.

Students will not be granted temporary approval to enroll in graduate classes at other local (non-AACSB accredited) institutions.

## Graduate Assistantships

Graduate Assistantships are awarded on an annual basis and are granted for the academic year. The stipend is for two semesters totaling \$8,000 and a tuition waiver of up to 12 semester credit hours per semester. Out of state fees are also waived. Any additional fees or cost are paid by the student.

Application forms can be obtained from the Office of Graduate Programs in the Mitchell College of Business.

## Requirements for Degrees

MBA students must satisfactorily complete ten (10) three semester-hour graduate courses. Students seeking the Master of Accounting degree must complete ten (10) three semester-hour graduate accounting courses.

## Doctor of Philosophy (PhD)

The Doctor of Philosophy (PhD) program in Management, Marketing, and Business Analytics is primarily designed for individuals desiring to transition to an academic career or consulting. The program's weekend format is designed to allow students to complete classes in an intensive series of Friday through Sunday classes. The PhD degree is awarded in recognition of the student's demonstrated ability to conduct original, scholarly research at the highest levels without extensive supervision. The degree is not granted upon completion of a stated amount of course work, but rather after demonstration by the student of a comprehensive knowledge and research capability in a specialized field of study. The student must demonstrate this ability in writing and by defending the research component based upon the result of an original investigation.

## Minimum Requirements for Admission

Applicants must have successfully completed an MBA, a specialized Master's degree in business, or a professional degree in related areas of study, from a nationally accredited program subject to the approval of the Director of Graduate Studies and the Admissions Committee. Applicants must have a minimum of five years of professional experience in business or other professional fields. Instructors from business schools or colleges who want to upgrade their academic status with a doctoral degree are also eligible to apply. Classes are admitted once per year starting in May. International students must meet or exceed the University's standard for language proficiency.

Students may apply on-line at <http://www.southalabama.edu/colleges/mcob/dba/index.html> (<http://www.southalabama.edu/colleges/mcob/dba/>).

## General Information

### Required Credits

A minimum of 60 semester hours of approved graduate credit is required.

A comprehensive examination is scheduled for the summer of the third year of the doctoral program. Failure to complete the work within the periods specified will necessitate reevaluation of the student's program and may result in a recommendation for dismissal by the MCOB Director of Graduate Studies to the Graduate Dean.

## Grade Requirements

1. All students must earn an overall GPA of 3.0 or better in the program in order to graduate.
2. Students may not drop (WD) from any course more than one time.
3. Students may not repeat a course more than one time.

## Requirements for Degree

PhD students must satisfactorily complete a minimum of sixty (60) semester-hour graduate credit.

## Areas of Study

- Accounting (MAcc) (p. 829)
- Business Administration (MBA) (p. 829)
- Business Administration (PhD) (p. 830)
- Graduate Certificate in Accounting (<http://bulletin.southalabama.edu/programs-az/business/mcob-graduate-programs/accounting-macc-certificate/>)
- [accounting-macc-certificate/](http://bulletin.southalabama.edu/programs-az/business/mcob-graduate-programs/accounting-macc-certificate/) (<http://bulletin.southalabama.edu/programs-az/business/mcob-graduate-programs/accounting-macc-certificate/>)

## Courses

### Accounting (ACC)

#### ACC 211 Financial Accounting 3 cr

The course provides an understanding of ways in which financial accounting information supports business decision-making. The focus is on the financial statements and the transactions and processes that produce them. ACC 211 and ACC 212 must be taken in sequence.

#### ACC 212 Managerial Accounting 3 cr

The course provides an understanding of ways in which managerial accounting information supports business decision-making. The focus is on identifying, measuring, analyzing, interpreting, and communicating financial information to managers for the pursuit of an organization's goals. ACC 211 and ACC 212 must be taken in sequence.

**Prerequisite:** ACC 211 Minimum Grade of C

#### ACC 310 Intro to Acc & Bus Software 3 cr

An introductory course in practical application and study of current accounting and business software. The course provides an overview of commonly used business and accounting software with practical applications.

**Prerequisite:** ACC 212 Minimum Grade of C

#### ACC 321 Acct for Entrepreneurial Bus 3 cr

A study of the analysis and use of accounting information by entrepreneurial businesses. Among the topics covered are typical financing sources of entrepreneurial businesses and valuation of closely held businesses. In addition, the course includes coverage of how financial statements can be used to: manage a business, monitor an entity's performance, determine credit decisions, manage cash flow, and prepare forecasted financial statements.

**Prerequisite:** ACC 212 Minimum Grade of C

#### ACC 331 Taxation of Individuals 3 cr

Basic federal income tax law and tax planning considerations relating to individuals.

**Prerequisite:** ACC 212 Minimum Grade of C

#### ACC 341 Accounting Information Systems 3 cr

The study of accounting as a comprehensive information system which provides for planning and control, special reports, and preparation of external financial statements.

**Prerequisite:** ACC 212 Minimum Grade of C and CIS 250 Minimum Grade of D

#### ACC 350 Financial Statement Analysis 3 cr

In-depth coverage of the principles and practices of effective analysis of the financial statements of firms for the purpose of understanding (1) the economic and financial characteristics and current conditions of the firm, (2) particular strategies the firm may select with which to compete, and (3) the accounting principles and procedures underlying the financial statements. The course integrates concepts from accounting, economics, finance and management. Credit cannot be received for both ACC 350 and FIN 350.

**Prerequisite:** ACC 212 Minimum Grade of C and (FIN 315 Minimum Grade of D or FIN 340 Minimum Grade of D)

**Cross-Listed:** FIN 350

#### ACC 371 Intermediate Accounting I 3 cr

Accounting theory as related to income measurement; preparation of balance sheets and income statements; recognition, measurement, and reporting of assets.

**Prerequisite:** ACC 212 Minimum Grade of C and (MA 112 Minimum Grade of D or MA 120 Minimum Grade of D or MA 125 Minimum Grade of D or MA 126 Minimum Grade of D) and ACC 212 Minimum Grade of D and ECO 215 Minimum Grade of D and ECO 216 Minimum Grade of D and BUS 255 Minimum Grade of D and BUS 265 Minimum Grade of D and CIS 250 Minimum Grade of D

#### ACC 372 Intermediate Accounting II 3 cr

Includes measurement, recognition and reporting of liabilities, equities, investments, and deferred taxes; EPS; and the preparation of cash flow statements. Coverage of selected professional pronouncements.

**Prerequisite:** ACC 313 Minimum Grade of C or ACC 371 Minimum Grade of C

#### ACC 380 Cost Accounting for Managers 3 cr

Managers must use cost and revenue data to make decisions about which products or services to produce. This course teaches managers about cost-accounting theory and practice including job-order and process-cost systems, cost-volume-profit relationships, budgets, standard costs, variance analysis, direct costing, and cost allocation.

**Prerequisite:** ACC 212 Minimum Grade of C

**Cross-Listed:** ACC 381

#### ACC 381 Cost Accounting 3 cr

Includes cost-accounting theory and practice involving such topics as job-order and process-cost systems, cost-volume-profit relationships, budgets, standard costs, variance analysis, direct costing, and cost allocation.

**Prerequisite:** ACC 212 Minimum Grade of C

#### ACC 410 Forensic Accounting 3 cr

An intro to principles for forensic accounting and professional ethics. Civil and criminal procedures and litigation services are covered. The courses introduces forensic accounting topics such as fraud, bankruptcy, digital forensics, and financial statement misrepresentation.

**Prerequisite:** ACC 372 Minimum Grade of C

**ACC 415 Data Analytics for Accounting 3 cr**

This course focuses on the use of data analytic tools in the accounting profession. Students will learn the fundamentals of data analysis in a variety of accounting disciplines, how to interpret the output, and ways to communicate the results. Students will work on projects aimed at enhancing their competency in critical thinking, problem-solving, written and oral communication, and data analytic skills.

**Prerequisite:** (ACC 341 Minimum Grade of C and ACC 372 Minimum Grade of C and ACC 381 Minimum Grade of C)

**ACC 416 Int'l and Advanced Accounting 3 cr**

Study of accounting in a global context including standards and issues and the roles and responsibilities of accountants. Additional topics include: business combinations, government accounting, interim and segmented reporting.

**Prerequisite:** ACC 314 Minimum Grade of C or ACC 372 Minimum Grade of C

**ACC 432 Tax of Partnerships and Corps 3 cr**

An examination of the federal tax treatment of partnerships and corporations. Topics include: tax aspects of the formation of the entity, elements of gross income, treatment of property dispositions, allowable deductions and credits, determination of entity and investor basis, and liquidation of the entity.

**Prerequisite:** (ACC 331 Minimum Grade of C or ACC 411 Minimum Grade of D) and (ACC 314 Minimum Grade of C or ACC 372 Minimum Grade of C)

**ACC 451 Auditing - W 3 cr**

Theory and application of the attest function, ethical issues, and written communication for accountants. Includes standards, objectives, review of internal control structures, tests of controls, substantive testing and reporting. Ethical issues and the preparation of written letters and formal reports are covered.

**Prerequisite:** (ACC 314 Minimum Grade of C or ACC 372 Minimum Grade of C) and MGT 305 Minimum Grade of D

**ACC 452 Advanced Auditing & Analytics 3 cr**

Advanced study of the application of auditing standards, internal control evaluations, applications of statistics, audits of information systems, internal and operational auditing, and legal and reporting obligations.

**Prerequisite:** ACC 451 Minimum Grade of C

**ACC 461 Acc for Gov and Not-For-Profit 3 cr**

A study of the concepts and procedures underlying fund accounting, budgetary control, and financial reporting requirements for governmental and not-for-profit entities.

**Prerequisite:** ACC 314 Minimum Grade of C or ACC 372 Minimum Grade of C

**ACC 490 Special Topics 3 cr**

Designed to provide senior students an opportunity to study selected topics of particular interest. A student may count no more than six hours of Special Topics in the concentration. Prerequisite: Approval of Department Chair.

**ACC 494 Directed Studies 3 cr**

Primarily designed to give superior students an opportunity to study some phase of accounting of particular interest. Conferences, a bibliography, and a formal research report are required. Requires permission of Department Chair, 2.5 GPA or better and junior or senior standing.

**ACC 496 Accounting Internship 3 cr**

The internship program is designed to give students practical experience in their field of study. Students complete directed projects under the supervision of Department Chair.

**Prerequisite:** ACC 314 Minimum Grade of C or ACC 372 Minimum Grade of C

**ACC 510 Forensic Acc. & Litig. Svcs. 3 cr**

An intro to forensic accounting from the CPA perspective, focusing on civil and criminal procedures, and litigation services. Includes topics such as fraud, bankruptcy, digital forensics, and financial statement misrepresentations.

**ACC 511 Financial Accounting Theory 3 cr**

The evolution of general accounting theory leading up to and including the Conceptual Framework will be discussed as well as the specific theory underlying certain accounting topics of current interest.

**ACC 516 Advanced Financial Accounting 3 cr**

Study of Business combinations, consolidation issues, interim and segmented reporting, inflation accounting. Coverage of selected professional pronouncements.

**ACC 521 Advanced Managerial Accounting 3 cr**

Advanced managerial and cost accounting topics. Tools for planning and control, development of cost information for decision making, cost allocation, inventory management systems, capital budgeting, performance measurement, transfer pricing and multi-national considerations.

**ACC 531 Tax Planning and Research 3 cr**

An examination of tax research tools, their utilization, and various tax planning considerations. Students are required to conduct research and tax planning upon assigned topics, and write a report on their findings.

**ACC 532 Tax Partnerships/Corporations 3 cr**

An examination of the federal tax treatment of partnerships and corporations. Topics include: tax aspects of the formation of the entity, elements of gross income, treatment of property dispositions, allowable deductions and credits, determination of entity and investor basis, and liquidation of the entity.

**ACC 534 Tax of Gifts, Trusts & Estates 3 cr**

An examination of the federal tax treatment of gratuitous transfers made during life and at death.

**ACC 535 Multi Tax 3 cr**

This course addresses the increased importance of international and multi-jurisdictional taxation in today's global environment. It introduces students to the principles guiding nexus, geographic allocation of income and the avoidance of double taxation. The course helps students develop an understanding of the U.S. tax rules that may apply to income involving the U.S. and other countries. It also helps students understand multistate tax rules. Students will develop an understanding of the tax implications resulting from business that is conducting electronically. Students will apply multi-jurisdictional tax principles and rules to solve case studies.

**ACC 541 Advanced Accounting Systems 3 cr**

Analysis of accounting information system case studies in order to expose students to real-world system problems and applications. Course work includes hands-on work with a variety of computer-based accounting application packages.

**ACC 552 Advanced Auditing & Analytics 3 cr**

Advanced study of the application of auditing standards, internal control evaluations, applications of statistics, audits of information systems, internal and operational auditing, and legal and reporting obligations.

**ACC 561 Acc of Government and NFPE 3 cr**

A study of the concepts and procedures underlying fund accounting, budgetary control, and financial reporting requirements for governmental and not-for-profit entities.

**ACC 570 Professional Accounting I 3 cr**

A study of issues and responsibilities relevant to the public accounting profession, including financial, regulation, assurance, and business considerations.

**ACC 571 Professional Accounting II 3 cr**

A study of contemporary issues and responsibilities relevant to the accounting profession, including ethical, legal and international considerations.

**ACC 572 Fraud Ex 3 cr**

Overview of the nature of occupational fraud and how it is committed included an introduction to the actions that can be taken to determine the presence of occupational fraud and procedures that can be implemented to deter fraud. Students will also learn how financial statement fraud and reporting occur, including investigation and financial fraud prevention techniques.

**ACC 580 Emerging Issues in Accounting 3 cr**

A study of current and emerging issues and responsibilities relevant to the accounting profession, with special emphasis on technology advancements, new services, regulatory changes, and international developments in accounting and business.

**ACC 590 Special Topics 3 cr**

Designed to provide graduate students an opportunity to study selected topics. Prerequisites: Permission of Department Chair. A student may count no more than three hours of Special Topics in the MBA degree program.

**ACC 594 Independent Study in Account 3 cr**

Readings and research on selected topics. Conference and formal research report required. Permission of department chair.

**Business (BUS)****BUS 101 Prof Experience I 1 cr**

An introduction to career success tools including: personality and career interest inventories, steps to succeed basic resume preparation, business ethics, personal branding, university and community involvement and other career preparation activities. This course is designed for students in their first and second semester within the MCOB.

**Prerequisite:** EH 101 (may be taken concurrently) Minimum Grade of C or EH 102 (may be taken concurrently) Minimum Grade of C

**BUS 150 Intro to Business and Mgt 3 cr**

A survey of the field of business, including profit-seeking firms, not-for-profit organizations, and new businesses created by entrepreneurs. Emphasis on the business environment, organization and management, current economic and international issues, and career opportunities. Societal and ethical issues are also examined. Open to University of South Alabama freshmen only.

**Prerequisite:** EH 101 (may be taken concurrently) Minimum Grade of C or EH 102 (may be taken concurrently) Minimum Grade of C

**BUS 201 Professional Experience II 1 cr**

Continued introduction to Career success tools including: resume building activities, cover letter and references development, career for a day shadowing, speed branding, dress for success, networking, career fair tools for success, university and community involvement and other career preparation activities. Prerequisite: C or better in BUS 101, Sophomore standing.

**Prerequisite:** BUS 101 Minimum Grade of C

**BUS 245 Data Analytics I 3 cr**

An introduction to data analytics in business that includes analysis to make data driven business decisions. This course utilizes statistical applications in business problems solving using descriptive statistics, probability theory, sampling distributions, methods of estimation, and tests of hypotheses. The course introduces students to basic predictive business modeling, and the communication of analytical results.

**Prerequisite:** UTM 75 or MMT 080 or A02 23 or MA 112 Minimum Grade of D or MA 113 Minimum Grade of D or MA 115 Minimum Grade of D or MA 120 Minimum Grade of D or MA 121 Minimum Grade of D or MA 125 Minimum Grade of D or MA 126 Minimum Grade of D or MA 131 Minimum Grade of D or MA 132 Minimum Grade of D or MA 171 Minimum Grade of D or MA 172 Minimum Grade of D or MA 287 Minimum Grade of D

**BUS 255 Data Analytics II 3 cr**

A second course in quantitative data analytics in business decision making utilizing methods of analysis including statistical inference, predictive, modeling, forecasting, correlation and regression analysis. It further develops fundamental knowledge and skills for making data driven business decisions including the use of computer applications for problem solving. This course relies heavily on project based learning to provide students with experience of solving data based business problems.

**Prerequisite:** (BUS 245 Minimum Grade of C or ST 175 Minimum Grade of D or ST 210 Minimum Grade of D) and (UTM 75 or (MA 112 Minimum Grade of D or MA 171 Minimum Grade of D) or (MA 113 Minimum Grade of D or MA 172 Minimum Grade of D) or (MA 115 Minimum Grade of D or MA 121 Minimum Grade of D) or (MA 120 Minimum Grade of D or MA 287 Minimum Grade of D) or (MA 125 Minimum Grade of D or MA 132 Minimum Grade of D) or (MA 126 Minimum Grade of D or MA 233 Minimum Grade of D))

**BUS 265 Legal Environ of Business I 3 cr**

A study of the global legal environment in which contemporary American business functions, including a review of legal thought and ethical considerations and the foundations and impacts of governmental regulation in areas such as labor and employment, environmental concerns, consumer protection, and antitrust. Contemporary issues, domestic and international concepts and institutions, and social forces that shape the legal environment are emphasized. Requires sophomore standing

**BUS 301 Professional Experience III 1 cr**

Career success tools including: personal professional strategic plan development, mock interviewing, dining etiquette, personal and professional mentoring, job search, application, and acceptance, job search ethics, creating a career plan, university and community involvement and other career preparation activities. Prerequisite: C or better in BUS 201, Junior standing.

**Prerequisite:** BUS 201 Minimum Grade of C

**BUS 302 Professional Preparation 3 cr**

Career success tools including personal professional strategic plan development, interviewing, personal and professional mentoring, job search, application, creating a career plan, university and community involvement, and other career preparation activities. Prerequisite: Junior transfer standing. Business students only.

**BUS 305 Data Analytics III 3 cr**

A course in quantitative data analytics in business decision making utilizing methods of analysis including linear programming, network optimization, binary integer programming, nonlinear optimization, decision analysis, and deep learning. It further develops fundamental knowledge and skills for making data driven business decisions including the use of computer applications for problem solving. This course relies heavily on project based learning to provide students with the experience of solving data based business problems.

**Prerequisite:** BUS 255 Minimum Grade of C and CIS 250 Minimum Grade of D

**BUS 430 Business Data Visualization: Concepts and Applications 3 cr**

The course provides an overview of the purposes, methods, and techniques of data visualization, that includes planning, data gathering, data validation, data analysis, and visual presentation. Additionally, the course covers data mining, data storytelling, and the use of data to support decision-making.

**Prerequisite:** BUS 305 Minimum Grade of C

**BUS 440 Bus in Reg and Emerg Markets-W 3 cr**

A comprehensive analysis of the issues in starting and maintaining business in emerging and developing markets, building on data and research skills acquired in foundational international business courses.

**Prerequisite:** MKT 310 Minimum Grade of D and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (ECO 330 Minimum Grade of D or ECO 363 Minimum Grade of D or FIN 332 Minimum Grade of D or MGT 334 Minimum Grade of D or MGT 336 Minimum Grade of D)

**BUS 490 Special Topics 3 cr**

Designed to provide senior students an opportunity to study selected topics of particular interest. A student may count no more than six hours of Special Topics in the concentration. Prerequisite: Approval of Department Chair.

**BUS 496 MCOB Honors Sr Project I - H 3 cr**

Applied business project and paper prepared under the direction of a project advisor plus two other persons selected by the advisor in consultation with the student. The student must have developed a proposal for the project and paper in consultation with the advisor and received permission from the committee to proceed. In addition, the student must be entering his or her senior year and be a major in the Mitchell College of Business. The project proposal must be formulated no later than the end of the first semester of the student's senior year and the project must be completed by the student's graduation date. The student must have maintained his or her standing in the university honors program to be eligible to enroll in this course in his or her last full semester in school. The course may be counted in one of two ways: 1) as an additional course not counting towards the business degree, or 2) in special cases, as a major or business elective, to be decided by the committee.

**Prerequisite:** (HON 399 Minimum Grade of D or HON 301 Minimum Grade of D) and BUS 305 Minimum Grade of D and (FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D) and (MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D) and (MGT 305 Minimum Grade of D or MGT 324 Minimum Grade of D) and (MGT 310 Minimum Grade of D or MGT 322 Minimum Grade of D or MGT 422 Minimum Grade of D) and (MGT 325 Minimum Grade of D or MGT 396 Minimum Grade of D) and (MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D)

**BUS 497 MCOB Honors Sr Project II - H 3 cr**

Applied business project and paper prepared under the direction of a project advisor plus two other persons selected by the advisor in consultation with the student. The student must have developed a proposal for the project and paper in consultation with the advisor and received permission from the committee to proceed. In addition, the student must be entering his or her senior year and be a major in the Mitchell College of Business. The project proposal must be formulated no later than the end of the first semester of the student's senior year and the project must be completed by the student's graduation date. The student must have maintained his or her standing in the university honors program to be eligible to enroll in this course. The student will formally enroll in the course in his or her last full semester in school. The course may be counted in one or two ways: 1) as an additional course not counting towards the business degree, or 2) in special cases, as a major or business elective, to be decided by the committee. Requires completion of the business core with the exception of MGT 485.

**Prerequisite:** BUS 496 Minimum Grade of C

**BUS 498 Mitchell Scholars Sr Project 3 cr**

Applied business project and presentation prepared under the direction of the instructor in consultation with the student. This course will have irregular meetings scheduled by the instructor and will have both a classroom component and a project component. The student must have maintained his/her standing in the Mitchell Scholars program and be a senior to be eligible to enroll in this course. This class will be counted in one of three ways: 1) as a business elective, 2) as an additional course not counting towards the business degree; or 3) in special cases, as a major elective to be decided by the major department's faculty. Requires completion of the business core with the exception of MGT 485 and approval of Associate Dean.

**Prerequisite:** MCOB 10 and BUS 305 Minimum Grade of D and FIN 315 Minimum Grade of D and MGT 300 Minimum Grade of D and MGT 305 Minimum Grade of D and MGT 310 Minimum Grade of D and MGT 325 Minimum Grade of D and MKT 320 Minimum Grade of D

**BUS 555 Study Abroad 3-6 cr**

Examines issues in business administration in an international setting at the graduate level. Specific topics selected from the fields of accounting, economics, finance, information systems, management or marketing depending on the instructor's area of expertise. Part or all of the course will be conducted outside the United States. Prerequisite: Permission to enroll in a relevant Mitchell College of Business study abroad program.

**BUS 601 Sem in Org. Behavior 3 cr**

This seminar provides an introduction to established theories and emerging trends in the field of organizational behavior. The course explores the thoughts, emotions, and behaviors of individuals within the context of work, teams, organizations and society. The emphasis is an organizational theory and development.

**BUS 614 Sem in Int'l Bus 3 cr**

This course provides students with exposure to management concepts and theories that form the basis of literature separate from other seminars in the doctoral program. Given that cultural, law and politics shape the different business environments around the world, it is unsurprising that different management concepts and theories are found in other places as well. This seminar introduces doctoral students to those elements of the international business environment that have an impact on management theory and practice on other business environments.

**BUS 622 Multivar Analysis 3 cr**

The course is designed to broaden and enrich student's knowledge and understanding of statistical methodology as it pertains to the study of multivariate techniques used in behavioral research.

**BUS 628 Regress Analysis 3 cr**

A study of applications of regression analysis used in business research. Topics include: a review of basic regression concepts and applications, multiple regression, residual analysis, model building, regression limitations and assumptions, time series modeling and forecasting, and case studies using regression techniques.

**BUS 630 Struct Equ Mod 3 cr**

The course provides students with a functional understanding of the path analysis theory and procedures of structural equation modeling. Students will learn to specify, estimate, and evaluate models using AMOS software.

**BUS 700 Fund of Research 3 cr**

This course provides students with the tools and perspective necessary to succeed in the DBA program. Readings are drawn from several sources and provide participants with a better understanding of the way to approach their work.

**BUS 702 Applied Stat and Reg 3 cr**

This course provides an examination of statistical concepts used for business research. Topics include: fundamentals of probability, sampling, statistical estimation, test of hypotheses, analysis of variance, chi-square analysis and regression analysis. Emphasis is placed on the use of statistical techniques for business research applications.

**BUS 704 Multivariate Analysis 3 cr**

The course is designed to broaden and enrich a student's knowledge and understanding of statistical methodology as it pertains to the study of multivariate techniques used in behavioral research.

**BUS 705 Seminars in Business Analytics 3 cr**

This course introduces the foundations of Data Science and Business Analytics with focus on research design and data analytic methods in Accounting, Economics, Finance, Management, Marketing, and Real Estate.

**BUS 706 Research Design and Methods 3 cr**

This course focuses on the general concepts related to conducting academic research and the various research methods commonly used in business research, including quantitative and qualitative analysis.

**BUS 708 Adv Stats & App Res 6 cr****BUS 710 Struct Equation Modeling 3 cr**

This course provides students with a functional understanding of path analysis theory and procedures of structural equation modeling. Students will learn to specify, estimate, and evaluate models using software packages designed for this purpose.

**BUS 751 Python for Business Analytics 3 cr**

Python programming for Business Analytics, with applications and examples from statistics, finance economics, marketing, management, accounting, and other business-related disciplines.

**BUS 753 Applied Business Analytics I 3 cr**

This course covers a variety of concepts and applied analytical methods useful in business research and analytics, such as big data, data measurement and preparation, multi-source modeling files, data analysis and machine learning.

**BUS 754 Seminars Business Analytics II 3 cr**

This course focuses on applied analytics. Students will complete the continuum of analytics including data source identification, data prep, descriptive and exploratory analytics, confirmatory and inferential analytics.

**BUS 757 Computational Business Stats 3 cr**

This course is designed for students who seek to develop skills in statistical computing using the R programming language. Students will learn how to use R for data manipulation, data visualization, writing statistical function, and optimizing statistical functions.

**BUS 759 Machine Learning and AI 3 cr**

Advanced statistical and machine learning algorithms/techniques/methods for Business Analytics with applications from statistics, finance, economics, marketing, management, accounting, and other business-related disciplines.

**BUS 789 Res and Teaching Concepts 1 cr**

Presentations and discussions related to teaching and research concepts.

**BUS 799 Dissertation Research 1-6 cr**

Independent research by the student under the sponsorship of the graduate faculty.

**Prerequisite:** BUS 699 Minimum Grade of S

**Master of Business Administration (MBA)****MBA 501 Analysis using Info Sys 3 cr**

Advanced management requires the ability to interpret data with datasets and calculate statistics from data. This course covers all the process of building, interpreting, calculating data and finally making decisions on the outcomes of that process. A significant part of the grade in this course comes from decision making exercises.

**MBA 502 Managing Accounting Info 3 cr**

This course focuses on making decisions using Accounting information which includes how to generate relevant and appropriate data and how to use accounting analysis to enhance success in making decisions.

**Prerequisite:** ACC 211 Minimum Grade of C

**MBA 503 Managing in the Bus. Env't 3 cr**

The course evaluates managerial decisions in a business environment impacted by ethical considerations, sustainability, social responsibility and stakeholder interests. The course also focuses on developing student skills in communication.

**Prerequisite:** ECO 215 Minimum Grade of C

**MBA 504 Customers & Supply Chains 3 cr**

This MBA course focuses on the role of customers and vendors on organizations. The course uses projects and decision scenarios to address the issues that result from managing supply chains and customer relationships.

**MBA 505 Managing People 3 cr**

This MBA course emphasizes the role of people within an organization and the issues and the decisions related to managing human assets. The course develops a number of techniques and scenarios that emphasize the importance of effective human resource management.

**Prerequisite:** MGT 300 Minimum Grade of C

**MBA 506 Managing Finance and Capital 3 cr**

Business managers must have a strong grasp of the role of finance and capital in the organization. The course focuses on establishing a strong knowledge base and the key decisions needed to be a successful manager.

**Prerequisite:** FIN 315 Minimum Grade of C

**Cross-Listed:** FIN 509

**MBA 507 Managing Strategic Decisions 3 cr**

The MBA Capstone course emphasizes decision making in a strategic context and builds upon all the courses taken prior to and concurrently with the course. The course includes decisions at the strategy development and strategy execution level. The evaluation exercises include an assessment of ethical, socially, responsible, and sustainability issues.

**Corequisite:** MGT 599

**MBA 590 Special Topics 3 cr**

The MBA Program includes courses that are designed to allow students the opportunity to learn management skills and applications through non-traditional formats. This course is designed to achieve that objective. Subject to the approval of the Director of Graduate studies.

**Management (MGT)****MGT 300 Management Theory and Practice 3 cr**

Theories of organizational structures, practices, and behavior, and the effective management of organizations. Emphasis on developing patterns and strategies of organizational management in a dynamic environment as affected by the interaction of material and human resources using the technique of applied social and management sciences.

**MGT 305 Organizational Comm - W 3 cr**

A study of written and oral communication of organizations. Emphasis is given to communication theory, including organization flows and barriers to organizational communication. The preparation of neutral, negative, and persuasive written messages as well as formal written reports is covered in depth. In addition, oral presentations and employment interviews are discussed.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**MGT 306 Organizational Comm Non Bus 3 cr**

A study of written and oral communication in organizations. Emphasis is given to communication theory, including organization flows and barriers to organizational communication. The preparation of neutral, negative, and persuasive written messages as well as formal written reports is covered in depth. In addition, oral presentations and employment interviews are discussed. For non-business majors.

**Prerequisite:** EH 102 Minimum Grade of C or EH 105 Minimum Grade of C

**MGT 311 Legal Environ of Bus II 3 cr**

An advanced treatment of the law of agency, commercial transactions, business organizations, property, negotiable instruments, secured transactions, professional liability, debtor-creditor relations, including applicable sections of Uniform Commercial Code.

**Prerequisite:** BUS 265 Minimum Grade of D or (MGT 310 Minimum Grade of D or MGT 332 Minimum Grade of D or MGT 422 Minimum Grade of D)

**MGT 325 Operations Management 3 cr**

Addresses concepts, problems, and managerial approaches applicable to the management of manufacturing and service operations. The course will examine the strategic and tactical considerations that are involved in creating a systematic framework that supports the creation of competitive advantages through effective operations and the production of high quality products. Topics covered include the role of operations in the overall organization, operations strategy development and implementation, product design and process selection, location and capacity planning, facilities layout, quality management, inventory management, production planning, scheduling and control, and project management. An important component of the overall course is the incorporation of computer applications for problem solving and decision making in operations.

**Prerequisite:** (MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D) and (BUS 255 Minimum Grade of D or ST 275 Minimum Grade of D)

**MGT 334 International Mgt 3 cr**

This course exposes students to the challenges that confront the managers of organizations & individuals in global settings. Special focus is on dealing with and benefitting from the diversity that exists across international cultures, markets, economics, governments, and organizations

**Prerequisite:** MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D

**MGT 340 Organizational Behavior - W 3 cr**

A study of human and group behavior in the workplace and within society. The focus is on individual characteristics and processes such as personality, perception, and motivation; interpersonal processes such as group behavior, leadership, communication, and decision making; and organizational processes such as culture, structure, power, and change. Requires Junior Standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D) and (MGT 305 Minimum Grade of D or MGT 324 Minimum Grade of D)

**MGT 341 Organizational Behavior 3 cr**

This course provides a basic survey of the field of Organizational Behavior. Our objective is to cover important topics such as job attitudes, work motivation, group dynamics, leadership and organizational culture. For non-business majors.

**Prerequisite:** (MGT 300 Minimum Grade of D or MGT 305 Minimum Grade of D or MGT 306 Minimum Grade of D)

**Cross-Listed:** MGT 340

**MGT 345 Creativity and Innovation 3 cr**

This course provides a broad framework for understanding the nature of entrepreneurship in multiple organizational settings. The course introduces students to the innovation and idea generation process and helps students determine the most desirable educational path for them to achieve their career goals. Sophomore standing.

**MGT 347 Franchising 3 cr**

This course is designed for students who are interested in learning about the opportunities and threats that abound in the modern world of franchising. Students will study existing franchising from both a historical and theoretical context. The logic of this course is that franchising is one of the development models that minimize risk for the "small business" focused student. Some franchising oriented people may want to start a franchise and grow it rapidly. This option is often a first step into business ownership for inexperienced owners. We discuss the applicability, opportunities, challenges, and implementation of the franchising model for expanding existing businesses. The format consists of case study and lecture discussion sequenced with extensive background readings, occasional guest lecturers, and a term case-based project culminating in a transactional plan.

**MGT 351 Human Resource Management 3 cr**

Principles, policies, and practices used to develop a sound human resource management program in the business organization. Among the topics included are job analysis, employment, organization development, employee development and evaluation, wage and salary administration and labor relations.

**Prerequisite:** (MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D) and ACC 212 Minimum Grade of D and ECO 215 Minimum Grade of D and ECO 216 Minimum Grade of D and BUS 255 Minimum Grade of D and BUS 265 Minimum Grade of D and CIS 250 Minimum Grade of D

**MGT 355 Leg & Fin Aspects of Entrepren 3 cr**

This course provides an overview of the legal and financial issues most frequently encountered by entrepreneurs and others involved in start-ups and small closely held, or family businesses. The course covers various aspects of financing and entrepreneurial venture. Major topics attracting seed and growth capital from sources such as venture capital, investment banking, government, and commercial banks; creating, protecting and leveraging intellectual property. Among the issues discussed are valuing a company, going public, selling out, acquisitions, bankruptcy, different legal forms or organizations, partnerships, and taxes.

**MGT 356 Strategic Issues in Family Bus 3 cr**

This course examines a new discipline that has developed in the last ten years and focuses on the unique aspects of family businesses. Organizational behavior, law, finance, operations, and basic small business concepts are being integrated into this course. Students will have an opportunity to consult with and develop transition plans for a family firm in a live field project.

**MGT 357 Leadership 3 cr**

This course includes a review of traditional as well as current thinking in Leadership theory. Students will complete several self-assessment exercises designed to assess one's leadership style and ability as a leader. A series of successful leaders will be studied in-depth. Prerequisite: Junior or senior standing.

**MGT 390 Total Quality Management 3 cr**

Total Quality Management (TQM) is a management philosophy which emphasizes customer focus, continuous improvement, and employee involvement throughout the organization. This course is an introductory course which examines these components and their integration into a comprehensive quality management system.

**Prerequisite:** (MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D) and (MGT 325 Minimum Grade of D or MGT 396 Minimum Grade of D)

**MGT 396 DEI in Organizations 3 cr**

This course will develop students' critical thinking regarding diversity, equity, and inclusion in organizations. Topics may include age, bias, culture, discrimination, equality, equity, ethnicity, gender, identity, inclusion, power, privilege, race, and sexual orientation.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**MGT 430 Operations Research 3 cr**

Reviews selected operations research concepts; nonlinear optimization methods, linear programming; dynamic programming; model building; and simulation methods. The student is expected to understand the concepts of operations research and to be able to use computer procedure to solve problems.

**Prerequisite:** MGT 325 Minimum Grade of D or MGT 396 Minimum Grade of D

**MGT 441 Service Operations 3 cr**

This course will provide students the opportunity to learn about service operations management, including service strategies and operations considerations and imperatives for service enterprises and how service systems are structured and operated. Students will also learn about various tools and techniques for managing service operations such as how to forecast service demand, determine capacity requirements, schedule activities, coordinate operations, plan and schedule service activities, and evaluate system performance.

**Prerequisite:** (MGT 325 Minimum Grade of D or MGT 396 Minimum Grade of D)

**MGT 450 Organizational Staffing 3 cr**

A detailed study of the function of employee staffing in a modern work organization. Emphasis on job analysis, criterion development, development and use of employment tests, validation of selection techniques, and statistical methods for making fair employment decisions. Course work includes a comprehensive staffing project.

**Prerequisite:** MGT 351 Minimum Grade of D and (BUS 245 Minimum Grade of D or ST 175 Minimum Grade of D or ST 210 Minimum Grade of D)

**MGT 451 Employee Training -Development 3 cr**

An applied course which details the training and development function. Content areas of job analysis, training needs analysis, training program development and implementation, and program evaluation will be incorporated in a comprehensive training and development project.

**Prerequisite:** MGT 340 Minimum Grade of D and MGT 351 Minimum Grade of D

**MGT 452 Employment Law 3 cr**

Analysis of significant workplace torts and laws regulating the employment relationship including: Title VII, FMLA, AOA, ADEA, FLSA, OSHA and related state laws. Emphasis on federal legislation and developing case law.

**Prerequisite:** MGT 351 Minimum Grade of D and (BUS 265 Minimum Grade of D or MGT 310 Minimum Grade of D or MGT 332 Minimum Grade of D or MGT 422 Minimum Grade of D)

**MGT 454 Compensation Administration 3 cr**

A study of the fundamentals of compensation administration in organizations. Topics include job analysis, KSA determination, job evaluation, wage structure development, incentive pay systems, legal aspects of compensation and new developments in compensation. Comprehensive course project required.

**Prerequisite:** MGT 351 Minimum Grade of D

**MGT 455 Labor - Management Relations 3 cr**

An examination of the organizing, negotiation, and contract administration phases of union-management relations. Case analyses, federal legislation and case law in labor relations, significant current issues, and a collective bargaining simulation are featured.

**Prerequisite:** MGT 351 Minimum Grade of D

**MGT 456 Strategic Issues on Family Bus 3 cr**

This course examines a new discipline that has developed in the last ten years and focuses on the unique aspects of family businesses. Organizational behavior, law, finance, operations, and basic small business concepts are being integrated into this course. Students will have an opportunity to consult with and develop transition plans for a family firm in a live field project.

**Prerequisite:** MGT 345 Minimum Grade of C

**MGT 460 Organiz Development and Change 3 cr**

Provides insight into the theory and practice of organization change and development. It bridges the gap between theory and practice and emphasizes the process of improving both organizations and individuals. Topics covered encompass understanding organizations and how they change, intervention strategies and methods for improving organizations, quality of work-life approaches and strategic considerations in system-wide change.

**Prerequisite:** MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D

**MGT 462 Negotiatn/Disp Resolutn in Bus 3 cr**

This course provides theoretical background and practical applications in business negotiation, conflict management, and alternative dispute resolution. Areas covered include positional and interest-based bargaining, business and employment arbitration, organizational conflict management strategies, mediation, and effective communications for negotiators and ADR participants.

**Prerequisite:** (MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D)

**MGT 465 New Venture Creation 3 cr**

How new businesses are organized and planned. Objectives are 1) understanding the knowledge, skills and abilities required of entrepreneurs, 2) creating and developing opportunities for new ventures, and 3) planning resources to convert those opportunities into businesses. Students work in teams to develop a business plan for a new venture they have chosen.

**Prerequisite:** MGT 345 Minimum Grade of C or MGT 355 Minimum Grade of C

**MGT 470 High Performance Organizations 3 cr**

Course examines the role of organization culture, leadership, employee involvement, work teams, and human resource practices in developing and sustaining high performance organizations that practice the principles of total quality management. Senior Standing.

**Prerequisite:** (MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D)

**MGT 475 Strategic HRM 3 cr**

This is a capstone course in human resource management that reviews essential human resource management topics to prepare students for the SHRM Assurance of Learning Exam. Topics covered include strategic HR, ethics, recruiting and selection, employee and organizational development, performance management, employment law, compensation administration, workplace safety, employee relations, labor relations, and general management topics including motivation, individual differences, organizational culture, and leadership. In addition, the course covers state of the art issues in human resource management, which are new and not well developed in existing texts.

**Prerequisite:** MGT 351 Minimum Grade of D and (MGT 340 Minimum Grade of D or MGT 320 Minimum Grade of D)

**MGT 483 Social Entrepreneurship 3 cr**

The course provides a broad theoretical perspective and practical framework for understanding social entrepreneurs and the social ventures they create ranging from local social organizations to large international social ventures leading global change. The course introduces students to the possibilities of social entrepreneurship and an introduction to the entire social venture creation process and life cycle. This course is a service-learning based and all students will participate in term-based community-based projects with local non-profit organizations. Extensive work outside of the normal classroom hours is required for this course.

**MGT 485 Bus Policy in Global Eco - W 3 cr**

The culmination course in business and management education. Interdisciplinary and global in nature, the course uses the case method to develop a top management perspective in which all business disciplines are integrated into the organization's effective total functioning.

**Prerequisites:** Seniors who have completed all core courses, have petitioned for graduation and are beginning the final semester.

**Prerequisite:** (BUS 305 Minimum Grade of D or MGT 350 Minimum Grade of D or ECO 453 Minimum Grade of D) and (FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D) and (MGT 305 Minimum Grade of D or MGT 324 Minimum Grade of D) and (MGT 310 Minimum Grade of D or BUS 265 Minimum Grade of D or MGT 332 Minimum Grade of D or MGT 422 Minimum Grade of D) and (MGT 325 Minimum Grade of D or MGT 396 Minimum Grade of D) and (MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D)

**Corequisite:** MGT 486

**MGT 486 Undergraduate Comp Exam 0 cr**

Comprehensive exam

**Corequisite:** MGT 485

**MGT 490 Special Topics 3 cr**

Designed to provide senior students an opportunity to study selected topics of particular interest. A student may count no more than six hours of Special Topics in the concentration. **Prerequisite:** Approval of Department Chair.

**MGT 492 Management Analysis & Consult 3 cr**

Designed to help students bridge the gap between management theory and the realities involved in the practice of management. Topics include (1) development of the human, social, and political skills of the student as an individual, (2) business ethics, (3) global management issues, and (4) current trends in society that affect business and management. Assignments include a project with a local organization to identify critical management issues, analyze alternatives, and present specific recommended solutions to company managers. Senior standing.

**Prerequisite:** (MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D) and (MGT 320 Minimum Grade of D or MGT 340 Minimum Grade of D) and MGT 351 Minimum Grade of D

**MGT 494 Dir St in Management 1-3 cr**

Primarily designed to give superior students an opportunity to study some phase of management of particular interest. Conferences, a bibliography, and a formal research report are required. Junior or senior standing, a cumulative GPA of 2.5 or better, and approval of the department chair following the evaluation of a written proposal.

**MGT 496 Management Internship 3 cr**

The internship program is designed to give students practical experience in their field of study. Students complete directed projects under the supervision of Department Chair. No more than three hours of internship credit may be counted toward a degree in the Mitchell College of Business. Prerequisites: Junior or Senior standing, declared major in management, overall GPA of at least 2.5, and Internship Agreement signed by department Chair.

**MGT 510 Legal Environment of Business 3 cr**

Detailed analysis of laws & regulations affecting contemporary business organizations. Emphasis on legal aspects of employment and labor relations, regulatory agencies, sales, warranties, products liability, consumer protection, anti-trust, securities, creditors' rights, and ethical considerations.

**Prerequisite:** MBA P

**MGT 521 Data Analy for Bus Decisions 3 cr**

An examination of basic statistical concepts used in business analysis. Topics include fundamental probability, sampling, statistical estimation, test of hypothesis, analysis of variance, and regression analysis. Emphasis is placed on the use of statistical techniques for business decision making.

**MGT 522 Supply Chain & Operations Mgmt 3 cr**

An integrative approach to the processes, operations, and information required to produce and transform resources into value-added outputs that maximize customer satisfaction. Particular emphasis is placed on strategic supply chain management, operations strategy, value chain analysis, demand management, process mapping, quality assurance, customer fulfillment strategies, order fulfillment processes, relationship and information management in supply networks, measuring operational performance, and analytical tools for managing operations and supply systems.

**MGT 532 Legal & Ethical Environ of Bus 3 cr**

Legal and Ethical Environment of Business is designed to develop an in-depth analytical understanding of selected legal/ethical issues and trends and their impact on management and other business functions. Students will analyze the legal and ethical implications of issues including products liability, professional regulations, corporate responsibility, workplace discrimination and harassment, privacy, workplace safety, restraints on trade, land use regulation, international law, and alternative dispute resolution.

**MGT 562 MBA Exec Lect I 0 cr**

The MBA Executive Lecture series exposes students to the thinking and analysis of distinguished visiting executives on such topics as economics and finance, strategic management, marketing, international business, and entrepreneurship. Seminars are held during fall and spring semesters.

**Prerequisite:** MGT 521 (may be taken concurrently) Minimum Grade of C or MGT 532 (may be taken concurrently) Minimum Grade of C

**MGT 564 MBA Exec Lect II 0 cr**

The MBA Executive Lecture series exposes students to the thinking and analysis of distinguished visiting executives on such topics as economics and finance, strategic management, marketing, international business, and entrepreneurship. Seminars are held during fall and spring semesters.

**Prerequisite:** ECO 506 (may be taken concurrently) Minimum Grade of C or MGT 530 (may be taken concurrently) Minimum Grade of C

**MGT 570 MBA Exec Lect III 0 cr**

The MBA Executive Lecture series exposes students to the thinking and analysis of distinguished visiting executives on such topics as economics and finance, strategic management, marketing, international business, and entrepreneurship. Seminars are held during fall and spring semesters.

**Prerequisite:** ACC 501 (may be taken concurrently) Minimum Grade of C or MKT 541 (may be taken concurrently) Minimum Grade of C

**MGT 572 MBA Exec Lect IV 0 cr**

The MBA Executive Lecture series exposes students to the thinking and analysis of distinguished visiting executives on such topics as economics and finance, strategic management, marketing, international business, and entrepreneurship. Seminars are held during fall and spring semesters.

**Prerequisite:** MGT 522 (may be taken concurrently) Minimum Grade of C or ACC 502 (may be taken concurrently) Minimum Grade of C

**MGT 590 Sp Top - 3 cr**

Designed to provide graduate students an opportunity to study selected topics. Approval of Department Chair. A student may count no more than three hours if Special Topics in the MBA degree program.

**Prerequisite:** MBA P

**MGT 594 Independent Study - Management 3 cr**

Readings and research on selected topics. Conferences and formal research report required. Prerequisites: Approval of Department Chair.

**MGT 599 MBA Comprehensive Exam 0 cr**

A corequisite course with MGT 580 with no credit hours which includes a graduate comprehensive business exam.

**MGT 701 Sem in Org Behavior 3 cr**

This seminar provides an introduction to established theories and emerging trends in the field of organizational behavior. The course explores the thoughts, emotions, and behaviors of individuals within the context of work, teams, organizations, and society. The emphasis is on organizational theory and development.

**MGT 703 Seminar in Org Theory & Change 3 cr**

This is a foundational overview seminar. The purposes of the seminar are to 1) provide an in-depth understanding of the dominant theoretical approaches used in organizational theory, 2) give a historical overview of the theories of organization change, and 3) develop student skills in evaluating, extending, and communicating ideas about organizational theory and/or change as it relates to the student's research.

**MGT 705 Leadership 3 cr**

This course includes a review of traditional as well as current thinking in leadership theory with a special emphasis on emotional and social intelligence and organizational citizenship behavior.

**MGT 707 Strategic Management 3 cr**

The course is designed to develop a thorough understanding of the primary frameworks of competitive strategy and corporate strategy. Topics covered in the course include: industry and competitive analysis, resource-based view of the firm, value chain analysis, competitive strategies, business models, scope of the firm, strategic alliances, and offensive and defensive strategies.

**MGT 709 Sem. Sp. Topics 3 cr**

This course will cover two broad areas. The first is a reprise and extension of Structural Equation Modeling (SEM). The second is an introduction to Game Theory (GT) and applications thereof.

**MGT 799 Dissertation Research 1-6 cr**

Independent Scholarship working with committee.

## Faculty Accounting

Faculty Name	Faculty Department	Faculty Position	Degrees Held
BALDWIN, AMELIA ANNETTE (baldwin@southalabama.edu)	Accounting	Professor	BSBA, Auburn University MAC, Auburn University PHD, Virginia Polytechnic Inst and
DEROY, TIFFANY LYNN (tderoy@southalabama.edu)	Accounting	Assistant Professor	BSBA, University of South Alabama MAC, University of South Alabama PHD, Kennesaw State University
FOSTER, RICHARD MARK (markfoster@southalabama.edu)	Accounting	Instructor	BSBA, University of Tennessee-Knox MAC, University of South Alabama
HSU, KO-CHENG (khsu@southalabama.edu)	Accounting	Associate Professor	BS, Illinois State University MS, Illinois State University MS, Iowa State University PHD, University of Memphis
JOHNSON, TRISTAN B (tristanjohnson@southalabama.edu)	Accounting	Assistant Professor	BSBA, Drexel University PHD, Florida State University
MADDEN, ELLEN KOPPERSMITH (emadden@southalabama.edu)	Accounting	Senior Instructor	BA, Birmingham-Southern College MBA, Spring Hill College
RICH, JAMES C. (jrich@southalabama.edu)	Accounting	Associate Professor	BBA, Campbell University MBA, Troy University-Main DBA, Kennesaw State University
VANN, CAROL E. (cvann@southalabama.edu)	Accounting	Assistant Professor	BSBA, University of Southern Miss MPAC, University of Southern Miss PHD, University of Memphis
XIN, HUA CHRISTINE (christinexin@southalabama.edu)	Accounting	Associate Professor	BS, Beijing Tech & Business Univ MS, Beijing Tech & Business Univ PHD, Rutgers The St U Central Offic

## Economics, Finance and Real Estate

Faculty Name	Faculty Department	Faculty Position	Degrees Held
AFFUSO, ERMANNO (eaffuso@southalabama.edu)	Econ, Finance, and Real Estate	Professor	MS, Polytechnic University of Bari PHD, Auburn University
CUMMINGS, JOHN REID (cummings@southalabama.edu)	Econ, Finance, and Real Estate	Professor	BA, University of NC- Chapel Hill MBA, University of Mobile DBA, Kennesaw State University
HARPER, ADAM CADE (harper@southalabama.edu)	Econ, Finance, and Real Estate	Assistant Professor	BS, University of Texas- Arlington MA, University of Texas- Arlington MA, University of Texas- Arlington PHD, University of Texas- Arlington
HUNSADER, KENNETH JAMES (khunsader@southalabama.edu)	Econ, Finance, and Real Estate	Professor	BS, Florida State University PHD, Florida State University
ISTIAK, KHANDOKAR (kistiak@southalabama.edu)	Econ, Finance, and Real Estate	Associate Professor	BS, University of Dhaka MS, University of Dhaka MA, University of Arizona PHD, Univ of Calgary

JAIN, URVASHI (urvashijain@southalabama.edu)	Econ, Finance, and Real Estate	Assistant Professor	BA, St Stephens College MS, Indian Statistical Institute PHD, University of Southern CA
JOHNSON, YING HUANG (yhuang@southalabama.edu)	Econ, Finance, and Real Estate	Associate Professor	MS, University of Memphis MRCP, University of Memphis PHD, University of Memphis
LAWREY, CHRISTOPHER M (clawrey@southalabama.edu)	Econ, Finance, and Real Estate	Associate Professor	BS, Arkansas State University-Main MBA, Arkansas State University- Main PHD, University of Mississippi
LE, HUUBINH B (hble@southalabama.edu)	Econ, Finance, and Real Estate	Associate Professor	BS, Georgia State University PHD, Kansas State University
PENNYWELL, GWENDOLYN P. (gpennywell@southalabama.edu)	Econ, Finance, and Real Estate	Associate Professor	BS, Prairie View A & M University PHD, Georgia State University
SWOFFORD, JAMES L. (jswoffor@southalabama.edu)	Econ, Finance, and Real Estate	Professor	BA, University of Richmond MA, University of Florida PHD, University of Florida
WOOD, BOB G (bgwood@southalabama.edu)	Econ, Finance, and Real Estate	Professor	BS, Arkansas State University-Main MBA, Arkansas State University- Main PHD, Louisiana State University

## Management

Faculty Name	Faculty Department	Faculty Position	Degrees Held
FINNEY, TREENA LYNN GILLESPIE (tgillespie@southalabama.edu)	Management	Professor	BA, Clemson University MS, Clemson University PHD, Depaul University
GILLIS, WILLIAM E. (gillis@southalabama.edu)	Management	Professor	BS, US Air Force Academy MBA, University of West Florida PHD, Florida State University
HUNT, JAMES A. (jayhunt@southalabama.edu)	Management	Instructor	BA, University of South Alabama MA, University of South Alabama MBA, University of South Alabama
MAES, JEANNE DELONEY (jmaes@southalabama.edu)	Management	Professor	BS, State University of New York MBA, University of South Alabama PHD, University of Southern Miss
MOSLEY, DONALD CRUMPTON (dcmosley@southalabama.edu)	Management	Professor	BA, Millsaps College MBA, University of South Alabama PHD, Mississippi State University
NELSON, THOMAS E. (thomasnelson@southalabama.edu)	Management	Associate Professor	BS, Ball State University MBA, Ball State University PHD, University of Louisville
SMITH, DAVID J. (djsmith@southalabama.edu)	Management	Instructor	BBA, University of Notre Dame MBA, Stetson University
SMITH, MICKEY BRANDON (mbsmith@southalabama.edu)	Management	Associate Professor	BA, University of South Alabama MA, University of West Florida PHD, Oklahoma State University
STEFANONE, ROBYN LEA (brouer@southalabama.edu)	Management	Professor	BA, University of Georgia BS, University of Georgia MSM, University of Central Florida PHD, Florida State University
STUPAVSKY, JANA (jstupavsky@southalabama.edu)	Management	Instructor	BSBA, University of South Alabama MBA, University of South Alabama
TURNIPSEED, DAVID L. (turnipseed@southalabama.edu)	Management	Professor	BS, University of Alabama MBA, University of Alabama PHD, University of Alabama

WASSENAAR, CHRISTINA L. (cwassenaar@southalabama.edu)	Management	Associate Professor	BS, California State Polytech-Pom MBA, Claremont Graduate University  PHD, Claremont Graduate University
WELDY, TERESA GAY (tweldy@southalabama.edu)	Management	Associate Professor	BS, University of South Alabama MBA, University of South Alabama PHD, University of South Alabama
WU, I-HENG (i- hengwu@southalabama.edu)	Management	Assistant Professor	BBA, Tamkang University MBA, National Chung-Hsing Universit MA, University of Minn-Twin Cities PHD, University of Iowa

## Marketing and Quantitative Methods

Faculty Name	Faculty Department	Faculty Position	Degrees Held
CAPELLA, MICHAEL LOUIS (mcapella@southalabama.edu)	Marketing/Quantitative Methods	Professor	BBA, Mississippi State University MBA, Georgia State University PHD, Mississippi State University
CHOW, ALAN FIELD (alchow@southalabama.edu)	Marketing/Quantitative Methods	Associate Professor	BS, Louisiana State University MS, Louisiana State University PHD, University of South Alabama
DADZIE, CHARLENE AMA (cdadzie@southalabama.edu)	Marketing/Quantitative Methods	Associate Professor	AB, University of Georgia MH, Cornell U-Ny St Statutory Cols PHD, University of North Texas
FINNEY, ROBERT ZACHARY (zfinney@southalabama.edu)	Marketing/Quantitative Methods	Professor	BS, Auburn University MBA, University of Mississippi PHD, University of Alabama
HAIR, JOSEPH F (jhair@southalabama.edu)	Marketing/Quantitative Methods	Professor	BA, University of Florida MA, University of Florida PHD, University of Florida
HOWARD, MATTHEW C (mhoward@southalabama.edu)	Marketing/Quantitative Methods	Associate Professor	BA, Virginia Polytechnic Inst and BS, Virginia Polytechnic Inst and MS, Pennsylvania State University PHD, Pennsylvania State University
LOES, MARIANNE C. (mloes@southalabama.edu)	Marketing/Quantitative Methods	Instructor	BSBA, University of South Alabama MBA, Auburn University
SABOL, MISTY ANNE (msabol@southalabama.edu)	Marketing/Quantitative Methods	Assistant Professor	BS, University of New Orleans MA, University of Alabama DBA, University of Dallas
SHARLAND, ALEXANDER P. (asharland@southalabama.edu)	Marketing/Quantitative Methods	Professor	BA, University of Stirling MBA, Virginia Polytechnic Inst and PHD, Florida State University
SIMONSON, PETER DOUGLAS (psimonson@southalabama.edu)	Marketing/Quantitative Methods	Assistant Professor	BSBA, University of Arizona MBA, North Dakota St University PHD, North Dakota St University
TASHBIN, GHOLAMREZA (gtashbin@southalabama.edu)	Marketing/Quantitative Methods	Instructor	BS, Spring Hill College MBA, Spring Hill College
WILLIAMS, ALVIN JEROME (awilliams@southalabama.edu)	Marketing/Quantitative Methods	Professor	BSBA, University of Southern Miss MA, University of Alabama PHD, University of Arkansas- Fayette
ZOGHBY, JENNIFER CHRISTINE (zoghby@southalabama.edu)	Marketing/Quantitative Methods	Part-Time Instructor	BA, Catholic University of America MPA, University of South Alabama PHD, University of South Alabama

## Accounting (MAcc) Degree Requirements

Students seeking the Master of Accounting degree must complete ten (10)-three semester-hour graduate courses.

Students seeking the Master of Accounting degree are required to complete any of the following foundation courses as designated by the Director of Graduate Studies. In addition, students must complete 10 graduate accounting courses. All courses are required. The program is totally on-line beginning fall semester 2018.

### Undergraduate Foundation Courses

#### Prerequisites

All courses must be taken as an undergraduate student or transferred into the university before admission will be granted to the MAcc program. Courses must have been passed with a minimum grade of "C" to complete a prerequisite requirement.

Code	Title	Hours
ACC 211	Financial Accounting	3
ACC 212	Managerial Accounting	3
CIS 250	Advanced Comp Applications	3
ACC 331	Taxation of Individuals	3
ACC 341	Accounting Information Systems	3
ACC 371	Intermediate Accounting I	3
ACC 372	Intermediate Accounting II	3
ACC 381	Cost Accounting	3
ACC 451	Auditing - W	3
<b>Total Hours</b>		<b>27</b>

### MAcc Core Courses

Code	Title	Hours
ACC 511	Financial Accounting Theory	3
ACC 521	Advanced Managerial Accounting	3
ACC 531	Tax Planning and Research	3
ACC 580	Emerging Issues in Accounting	3
ACC 541	Advanced Accounting Systems	3
ACC 572	Fraud Ex	3
ACC 570	Professional Accounting I	3
ACC 510	Forensic Acc. & Litig. Svcs.	3
ACC 552	Advanced Auditing & Analytics (see footnote table below (p. 829)) <sup>1</sup>	3
ACC 571	Professional Accounting II	3
Other Courses as approved by the Chair of the Department of Accounting		3
<b>Total Hours</b>		<b>33</b>

#### Footnote

<sup>1</sup> This course is dual-listed with a 400-level course. Students may not repeat dual-listed courses completed at the 400-level.

### CPA Eligibility

Persons seeking licensure as a CPA in the state of Alabama must have completed a minimum of 150 semester hours or 225 quarter hours of

postsecondary education, including (1) a baccalaureate degree from an accredited university, and (2) evidence that he or she has satisfied either one of the following:

- To sit for the CPA Examination in the State of Alabama, an individual must possess at least a baccalaureate degree that is accredited by one of the regional accrediting bodies, such as the Southern Association of Colleges and Schools (SACS) and have completed at least 120 semester hours of college work. The 120 semester hours must include at least 24 semester hours of general business courses other than accounting (i.e. marketing, management, finance, economics, etc.), at least 24 semester hours of accounting courses at the upper division (i.e. junior or senior level) and/or graduate level. Upon completing all four parts of the exam, the successful candidate will have 36 months to complete 3 additional hours of general business coursework and 9 additional hours of accounting courses at the upper division (i.e. junior or senior level) and/or graduate level. In addition, the candidate must have earned a total of at least 150 semester hours of college credit.
- Candidates who hold the Master of Accounting degree from an accounting program that is separately accredited in accounting by AACSB International (such as the University of South Alabama) are considered to meet all the educational requirements to be a CPA in the State of Alabama. They must also meet the experience requirement to be licensed.

If you need any further information, see the Chair of the Department of Accounting.

## Business Administration (MBA) Degree Requirements

The Mitchell MBA degree is accredited by the Association for the Advancement of Collegiate Schools of Business. It is a professional degree designed to enable individuals to study advanced concepts of business, industry, and government operations. The program is intended for the active manager or technical supervisor as well as the recent graduate who is interested in advanced study in the field of business. The business environment is constantly changing and the coursework in the MBA program is designed to facilitate decision making within ambiguous and changing conditions. The program requires ten (10) courses each carrying three semester hours of credit.

Code	Title	Hours
MBA 501	Analysis using Info Sys	3
MBA 502	Managing Accounting Info	3
MBA 503	Managing in the Bus. Env't	3
MBA 504	Customers & Supply Chains	3
MBA 505	Managing People	3
MBA 506	Managing Finance and Capital	3
MBA 507	Managing Strategic Decisions	3
Select three MBA Electives approved by the Director of Graduate Programs		9
MGT 599	MBA Comprehensive Exam (see footnote table below (p. 830)) <sup>1</sup>	0
<b>Total Hours</b>		<b>30</b>

## Footnote

<sup>1</sup> Co-requisite with MBA 507

# Business Administration (PhD)

## Degree Requirements

### Doctor of Philosophy (PhD)

The Doctor of Philosophy in Business Administration (PhD) program in Management or Marketing is designed for individuals in business desiring to transition to an academic career or build skills for consulting occupations. The program weekend format is designed to allow students to complete the program through an intensive series of Friday through Sunday classes. In the event a situation is not addressed below, the regulations governing that situation will be determined by the Graduate School.

### Minimum Requirements for Admission

Applicants must have successfully completed an MBA, a specialized Master's degree in business, or a professional degree in related areas of study, from nationally accredited programs subject to the approval of the Director of Graduate Studies and the Admissions Committee; Applicants must have a minimum of five years of professional experience in business or other professional fields. Instructors from business schools or colleges who want to upgrade their academic status with a doctoral degree are also eligible to apply. Classes are admitted once each year, starting in May. Check the website for specific deadlines. International students must meet or exceed the University's standard for language proficiency.

Students may apply on-line at <https://www.southalabama.edu/colleges/mcob/dba/index.html> (<https://www.southalabama.edu/colleges/mcob/dba/>).

## General Information

### Required Credits

A minimum of 60 semester hours of approved graduate credit is required. Details about the curriculum are given below.

### Elective Substitution

With Director approval, up to three seminar elective and/or research methods may be substituted during the second year of courses.

### Residence, Full-time Study, and Continuation Registration

A minimum of eight consecutive terms of full-time study in residence is required.

### Time Limit

All requirements for the PhD degree must be completed within 36 months from the date of matriculation. A student who has not satisfactorily completed the research component in a three year period must apply for a defined extension to complete the degree. This request must be recommended by the major professor, the Director of Graduate Studies, and approved by the Dean of the Graduate School.

A comprehensive examination is scheduled for the summer of the third year of the doctoral program. Failure to complete the work within the periods specified will necessitate reevaluation of the student's program and may result in a recommendation for dismissal by the Director of Graduate Studies to the Graduate Dean.

## Doctor of Philosophy Degree Requirements

The Doctor of Philosophy (PhD) degree is awarded in recognition of the student's demonstrated ability to conduct original, scholarly research at the highest levels without extensive supervision. The degree is not granted upon completion of a stated amount of course work, but rather after demonstration by the student of a comprehensive knowledge and research capability in a specialized field of study. The student must demonstrate this ability in writing and by defending the research component based upon the result of an original investigation.

## Grade Requirements

1. All students must earn an overall GPA of 3.0 or better in the program in order to graduate.
2. Students must pass a course with a grade of no less than a B.
3. Students may not drop (WD) from any course more than one time.
4. Students may not repeat a course more than one time.

## Graduation Plan

### Requirements for Degree

PhD students must satisfactorily complete a minimum of sixty (60) semester-hour graduate credit. A minimum of eight consecutive terms of full-time study is required.

### PhD Degree in Marketing

To earn a PhD degree in Marketing from the University, a student must satisfactorily complete the following graduate courses and research assignments.

Course	Title	Hours
<b>First Year</b>		
<b>Summer</b>		
BUS 700	Fund of Research	3
BUS 702	Applied Stat and Reg	3
BUS 789	Res and Teaching Concepts	1
<b>Hours</b>		<b>7</b>
<b>Fall</b>		
BUS 704	Multivariate Analysis	3
MKT 701	Marketing Management	3
BUS 789	Res and Teaching Concepts	1
<b>Hours</b>		<b>7</b>
<b>Spring</b>		
BUS 706	Research Design and Methods	3
MKT 703	Supply Chain & Logistics	3
BUS 789	Res and Teaching Concepts	1
<b>Hours</b>		<b>7</b>
<b>Second Year</b>		
<b>Summer</b>		
BUS 708	Adv Stats & App Res	6
BUS 789	Res and Teaching Concepts	1
Conceptual paper presented to review team		—
<b>Hours</b>		<b>7</b>
<b>Fall</b>		
BUS 710	Struct Equation Modeling	3
MKT 705	Sem. Marketing Communications	3
BUS 789	Res and Teaching Concepts	1
<b>Hours</b>		<b>7</b>
<b>Spring</b>		
MKT 709	Marketing: Sp Topic-	3
MKT 707	Seminar in Marketing Strategy	3

BUS 789	Res and Teaching Concepts	1
<b>Hours</b>		<b>7</b>
<b>Third Year</b>		
<b>Summer</b>		
MKT 799	Dissertation Research	3
ABD status conditional on results of the comprehensive exam		
MKT 799	Dissertation Research	3
<b>Hours</b>		<b>6</b>
<b>Fall</b>		
MKT 799	Dissertation Research	6
Paper submission to a national or international conference		
<b>Hours</b>		<b>6</b>
<b>Spring</b>		
MKT 799	Dissertation Research	6
Paper submission to a national or international conference		
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>60</b>

### PhD Degree in Management

To earn a PhD degree in Management from the University, a student must satisfactorily complete the following graduate courses and research assignments.

Course	Title	Hours
<b>First Year</b>		
<b>Summer</b>		
BUS 700	Fund of Research	3
BUS 702	Applied Stat and Reg	3
BUS 789	Res and Teaching Concepts	1
<b>Hours</b>		<b>7</b>
<b>Fall</b>		
BUS 704	Multivariate Analysis	3
MGT 703	Seminar in Org Theory & Change	3
BUS 789	Res and Teaching Concepts	1
<b>Hours</b>		<b>7</b>
<b>Spring</b>		
BUS 706	Research Design and Methods	3
BUS 789	Res and Teaching Concepts	1
<b>Hours</b>		<b>4</b>
<b>Second Year</b>		
<b>Summer</b>		
BUS 708	Adv Stats & App Res	6
BUS 789	Res and Teaching Concepts	1
Conceptual paper presented to review team		
<b>Hours</b>		<b>7</b>
<b>Fall</b>		
BUS 710	Struct Equation Modeling	3
MGT 705	Leadership	3
BUS 789	Res and Teaching Concepts	1
<b>Hours</b>		<b>7</b>
<b>Spring</b>		
MGT 709	Sem. Sp. Topics	3
MGT 707	Strategic Management	3
BUS 789	Res and Teaching Concepts	1
<b>Hours</b>		<b>7</b>
<b>Third Year</b>		
<b>Summer</b>		
MGT 799	Dissertation Research	3
ABD status conditional on results of the comprehensive exam		
MGT 799	Dissertation Research	3
<b>Hours</b>		<b>6</b>

<b>Fall</b>		
MGT 799	Dissertation Research	6
Paper submission to a national or international conference		
<b>Hours</b>		<b>6</b>
<b>Spring</b>		
MGT 799	Dissertation Research	6
Paper submission to a national or international conference		
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>57</b>

### PhD Degree in Business Analytics

To earn a PhD degree in Business Analytics from the University, a student must satisfactorily complete the following graduate courses and research assignments.

Course	Title	Hours
<b>First Year</b>		
<b>Summer</b>		
BUS 700	Fund of Research	3
BUS 702	Applied Stat and Reg	3
BUS 789	Res and Teaching Concepts	1
<b>Hours</b>		<b>7</b>
<b>Fall</b>		
BUS 704	Multivariate Analysis	3
BUS 750		
BUS 789	Res and Teaching Concepts	1
<b>Hours</b>		<b>4</b>
<b>Spring</b>		
BUS 751	Python for Business Analytics	3
MGT 753		
BUS 789	Res and Teaching Concepts	1
<b>Hours</b>		<b>4</b>
<b>Second Year</b>		
<b>Summer</b>		
BUS 708	Adv Stats & App Res	6
BUS 789	Res and Teaching Concepts	1
<b>Hours</b>		<b>7</b>
<b>Fall</b>		
BUS 754	Seminars Business Analytics II	3
BUS 759	Machine Learning and AI	3
BUS 789	Res and Teaching Concepts	1
<b>Hours</b>		<b>7</b>
<b>Spring</b>		
BUS 710	Struct Equation Modeling	3
BUS 757	Computational Business Stats	3
BUS 789	Res and Teaching Concepts	1
<b>Hours</b>		<b>7</b>
<b>Third Year</b>		
<b>Summer</b>		
BUS 799	Dissertation Research	6
ABD status conditional on results of the comprehensive exam		
<b>Hours</b>		<b>6</b>
<b>Fall</b>		
BUS 799	Dissertation Research	6
Paper submission to a national or international conference		
<b>Hours</b>		<b>6</b>
<b>Spring</b>		
BUS 799	Dissertation Research	6
Paper submission to a national or international conference		
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>54</b>

# Pat Capps Covey College of Allied Health Professions

## General Information

(251) 445-9250

College of Allied Health website  
<https://www.southalabama.edu/colleges/alliedhealth> (<https://www.southalabama.edu/colleges/alliedhealth/>)

### Allied Health Administrative Staff

Title	Name
Dean	Susan Gordon-Hickey
Associate Dean for Graduate Affairs & Faculty Development	Elizabeth M. Adams
Associate Dean for Community Engagement	Charles Erwin
Director of Academic Advising, Allied Health	Brittney Day
Academic Advisor II	Nancy Dunn

The Pat Capps Covey College of Allied Health Professions is dedicated to the provision of the highest quality in basic medical sciences and health professional education to meet healthcare needs and to contribute to new knowledge through research. Our programs vary in specialization and are either clinical or health science focused.

### Clinical Programs and Accrediting Agency

- **Emergency Medical Services Paramedic & EMT Programs:** Committee on Accreditation of Allied Health Educational Programs (CAAHEP) and the Committee on Accreditation for the EMS Professions (CoAEMSP)
- **Occupational Therapy (Master of Science in Occupational Therapy & Doctor of Occupational Therapy):** Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA)
- **Physical Therapy (Doctor of Physical Therapy):** Commission on Accreditation in Physical Therapy Education (CAPTE) for the American Physical Therapy Association (APTA)
- **Physician Assistant (Master of Health Sciences):** Accreditation Review Commission on Education for the Physician Assistant, Inc. (ARC-PA)
- **Radiologic Sciences (Bachelor of Science Program):** Joint Review Committee on Education in Radiologic Technology (JRCERT)
- **Speech-Language Pathology and Audiology Programs (Master of Science in Speech-Language Pathology and Doctor of Audiology):** Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA)

The clinical programs are accredited by their national specialized accreditor and lead to certification and licensure in the United States. Upon graduation from a professional/clinical program, students are eligible to sit for their respective certification and licensure board examinations to enter professional practice in their chosen specialization.

The clinical programs in the Pat Capps Covey College of Allied Health Professions provide the scientific education and clinical education opportunities needed for clinical practice. Coursework and clinical placements for these programs are full-time. Students must be able to manage full-time clinical placements appropriate to the profession. Clinical placements may be weekdays or on the weekend. Students may need to be placed at clinical sites between semesters. Additionally, students are not guaranteed clinical placements in Mobile and should be prepared to commute.

Through University approval, and when deemed to be in the best interest of the students, the faculty of the College reserves the right to alter curricula and regulations as considered necessary.

### Health Sciences Programs

- Biomedical Sciences (BS)
- Biomedical Sciences (MS)
- Communication Sciences and Disorders (PhD)
- Professional Health Sciences (BS)
- Speech and Hearing Sciences (BS)

The health sciences programs prepare students for the health care workforce or for graduate-level clinical/professional programs.

### Academic Advising

Students are encouraged to take full advantage of the academic advising services provided in the College of Allied Health Professions. The academic advisors are available throughout the academic year to assist undergraduate students and other persons seeking information about Allied Health Professions programs. Freshmen (i.e., students with fewer than 30 completed credit hours and students with college credit from high school who are in their first full-time semester of college) are advised in the Academic Advising and Transfer Services (AATS) office (<https://www.southalabama.edu/departments/academicadvising/>) located in the Academic Services Center. Sophomores, Juniors, and Seniors are advised in the College of Allied Health Professions' Advising Office. The Allied Health academic advisors are located on the third floor of the Health Sciences Building, room 3028 (HAHN 3028). You may contact the Allied Health Advising Office at (251) 445-9260 or [ahp advising@southalabama.edu](mailto:ahp advising@southalabama.edu) (<http://bulletin.southalabama.edu/programs-az/allied-health/ahp advising@southalabama.edu>) or schedule an appointment via Navigate South (<https://www.southalabama.edu/services/logins/students/>). Undergraduate students in the professional component of their program and graduate students are advised by their respective departmental faculty advisors.

### Computer Access Requirement

All students enrolled in the Pat Capps Covey College of Allied Health Professions are required to have access to a personal computer. This access must include a current version of the Microsoft Office<sup>®</sup> software suite including Word<sup>®</sup> and Excel<sup>®</sup>, access to the University's e-mail system and access to the Internet for research purposes. Individual programs may have additional requirements specific to their curriculum.

### General Requirements for Immunizations, Health Insurance, Background Checks, and Drug Screening

Students in clinical programs are required to provide documentation of immunizations. Confirmation of immunization and/or documentation that the immunization process is underway (e.g. multiple shot immunization process) is required prior to matriculation. Additionally, some immunizations will be confirmed annually (i.e. flu shot). Students

will be required to meet the immunization requirements of clinics at which they are completing clinical rotations. Some clinical sites may require updated paperwork and/or additional immunizations. Specific immunization requirements are found in program handbooks.

Students in clinical programs are required to have continuous health care coverage. As such, students in clinical programs are required to maintain health insurance throughout the program of study and bear all costs associated with their health care. Students applying for admission to clinical programs will need to provide proof of health insurance coverage before matriculation to the program and every year after matriculation.

Students in clinical programs are required to submit background checks and drug tests prior to matriculating into a clinical program. For clinical programs, acceptance, admission, and retention in the applicable program are contingent upon an acceptable background check for the profession. Drug tests may be randomly administered while in clinical programs. Students are informed of these requirements minimally in the application process, during orientation, and in program handbooks. The College of Allied Health Professions policies on drug testing and background checks are found in the CAHP Policy and Procedures Manual on the website. Students are responsible for becoming familiar with individual requirements and regulations specific to their programs.

Students must adhere to the policies of the site at which they are completing clinical education experiences/rotations. This includes, but is not limited to, the immunization/vaccination policies, policies on reporting changes in background check status, and drug testing/result requirements. Change in the student's status should be reported by the student to their program director/department chair and to their direct supervisor at the clinical site. The site may choose to disallow the student's participation in clinical education activities at their site based on these results and/or change in status.

## Departments of Instruction

- Biomedical Sciences (p. 835)
  - Biomedical Sciences (BS) (p. 840)
  - Biomedical Sciences (MS) (p. 844)
  - Biomedical Sciences Minor (p. 844)
  - Public Health Minor (<http://bulletin.southalabama.edu/programs-az/allied-health/biomedical-sciences/public-health-minor/>)
- Emergency Medical Services (p. 845)
  - Advanced EMT (AEMT) Certificate Program (p. 851)
  - Emergency Medical Services (BS) (p. 851)
  - Emergency Medical Services Minor (p. 854)
  - EMT Certification Program (p. 854)
  - Paramedic Certificate Program (p. 854)
  - Professional Health Sciences (BS) (p. 855)
- Occupational Therapy (p. 858)
  - Occupational Therapy (MS) (p. 865)
  - Occupational Therapy (OTD) (p. 867)
- Physical Therapy (p. 869)
  - Physical Therapy (DPT) (p. 873)
- Physician Assistant Studies (p. 876)
  - Physician Assistant Studies (MHS) (p. 882)
- Radiologic Sciences (p. 885)
  - [/programs-az/allied-health/radiologic-sciences/rad-vr\\_cert/](http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-vr_cert/) ([http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-vr\\_cert/](http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-vr_cert/))

- Computed Tomography Certificate (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-ct-cert/>)
- Magnetic Resonance Imaging Certificate (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-mri-cert/>)
- Mammography Certificate (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-mammography-cert/>)
- Radiation Therapy Certificate (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-therapy-cert/>)
- Radiologic Sciences (BS) (p. 892)
- Radiologic Sciences (BS) - Computed Tomography (CT) (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/radiologic-sciences-bs-ct/>)
- Radiologic Sciences (BS) - Magnetic Resonance Imaging (MRI) (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/radiologic-sciences-bs-mri/>)
- Radiologic Sciences (BS) - Mammography (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/radiologic-sciences-bs-mammography/>)
- Radiologic Sciences (BS) - Radiation Therapy (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/radiologic-sciences-bs-rad-therapy/>)
- Radiologic Sciences (BS) - Radiology Administration (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/radiologic-sciences-bs-rad-admin/>)
- Radiologic Sciences (BS) - Ultrasound (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/radiologic-sciences-bs-ultrasound/>)
- Radiologic Sciences (BS) - Vascular Radiography (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/radiologic-sciences-bs-vr/>)
- Radiology Administration (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-admin-cert/>)
- Ultrasound Certificate (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-ultrasound-cert/>)
- Vascular Radiography Certificate (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-vr-cert/>)
- Speech Pathology and Audiology (p. 898)
  - Audiology (AuD) (p. 905)
  - Communication Sciences and Disorders (PhD) (p. 906)
  - Speech and Hearing Sciences (BS SHS) (p. 907)
  - Speech and Hearing Sciences Minor (p. 911)
  - Speech-Language Pathology (MSSLP) (p. 912)

## Admission to Professional Programs

The Dean of the Pat Capps Covey College of Allied Health Professions oversees the establishment and monitoring of the admission standards for the professional clinical degree programs. Each student must meet the admission standards of the program for which they are applying. However, because of limited capacities, admission is on a competitive basis. Notice of actions on applications for admission is provided by the respective departments. Any other correspondence between students

and faculty members, department chairs, and/or administrative officers does not constitute nor does it imply admission to any specific program.

Application forms and other information may be obtained from each department's website or by contacting the department directly.

## College Requirements

### Undergraduate

#### Admission to Professional Programs

The Dean of the Pat Capps Covey College of Allied Health Professions oversees the establishment and monitoring of the admission standards for the professional clinical degree programs. Each student must meet the admission standards of the program for which they are applying. However, because of limited capacities, admission is on a competitive basis. Notice of actions on applications for admission is provided by the respective departments. Any other correspondence between students and faculty members, department chairs, and/or administrative officers does not constitute nor does it imply admission to any specific program.

Application forms and other information may be obtained from each department's website or by contacting the department directly.

#### Undergraduate Promotion Policies

For professional component undergraduate students in Radiologic Sciences, a minimum grade of "C" is required in each professional component course. This minimum grade of "C" reflects only the letter grade since many courses will require an 80% or 90% competency in order to be considered passing level. Students receiving less than a "C" in a professional course in Radiologic Sciences will not be allowed to proceed in the program (i.e. dismissed). Students not meeting this minimal requirement may apply for reinstatement by petitioning the respective departmental Student Evaluation and Promotions Committee. The student must petition in writing through the office of the Department Chair no later than five days prior to the beginning of the semester for which reinstatement is requested. If for any reason, a student must withdraw from the professional component of a program, readmission will require approval of the appropriate Department Chair and the Dean of the College. Undergraduate students majoring in Speech and Hearing Sciences must complete each SHS course with a grade of "C" or better.

#### Transient Course Work Credit

All students enrolled in the Pat Capps Covey College of Allied Health Professions must receive prior approval from their academic advisor, the Chair of the Department and the Dean before taking courses at another institution. Failure to obtain prior approval may result in loss of credit for the course work.

## Graduate

### Graduate Degree Programs

The Pat Capps Covey College of Allied Health Professions offers a Doctor of Philosophy (PhD) in Communication Sciences and Disorders; three clinical doctoral degrees, the Doctor of Audiology (AuD), the Doctor of Occupational Therapy (OTD), and the Doctor of Physical Therapy (DPT); and 4 Masters degrees, the Master of Science in Biomedical Sciences (MS BMD), Master of Health Sciences (MHS), Master of Science in Occupational Therapy (MS OT), and Master of Science in Speech-Language Pathology (MS SLP). These degrees are administered through the Department, the College, and the Graduate School. Program requirements for all graduate programs can be found under the respective departmental information.

### Admission to Graduate Programs

In addition to the minimum requirements set by the Graduate School, students applying to the graduate programs in the Pat Capps Covey College of Allied Health Professions must meet the application requirements of the individual program. Submission of the GRE score and minimum GRE score required to apply for admission to each graduate program is established by the specific program's admissions committee. Interested students should check the specific requirements for the specific program.

Admission to the graduate programs in the Pat Capps Covey College of Allied Health Professions is competitive. The programs are limited access and students are admitted based on their credentials. Students are encouraged to refer to the departmental website for admissions criteria and information.

### Documents Required for Admission

All documents required for admission review such as transcripts and test scores must be official. Transcripts must be transmitted from the home institution to the department. Scores from testing agencies must be sent directly to the University. These documents become the property of the University of South Alabama. Programs may use a Centralized Application System or other admissions process. Students may be asked to upload transcripts, test scores, and letters of recommendation to this system as well. If a student decides to apply to another program, a new application and processing fee must be submitted.

### Grade Standards

The grading system for graduate-level includes final grade options of "A", "B", "C", and "F". A minimum overall Grade Point Average (GPA) of 3.0 must be maintained throughout the program. In accordance with USA Graduate School grade standards, any term in which a graduate student drops below an overall 3.0 GPA, the student is placed on probationary status and has a period of two terms to attain an overall 3.0 GPA or be dismissed. In graduate programs within the PCCCAHP, a maximum of eight semester credits of courses with the grade of "C" may be counted toward a degree program. Additional details are provided in the Academic Dismissal section below. Students may, with approval of the departmental faculty, repeat a course in which a "C" has been earned. In graduate clinical programs, any grade lower than a "C" in any course will result in academic dismissal from the program. Academic programs may establish more stringent grade requirements for program retention.

#### Academic Dismissal

In accordance with USA Graduate School grade standards, any term in which a graduate student drops below an overall 3.0 GPA, the student is placed on probationary status and has a period of two terms to attain an overall 3.0 GPA or be dismissed.

Students in graduate clinical programs who receive more than 8 credit hours of "C" in courses will be dismissed from their program. The student may appeal the dismissal following the CAHP Appeals Process for Academic Dismissal. If the appeal is granted, a remediation plan, which may include additional and/or repeating coursework, may be implemented. In this case, the student's anticipated timeline for graduation may be extended. If the student is allowed to remain in the program by retaking a course or courses, any "C" grades in the repeated course(s) and future courses will also result in automatic dismissal from the program. Individual programs may have more stringent grade standards than the USA Graduate School and the Covey College of Allied Health Professions standards.

In graduate clinical programs, any grade lower than a "C" will result in academic dismissal. A student who is academically dismissed from a program will not be allowed to re-apply to the same program.

Students may appeal dismissal in accordance with the CAHP Appeals Process for Academic Dismissal, but reinstatement is not automatically granted and will be evaluated on a case-by-case basis.

### Academic Misconduct

A student dismissed from a graduate program as the result of an academic misconduct penalty will be automatically dismissed from the College and will not be eligible to apply for readmission.

### Final Grade Grievance Policy

A student may initiate an inquiry under procedures set forth in The Lowdown ([www.southalabama.edu/lowdown/](http://www.southalabama.edu/lowdown/) (<http://www.southalabama.edu/lowdown/>)).

### Appeal Procedure

Students may appeal academic dismissal, academic misconduct dismissal and final grade grievance decisions under specified circumstances. Information concerning this procedure may be obtained from the office of the Dean of the College.

### Transfer Credit

A maximum of twelve (12) semester hours of approved transfer credit from another institution is allowed for a master's degree, and a maximum of one half of the minimum hours required for the doctoral degree is normally allowed as transfer credit. Exceptions are allowed under unusual circumstances, but in no case will the number of transfer credit hours exceed two thirds of the minimum hours required for the degree. The decision to accept transfer credit resides with the program faculty and department chair. Programs in the College may accept transfer credit from a regionally accredited university and/or programs with specialized accreditation; however, programs may set a limit to the total transfer credit accepted and programs are not required to accept transfer credits. Prior approval of the Chair of the department and College Director of Graduate/Professional Studies is required. For specific information concerning Transfer Credit see appropriate section under Pat Capps Covey College of Allied Health Professions or contact the Chair of the specific program. Only courses with "A" or "B" grades are acceptable for transfer.

### Student Responsibility

While the Pat Capps Covey College of Allied Health Professions will endeavor to provide timely and accurate advisement, it is the responsibility of the student to know and satisfy the degree requirements of the academic program, to be aware of the University and College academic calendar and to understand and comply with University and College academic policies and procedures.

## Biomedical Sciences Department Information

(251) 445-9265

Department of Biomedical Sciences website  
<https://www.southalabama.edu/colleges/alliedhealth/biomedical>  
(<https://www.southalabama.edu/colleges/alliedhealth/biomedical/>)

## Biomedical Sciences Faculty

Title	Name
Chair	Nancy Rice
Professors	Rice
Professor Emeritus	Covey, Davis, Spector, Turens
Associate Professor Emeritus	Stanfield
Associate Professors	Mockett, Ravine, Shokolenko, Thulasiraman
Assistant Professors	Gorelik, Swiger
Instructors	Henry

The Department of Biomedical Sciences educates students for successful health-related careers by providing instruction in core scientific content, encouraging critical thinking and providing active collaboration; it engages in hypothesis-driven research, embraces global diversity, and guides students to become life-long learners dedicated to enriching the scientific and healthcare community. The curriculum offers students a strong general education in the humanities, arts, and social sciences, followed by in-depth study in one of three concentrations: Pre-Health Professions, Biotechnology, and Public and Global Health. The program offers an optional Honors Research Thesis (BMD 499) to qualified students consisting of a laboratory apprenticeship in biomedical research under the mentorship of a faculty scientist. Students interested in the Honors Research Thesis option should contact Dr. Robin Mockett for information.

### Concentrations

#### Pre-Health Professions (PHP)

The PHP concentration provides a strong foundation in basic human sciences, with corollary work in chemistry, math, and statistics. The PHP concentration prepares students to pursue post baccalaureate educational experiences in any biomedical discipline, including medicine, dentistry, pharmacy, optometry, as well as a Ph.D. degree in a variety of health and science related fields. In addition, this concentration offers prerequisite coursework for students wishing to pursue programs in the Pat Capps Covey College of Allied Health Professions.

#### Biotechnology (BT)

The BT concentration provides a strong foundation in basic human sciences, with an emphasis on fundamental concepts of genetics, molecular biology, and recombinant DNA technology. The core requirements have a strong applied skill-based laboratory component that further reinforces theoretical concepts. The BT concentration prepares students for entry level biotechnology jobs or post-graduate (M.S. and Ph.D.) research programs.

#### Public And Global Health (PGH)

The PGH concentration offers students interested in healthcare careers with a foundational knowledge of those challenges that limit the provision of health care globally. This concentration provides a strong foundation in basic human sciences, corollary work in chemistry, math, and statistics, and adds a multi-disciplinary exploration into key factors important to health and disease in resource limited areas. Students in the PGH concentration will gain knowledge of public health, global diseases, international healthcare systems, and introduction to epidemiology, as well as a basic knowledge of those social and environmental factors that impact health and disease in vulnerable populations. A BMD degree with a concentration in PGH prepares students for a tremendous diversity of graduate programs and careers in scientific research, public health,

global health education, and jobs in industry and government laboratories (CDC).

## Degrees, Programs, or Concentrations

- Biomedical Sciences (BS) (p. 840)
- Biomedical Sciences (MS) (p. 844)
- Biomedical Sciences Minor (p. 844)
- Public Health Minor (<http://bulletin.southalabama.edu/programs-az/allied-health/biomedical-sciences/public-health-minor/>)

## Courses

### Allied Health Profs (AHP)

#### AHP 101 Freshman Sem in Allied Health 2 cr

A course for first-time students that assists with maximizing the student's potential to achieve academic success and to adjust responsibly to the individual and interpersonal challenges presented by college life. Taught in small groups, the course provides an introduction to the nature of higher education with special emphasis on health-related disciplines. Appropriate reading and writing assignments will be required.

**Cross-Listed:** HSC 101

#### AHP 201 Service Learning in Allied Health Professions 1 cr

A course for students majoring in the College of Allied Health Professions that assists with maximizing students' potential to holistically embrace their majors and all that their future careers entail. The course introduces students to the concept of service learning and how to process experiences that may or may not immediately align with their own previous experiences. At the end of the course, the student will understand what it means to serve and how learning occurs in the most unlikely situations and environments.

#### AHP 390 Special Topics 1-9 cr

The purpose of this course for the undergraduate student is to develop an improved understanding of culture, to recognize any cultural practices that affect health care, and to incorporate this understanding into the provision of care. Culture will be examined through writing, cultural experiences, and through collaboration.

#### AHP 401 Seminar in HP 3 cr

This course is designed to provide students with an overview of different health professions and their scope of practice and also to provide information about health administration.

#### AHP 510 IPE Autism Spectrum Disorders 1 cr

This foundational course is designed to prepare graduate students in OT, PT, SLP, MD and ED to provide high-quality services to individuals with autism spectrum disorder and other developmental disabilities. The emphasis will be on interprofessional education using team-based instruction to support effective interprofessional practice in both educational and health care settings. **ADDITIONAL RESTRICTION:** Students can only be enrolled following successful application and admission. Contact the course instructor for information on application.

#### AHP 550 IPE for Inclusive Pract in AHP 1-3 cr

This course will focus on advancing the ideals of diversity, equity, and inclusion in future allied health providers to develop inclusive practices, and will support the development of interprofessional collaborative practice skills. The course will provide students with opportunities to engage with members of various healthcare-focused graduate programs through both interprofessional education modules and interprofessional clinical laboratory experiences.

**Cross-Listed:** AHP 650

#### AHP 590 Special Topics 1-9 cr

Selected topics in Health Sciences. Requires special permission.

#### AHP 650 IPE for Inclusive Pract in AHP 1-3 cr

This course will focus on advancing the ideals of diversity, equity, and inclusion in future allied health providers to develop inclusive practices, and will support the development of interprofessional collaborative practice skills. The course will provide students with opportunities to engage with members of various healthcare-focused graduate programs through both interprofessional education modules and interprofessional clinical laboratory experiences.

**Cross-Listed:** AHP 550

### Biomedical Sciences (BMD)

#### BMD 101 Orientation to BMD 1 cr

An introduction to Biomedical Sciences that will establish an early and continuing working relationship between students and faculty, increase awareness of sciences and scientists and familiarize students with functions, policies and services of the University, College and Department. Taught Fall Semester.

#### BMD 102 Lab Skills Bootcamp 0 cr

Lab Skills Bootcamp is an intense one-week training program to provide first-time experience and practice in basic biomedical laboratory techniques for students who have little to no research or laboratory background. Skills include basic biosafety, calculations, preparing solutions, data interpretation, micropipetting, DNA isolation, and PCR. A minimum cumulative GPA of 3.0 is required.

#### BMD 110 Introduction to A & P I 4 cr

An introduction to the structure and function of the human body with an emphasis on anatomy. This course surveys anatomical terminology, basic chemistry, cell structure/function, tissues, skin skeleton, joints, muscles, and central nervous system.

#### BMD 111 Introduction to A & P II 4 cr

Topics include, peripheral/autonomic nervous system, endocrinology, cardiovascular system, blood, respiration, digestion, metabolism/nutrition, urinary system, and reproduction.

#### BMD 200 Career Planning 1 cr

Clinical Observations (Medicine, Dentistry, Optometry and Veterinary Medicine). This course gives the student clinical exposure to various health-care services. It is designed to help students make informed decisions when selecting a career in the health professions. A written report on the clinical experience or scenario dealing with "medical ethics" is required. May be repeated for a maximum of six hours' credit. Permission of the Director of Health Pre-Professional Program is required.

**Prerequisite:** CH 131 Minimum Grade of D and BLY 121 Minimum Grade of D

#### BMD 201 Seminars in Biomedical Science 1 cr

This course introduces students to contemporary biomedical research and career possibilities in the biomedical sciences. Students will use the resources of the Biomedical Library to perform a literature search.

**BMD 210 Microbiology in Healthcare 3 cr**

This course introduces concepts of human host-infectious microbe interactions that result in disease. Microorganisms examined include viruses, parasites, fungi, mycobacteria, and bacteria. Included topics are genetics, taxonomy, microbial metabolism, virulence factors, host defense/microbe evasion mechanisms, epidemiology, antimicrobial chemotherapy/resistance, merging/reemerging infectious diseases, and diagnostic criteria. Emphasis will be placed on the microbial infections of different body systems.

**Prerequisite:** BLY 101 Minimum Grade of C or BLY 121 Minimum Grade of C or CH 101 Minimum Grade of C or CH 131 Minimum Grade of C

**BMD 210L Microbiology in Healthcare Lab 1 cr**

Laboratory experience includes introduction to fundamental microbial techniques, including differential staining, biochemical identification techniques, and antimicrobial susceptibility testing. Patient case studies will be used to supplement learning experience.

**Prerequisite:** (BLY 101 Minimum Grade of C or BLY 121 Minimum Grade of C or CH 101 Minimum Grade of C or CH 131 Minimum Grade of C)

**BMD 212 Introduction to Food Science 3 cr**

This course is an introduction to digestion, absorption, transportation, and utilization of nutrients. It will discuss the integration of basic chemical, physical, microbiological and nutritional properties and components of food and their relationship to a healthy lifestyle. Lab exercises are completed in which students prepare foods and observe the chemical and physical properties that affect the product.

**Corequisite:** BMD 212L

**BMD 212L Intro to Food Science Lab 1 cr**

Laboratory experience includes an introduction to digestion, absorption, transportation, and utilization of nutrients. Lab exercises are completed in which students prepare foods and observe the chemical and physical properties that affect the product.

**Corequisite:** BMD 212

**BMD 251 Human Anatomy & Physiology I 4 cr**

This is the first of a two-course sequence that covers basic human anatomy and physiology, including the study of the structure and function of various body systems. Included is a study of basic principles of organism homeostasis, biochemical makeup, a study of cells and tissue, cellular metabolism, joints, the integumentary, and skeletal systems, muscular and nervous systems, and the senses. Laboratory experiences are provided through demonstration and interactive (virtual) laboratories.

**Prerequisite:** BLY 101 Minimum Grade of C or BLY 121 Minimum Grade of C or CH 100 Minimum Grade of C or CH 131 Minimum Grade of C

**Cross-Listed:** BMD 114

**BMD 252 Human Anatomy & Physiology II 4 cr**

A continuation of BMD 251. Topics include nervous, cardiovascular, lymphatic, immune, respiratory, digestive, and urinary systems. Additional topics may include blood, metabolism, immunology and reproduction. Laboratory experience is provided through demonstration and interactive (virtual) laboratories.

**Prerequisite:** BMD 251 Minimum Grade of C

**Cross-Listed:** BMD 115

**BMD 290 Sp Top - H - 1-3 cr**

Topics of current health interest.

**BMD 311 Human Anatomy 3 cr**

A course in human gross and microscopic anatomy in a systematic approach, with an emphasis on structure-function relationships at the cell, tissue and organ level. The topics include anatomy of integumentary, musculoskeletal, nervous, cardio-vascular, lymphatic, respiratory, digestive, urinary and reproductive systems. This course is lecture-based with no lab component.

**Prerequisite:** BLY 121 Minimum Grade of D

**BMD 321 Biochemistry I-Molecular Biol 3 cr**

The course covers different aspects of molecular biology including protein structure and function, carbohydrate, lipids, DNA replication, transcription and translation and applications to medical problems (i.e., forensic medicine, diagnosis of genetic diseases, etc).

**Prerequisite:** CH 201 Minimum Grade of D

**BMD 322 Biochemistry II-Metabolism 3 cr**

The course discusses the chemical basis of metabolism including the conversion of nutrients from digestion to either molecules of biological relevance or to energy. Genetic diseases affecting these pathways are described and discussed.

**Prerequisite:** (BMD 321 Minimum Grade of C or BLY 440 Minimum Grade of C or CH 440 Minimum Grade of C) and CH 201 Minimum Grade of D

**BMD 323 Biochemistry Laboratory 2 cr**

This laboratory is designed to provide hands-on experience on several biochemical techniques including cell fractionation, chromatography, DNA isolation, electrophoresis, determination of enzyme activity, etc.

**Prerequisite:** BMD 321 Minimum Grade of C

**BMD 331 Biotechnology Skills I 4 cr**

This course is designed to train students in fundamental biotechnology laboratory skills and applying the scientific method to create, test, and interpret new hypotheses. Students will collaborate with peers and faculty to generate publishable data, and present their findings in both written and oral form.

**Prerequisite:** BMD 323 Minimum Grade of C

**BMD 334 Human Physiology I 3 cr**

The objectives of this course are to study human physiology with emphasis on cellular physiology (cell structure, metabolism, and transport) and the endocrine and nervous systems and skeletal muscle. This course is the first of a 2 course sequence.

**Prerequisite:** BLY 121 Minimum Grade of C and CH 131 Minimum Grade of C and CH 132 Minimum Grade of C

**BMD 335 Human Physiology II 3 cr**

Study of human physiology with emphasis on the basic principles of organ system physiology. The course emphasizes muscle, cardiovascular, renal, respiratory, digestive, and reproductive physiology and an introduction to immunology. This is the second course in a 2 course sequence.

**Prerequisite:** BMD 334 Minimum Grade of C

**BMD 336 Physiology Lab - W 2 cr**

This laboratory is designed to provide students with hands-on laboratory experience in physiology, with emphasis on the musculoskeletal, cardiovascular, respiratory and nervous systems. Limited to BMD majors unless by special permission. Special fee.

**Prerequisite:** (BMD 334 Minimum Grade of C and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C))

**Corequisite:** BMD 335

**BMD 350 Human Genetics and Genomics 3 cr**

This course presents the principles and current information about classical, molecular, and population genetics. It gives an understanding of DNA, gene, gene function and regulation, genome, and the mechanisms of Mendelian and non-Mendelian inheritance. The focus is on human genetics by understanding the clinical applications of genetics and genomics in human health and disease, with special emphasis on chromosomal abnormalities, gene mutations, cancer genetics, and gene therapy.

**Prerequisite:** BMD 321 Minimum Grade of C or BLY 301 Minimum Grade of C or BLY 440 Minimum Grade of C

**BMD 351 Global Health-W 3 cr**

This course introduces students to the basic principles of global public health that are used to improve population health at all levels. Students will get an overview of the determinants of health and how health status is measured. Students will also review the burden of disease, who is most affected by different disease burdens, risk factors, and key measures to address the burden of disease in cost-effective, doable, sustainable, and fair ways. Special attention will be paid throughout the course to health systems issues. The course will cover key concepts and frameworks but be practical in orientation. The course will be global in coverage but with a focus on low- and middle-income countries, the health of the poor and health disparities. Particular attention will be paid throughout the course to the linkages between health and development.

**BMD 390 Sp Top - 1-6 cr**

Topics of current health interest.

**BMD 401 Immunology 3 cr**

This course presents the basic concepts of immunochemistry, immunobiology and host immune responses to disease. Antigens, antibodies, cells and structures of the immune system will be discussed as well as their roles in the processes of immunity, allergies, transplantation, and diseases.

**Prerequisite:** BMD 321 Minimum Grade of C

**BMD 402 Medical Microbiology 4 cr**

This course presents the concepts of pathogenicity and virulence as they relate to disease causing bacteria, mycobacteria, fungi, protozoans, and viruses. Mechanisms of pathogenicity, host interactions, epidemiology and diagnosis will be emphasized. General concepts of microbial physiology, taxonomy, genetics, host immune response, and antimicrobial therapy are also presented. The laboratory portion of the course will provide hands-on experience in the handling and identification of each microbe class. Special fee.

**Prerequisite:** (BMD 321 (may be taken concurrently) Minimum Grade of C or BLY 440 Minimum Grade of C or CH 440 Minimum Grade of C)

**BMD 403 Molecular Basis of Cancer 3 cr**

This course will focus on the biological and molecular features of oncogenesis and clinical cancer, with specific attention given to the molecular events underlying carcinogenesis, metastasis, and angiogenesis. Recent therapeutic advances and their implications for the field will be explored through reading of current scientific literature. Case study learning is integrated into the course to help students understand the societal implications of cancer. Credit cannot be received for BMD 403 and BMD 503.

**Prerequisite:** BMD 321 Minimum Grade of C or BLY 301 Minimum Grade of C or BLY 302 Minimum Grade of C

**Cross-Listed:** BMD 503

**BMD 404 Neurobiology of Trauma and Recovery 3 cr**

The objective of this course is to take the student to a greater level of understanding of the neurophysiology of the mind-body interaction and how, after trauma, this same mind-body interaction holds the potential for recovery, through a process of neurobiological restoration.

**Prerequisite:** (BLY 101 Minimum Grade of D and BLY 102 Minimum Grade of D) or (BLY 121 Minimum Grade of D and BLY 122 Minimum Grade of D)

**BMD 410 Pathophysiology 3 cr**

A systematic study of disease processes involving relationships between pathophysiological changes and clinical manifestations.

**Prerequisite:** BMD 321 Minimum Grade of C

**BMD 411 Women's Health 3 cr**

This course is an introduction to the medical, research, and public health issues surrounding women's health. Female anatomy and physiology, pregnancy and childbirth, and diseases disproportionately affecting women will be presented. Historical and current social and economic perspectives on women's roles in healthcare, science, and society will be discussed.

**Prerequisite:** BLY 121 Minimum Grade of D

**BMD 415 Microscopic Anatomy 4 cr**

A course in (human) microscopic anatomy with laboratory emphasizing recognition and utilizing traditional histologic techniques to process tissue for microscopic examination. Taught Fall Semester.

**Prerequisite:** BMD 311 Minimum Grade of D

**BMD 420 Pharmacology 3 cr**

An introduction to pharmacological concepts and effects and uses of major drug classes. Drug design, pharmacodynamics (receptors, mechanisms, dose-response) and pharmacokinetics (time action) are discussed in general (principles), and in particular, for selected classes of drugs. Credit cannot be received for BMD 420 and BMD 520.

**Prerequisite:** (BMD 321 Minimum Grade of C or BLY 440 Minimum Grade of C or CH 440 Minimum Grade of C)

**Cross-Listed:** BMD 520

**BMD 430 Neurosciences 4 cr**

A study of neuroscience which integrates neurochemistry, neuroanatomy, and neurophysiology, emphasizing cellular neurobiology, neural systems, and the neurobiology of behavior. Course includes laboratory experience. Credit cannot be received for BMD 430 and BMD 530.

**Prerequisite:** BMD 311 Minimum Grade of C and BMD 334 Minimum Grade of C

**Cross-Listed:** BMD 530

**BMD 434 Human Physiology 6 cr**

A study of human physiology from cells to systems. A strong foundation in biology and general chemistry is required. Special permission from instructor required. Prerequisites: BLY 121 and 122, CH 131 and 132.

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (CH 115 Minimum Grade of D or CH 131 Minimum Grade of D) and (CH 116 Minimum Grade of D or CH 132 Minimum Grade of D)

**Cross-Listed:** BMD 534

**BMD 441 Epidemiology 3 cr**

This course will cover a wide variety of topics along with providing students in-field examples of the use of epidemiology and statistics for public and global health. The goal is to become familiar with basic statistical concepts, epidemiologic terminology, outcome measures, and study designs; to appreciate application of epidemiology to subfields (e.g., infectious diseases, reproductive health, genetics); and to apply epidemiologic methods to current public health issues.

**Prerequisite:** (ST 210 Minimum Grade of D or ST 305 Minimum Grade of D)

**BMD 450 Introduction to Research 2 cr**

The purpose of this course is to relay the relevance of biomedical research to all medical practices. First, students will learn how to systematically read, analyze, and present primary biomedical science literature. Second, students will learn how to design a new research project. Written abstracts and oral classroom presentations are required.

**Prerequisite:** BMD 321 Minimum Grade of C

**BMD 451 Biotechnology Skills II 4 cr**

Students will learn the biological principles of genome editing and its applications in biotechnology. Emphasis will be on CRISPR/Cas technology in prokaryotic and eukaryotic biological systems. Students will perform CRISPR/Cas9 gene editing and collaborate with peers and faculty to generate a knock-out cell line.

**Prerequisite:** (BMD 331 Minimum Grade of C)

**BMD 490 Special Topics 1-6 cr****BMD 493 Ethical Issues in Health - W 3 cr**

This course will provide an open forum for discussion of current controversial issues in biomedical sciences. The topics will include research integrity, discussions on the impact of medical advances in society as well as issues of historical relevance.

**Prerequisite:** (BLY 121 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**BMD 494 Directed Research Studies 1-3 cr**

The student will perform a biomedical research project under the direction of a faculty mentor. This will include literature searches and presenting the project in a written format. Instructor Permission Required. Credit cannot be received for BMD 494 and BMD 594.

**Prerequisite:** BMD 321 Minimum Grade of C

**Cross-Listed:** BMD 594

**BMD 499 Honors Research Thesis - W - H 1-6 cr**

Literature survey and laboratory research experience under the direction of the faculty. Instructor permission required.

**Prerequisite:** BMD 311 Minimum Grade of C and BMD 322 Minimum Grade of C and BMD 323 Minimum Grade of C and BMD 335 Minimum Grade of C and BMD 336 Minimum Grade of C

**BMD 500 Graduate Seminar 2 cr**

Professional growth through in-depth experiences in the presentation of problems and formal papers, with emphasis on guided discussions and research criticism. A different topic of current health interest will be selected every semester for in-depth coverage and discussion. Various aspects of the selected topic will be presented by both faculty and students. Each presentation will focus on a single paper from the current biomedical literature.

**BMD 501 Immunology 3 cr**

This course presents the basic concepts of immunochemistry, immunobiology, and host immune responses to disease, antigens, antibodies, cells and structures of the immune system will be discussed as well as their roles in the process of immunity, allergies, transplantation and diseases. A term paper is required.

**BMD 502 Medical Microbiology 4 cr**

This course presents the concepts of pathogenicity and virulence as they relate to disease causing bacteria, mycobacteria, fungi, protozoans, and viruses. Mechanisms of pathogenicity, host interactions, epidemiology and diagnosis will be emphasized. General concepts of microbial physiology, taxonomy, genetics, host immune response, and antimicrobial therapy are also presented. The laboratory portion of the course will provide hands-on experience in the handling and identification of each microbe class. A term paper is required. Credit cannot be received for both BMD402 and BMD502

**Cross-Listed:** BMD 402

**BMD 503 Molecular Basis of Cancer 3 cr**

This course will be a discussion of the biological and molecular features of oncogenesis and clinical cancer focusing on the specific molecular events underlying carcinogenesis, metastasis, and angiogenesis. Case study learning will be integrated into the course to engage students in understanding the societal implications of cancer. A term paper is required. Credit cannot be received for both BMD 403 and BMD 503.

**Cross-Listed:** BMD 403

**BMD 507 Advanced Physiology 4 cr**

The foundation of the biomedical sciences in physiology - the study of the function of the human body. This course will cover advanced concepts in body function from the molecular, cellular, and organ levels. In addition, there will be a weekly focus on current literature reports that coordinate with recent lecture topics.

**BMD 508 Human Gross Anatomy 4 cr**

This is a course in gross anatomy of human body systems utilizing human cadavers and prosected specimens. Emphasis is placed on the relationships between structure and function. The lecture component of the course will be presented through live in person lectures and recorded video lectures on selected topics. The laboratory component will consist of dissection of human cadaver. Prosected material, skeleton models and diagnostic imaging will be introduced for each area of dissection.

**BMD 511 Women's Health 3 cr**

This course is an introduction to the medical, research, and public health issues surrounding women's health. Female anatomy and physiology, pregnancy and childbirth, and diseases disproportionately affecting women will be presented. Historical and current social and economic perspectives on women's roles in healthcare, science, and society will be discussed.

**Prerequisite:** BLY 121 Minimum Grade of D

**BMD 520 Pharmacology 3 cr**

This course will help students master the practical competencies of basic pharmacology. It will focus on the pharmacology of drugs including their classification and origin, pharmacokinetics, mechanism of action, indications, contraindications, adverse and side effects, drug interactions, and use in special patient populations. You will learn how drugs affect different biological systems, how the body responds to those drugs, and why one drug does not fit all. It is the responsibility of the student to go over the biochemistry and physiology concepts learned in previous courses to better understand this course.

**Cross-Listed:** BMD 420

**BMD 530 Neurosciences 4 cr**

A study of neuroscience which integrates neurochemistry, neuroanatomy, and neurophysiology, emphasizing cellular neurobiology, neural systems, and the neurobiology of behavior. Course includes laboratory experience. A term paper is required. Credit cannot be received for BMD 430 and BMD 530.

**Cross-Listed:** BMD 430

**BMD 534 Human Physiology 6 cr**

A study of human physiology from cells to systems. A strong foundation in cell biology and general chemistry is required. This course is restricted to pharmacy students or special permission from the instructor.

Prerequisites: BLY 121, BLY 122, CH 131, CH 132.

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (CH 115 Minimum Grade of D or CH 131 Minimum Grade of D) and (CH 116 Minimum Grade of D or CH 132 Minimum Grade of D)

**Corequisite:** BMD 536

**BMD 536 Physiology Lab 1 cr**

This laboratory is designed to provide hands-on laboratory experiments to accompany the lecture material in BMD 534. This course is restricted to pharmacy students or special permission from the instructor.

Corequisite: BMD 534.

**Corequisite:** BMD 534

**BMD 590 Special Topics 1-3 cr**

This course provides in-depth study on current topics in biomedical sciences. Permission of Graduate Coordinator or Department Chair required.

**Cross-Listed:** BMD 490

**BMD 594 Directed Studies 1-3 cr**

With the guidance of a faculty mentor, students will complete an independent research project (quantitative or qualitative) that will include a complete literature search, hypothesis development and testing through either laboratory experiments or meta-analysis, and final written report and analysis. Approval by the mentor and/or Graduate Director is required.

**Cross-Listed:** BMD 494

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
GORELIK, GABRIELA (ggorelik@southalabama.edu)	Biomedical Sciences	Assistant Professor	BS, Univ of Buenos Aires PHD, Univ of Buenos Aires
HENRY, ALISON K'ANN (ahenry@southalabama.edu)	Biomedical Sciences	Instructor	BS, Texas A & M University MS, Virginia Polytechnic Inst and EDD, University of South Alabama
MOCKETT, ROBIN JON (mockett@southalabama.edu)	Biomedical Sciences	Associate Professor	BS, Queens University PHD, Southern Methodist University
RAVINE, TERRENCE J. (travine@southalabama.edu)	Biomedical Sciences	Associate Professor	BSMT, University of Akron MS, University of Akron PHD, Virginia Commonwealth U
RENEMA, PHOIBE (prenema@southalabama.edu)	Biomedical Sciences	Assistant Professor	BS, Pensacola Christian College PHD, University of South Alabama
RICE, NANCY ANN (nrice@southalabama.edu)	Biomedical Sciences	Professor	BS, Western Kentucky University PHD, Univ of Tenn Hlth Sci Center
SHOKOLENKO, INNA NIKOLAEVNA (ishokolenko@southalabama.edu)	Biomedical Sciences	Associate Professor	MS, Kiev State Linguistic Univ PHD, Univ of South Alabama - COM
SWIGER, BRAD M. (bswiger@southalabama.edu)	Biomedical Sciences	Assistant Professor	BS, University of South Alabama PHD, University of South Alabama
THULASIRAMAN, PADMAMALINI (pthulasiraman@southalabama.edu)	Biomedical Sciences	Associate Professor	BS, McGill University Quebec MS, University of Oklahoma-Norman  PHD, University of Illinois-Urbana
URANKAR, SARAH ELIZABETH (sarahurankar@southalabama.edu)	Biomedical Sciences	Instructor	BS, East Carolina University MS, East Carolina University

## Biomedical Sciences (BS)

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 841)		56-58
<b>Major Requirements</b>		
<i>Biomedical Sciences Core</i>		

A. Complete the following:

BMD 201	Seminars in Biomedical Science	1
BMD 321	Biochemistry I-Molecular Biol	3
BMD 322	Biochemistry II-Metabolism	3
BMD 323	Biochemistry Laboratory	2

B. Complete the following:<sup>1</sup>

BMD 251	Human Anatomy & Physiology I	4-6
or BMD 311 & BMD 334	Human Anatomy and Human Physiology I	

C. Complete the following:<sup>2</sup>

BMD 210 & 210L	Microbiology in Healthcare and Microbiology in Healthcare Lab	4
or BMD 402	Medical Microbiology	

*Electives*<sup>3</sup>

## A. Select 16-17 hours from the following: 16-17

BMD 210	Microbiology in Healthcare	
BMD 210L	Microbiology in Healthcare Lab	
BMD 212	Introduction to Food Science	
BMD 212L	Intro to Food Science Lab	
BMD 251	Human Anatomy & Physiology I	
BMD 252	Human Anatomy & Physiology II	
BMD 290	Sp Top - H -	
BMD 311	Human Anatomy	
BMD 331	Biotechnology Skills I	
BMD 334	Human Physiology I	
BMD 335	Human Physiology II	
BMD 336	Physiology Lab - W	
BMD 350	Human Genetics and Genomics	
BMD 351	Global Health-W	
BMD 390	Sp Top -	
BMD 401	Immunology	
BMD 402	Medical Microbiology	
BMD 403	Molecular Basis of Cancer	
BMD 404	Neurobiology of Trauma and Recovery	
BMD 410	Pathophysiology	
BMD 411	Women's Health	
BMD 420	Pharmacology	
BMD 430	Neurosciences	
BMD 441	Epidemiology	
BMD 450	Introduction to Research	
BMD 451	Biotechnology Skills II	
BMD 490	Special Topics	
BMD 493	Ethical Issues in Health - W	
BMD 494	Directed Research Studies	
BMD 499	Honors Research Thesis - W - H	
BLY 301	Cell Biology	
BLY 411	Developmental Biology	
BLY 459	General Parasitology	
EMS 210	Medical Terminology	

*Concentration*

Complete one of the following options: 14-15

## A. Pre-Health Professions (PHP) Option

BMD 335	Human Physiology II	
BMD 336	Physiology Lab - W	
BMD 350	Human Genetics and Genomics	
BMD 401	Immunology	

PHP Elective: Select one of the following:

BMD 403	Molecular Basis of Cancer	
or BMD 410	Pathophysiology	
or BMD 420	Pharmacology	
or BMD 430	Neurosciences	

## B. Public and Global Health (PGH) Option

IS 100	Global Issues	
KIN 263	Intro to Nutrition	
BMD 351	Global Health-W	
BMD 441	Epidemiology	
HS 475	Public Health	

## C. Biotechnology (BT) Option

BMD 331	Biotechnology Skills I	
BMD 350	Human Genetics and Genomics	
BMD 451	Biotechnology Skills II	
BLY 445	Computational Genetics-W	

**Minor Requirements**

A minor is not required for this degree program 0

**Total Hours** 103-109**Footnote**<sup>1</sup> Students enrolled in the Pre-Health Professions (PHP) concentration are required to complete BMD 311 and BMD 334.<sup>2</sup> Students enrolled in the Pre-Health Professions (PHP) concentration are required to complete BMD 402.<sup>3</sup> Elective hours must be unduplicated.**General Education Requirements**

Code	Title	Hours
<b>Area I - Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II - Humanities &amp; Fine Arts</b>		
A. Complete the following:		
CA 110	Public Speaking	3
B. Select one of the following:		
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	
C. Select one of the following: <sup>1</sup>		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
D. Select one of the following:		
AFR 101	Intro to African Amer Studies	3
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	

EH 235	World Lit before 1650		
EH 236	World Lit after 1650		
LG 101	Introductory Latin I		
LG 102	Introductory Latin II		
LG 111	Introductory French I		
LG 112	Introductory French II		
LG 121	Introductory Chinese I		
LG 122	Introductory Chinese II		
LG 131	Introductory Spanish I		
LG 132	Introductory Spanish II		
LG 141	Intro Classical Greek I		
LG 142	Intro Classical Greek II		
LG 151	Introductory German I		
LG 152	Introductory German II		
LG 153	Accelerated Intro German		
LG 171	Introductory Russian I		
LG 172	Introductory Russian II		
LG 173	Accelerated Intro Russian		
LG 201	Intermediate Latin I		
LG 202	Intermediate Latin II		
LG 211	Intermediate French I		
LG 212	Intermediate French II		
LG 213	Accelerated Inter French - H		
LG 221	Intermediate Chinese I		
LG 222	Intermediate Chinese II		
LG 231	Intermediate Spanish I		
LG 232	Intermediate Spanish II		
LG 234	Inter Spanish Accel -H		
LG 241	Inter Classical Greek I		
LG 242	Inter Classical Greek II		
LG 251	Intermediate German I		
LG 252	Intermediate German II		
LG 271	Intermediate Russian I		
LG 272	Intermediate Russian II		
LG 273	Intensive Second Year Russian		
LGS 101	Introductory Japanese I		
LGS 102	Introductory Japanese II		
LGS 106	Introductory Arabic I		
LGS 107	Introductory Arabic II		
LGS 110	Intro American Sign Language I		
LGS 111	Intro American Sign Lang II		
LGS 171	Introductory Korean I		
LGS 172	Introductory Korean II		
LGS 201	Intermediate Japanese I		
LGS 202	Intermediate Japanese II		
LGS 206	Intermediate Arabic I		
LGS 207	Intermediate Arabic II		
LGS 210	Intermediate ASL I		
LGS 211	Intermediate ASL II		
PHL 110	Introduction to Philosophy		
PHL 120	Critical Thinking		
PHL 121	Introduction to Logic		
PHL 131	Introduction to Ethics		
PHL 220	Medical Reasoning		
PHL 231	Social Ethics		
PHL 240	Western Philosophy: Classical		
REL 100	Intro to the Study of Religion		
REL 200	Old Testament/Hebrew Bible		
REL 201	Survey of the New Testament		
<b>Area III – Natural Sciences &amp; Mathematics</b>			
A. Select one of the following:			3-4
MA 113	Precalculus Trigonometry		
MA 115	Precal Algebra-Trigonometry		
MA 120	Calculus and Its Applications		
MA 125	Calculus I		
MA 126	Calculus II		
MA 227	Calculus III		
MA 237	Linear Algebra I		
MA 238	Differential Equations I		
B. Complete the following:			
CH 131	General Chemistry I		4
& 131L	and General Chemistry I Lab		
CH 132	General Chemistry II		4
& 132L	and General Chemistry II Lab		
Area IV – History, Social & Behavioral Sciences <sup>1</sup>			
A. Select one of the following:			3
HY 101	HY of Western Civilization I		
HY 102	HY of Western Civilization II		
HY 121	World Civilization I		
HY 122	World Civilization II		
HY 135	US History to 1877		
HY 136	US History since 1877		
B. Select three of the following:			9
AN 100	Intro to Cultural Anthropology		
AN 101	Intro Archaeology-Bio Anthro		
CA 100	Intro to Communication		
CA 211	Interpersonal Comm		
ECO 215	Prin of Microeconomics		
ECO 216	Prin of Macroeconomics		
GEO 114	People, Places, Environment		
GEO 115	World Regional Geography		
GS 101	Intro to Gender Studies		
HY 101	HY of Western Civilization I		
HY 102	HY of Western Civilization II		
HY 135	US History to 1877		
HY 136	US History since 1877		
IS 100	Global Issues		
IST 201	Seasons of Life		
NAS 101	Intro Native American Studies		
PSC 130	Intro to US Government		
PSY 120	Introduction to Psychology (see footnote table below (p. 843)) <sup>2</sup>		
PSY 250	Life Span Development (see footnote table below (p. 843)) <sup>2</sup>		

SY 109 Introductory Sociology (see footnote table below (p. 843))<sup>2</sup>

SY 112 Social Problems (see footnote table below (p. 843))<sup>2</sup>

### Area V - Supporting Required Courses

#### A. Complete the following:

BLY 121 General Biology I 4  
& 121L and General Biology I Lab

CH 201 Organic Chemistry I 4  
& 201L and Organic Chemistry I Lab

#### B. Select one of the following: 3

ST 210 Stat Reason and Application

ST 305 Applied Stat Health Sciences

#### C. Complete the following:<sup>3</sup>

AN 121 Biological Anthropology 4-5  
& 121L and Biological Anthropology Lab

or PH 114 Physics with Algebra-Trig I  
& 114L and Alg-Trig Based Physics I Lab

**Total Hours 53-55**

## Footnote

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102, HY 121 & HY 122, or HY 135 & HY 136).

<sup>2</sup> Recommended

<sup>3</sup> Only students in the Public and Global Health (PGH) Concentration should enroll in AN 121 / AN 121L.

### Notes:

- A maximum of 3 hours of BMD 450, BMD 494 or BMD 499 can count toward major electives.
- Students interested in Health Professions (e.g., dental, medicine, pharmacy, etc.) and/or Ph.D. programs in Basic Medical Sciences may also need to enroll in General Biology II, Physics II, Organic Chemistry II and/or Calculus.
- All undergraduates must complete two designated writing credit (W) courses, at least one of which must be in the student's major.
- Additional classes may be needed to reach the 120 total credit hours required for graduation.
- General electives can be chosen from any courses to reach the 120 total credits required for graduation.

## Graduation Plan (Pre-Health Professions concentration)

(120 Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I	3
BLY 121 & 121L	General Biology I and General Biology I Lab	4
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	4

PSY 120 Introduction to Psychology (or Area IV B. Social Science Elective) 3

BMD 201 Seminars in Biomedical Science 1

**Hours 15**

### Spring

EH 102 English Composition II 3

BLY 122 & 122L General Biology II and General Biology II Laboratory<sup>2</sup> 4

CH 132 & 132L General Chemistry II and General Chemistry II Lab 4

Math Area III, A<sup>1</sup> 3-4

### Milestone Notes

MA 113 or MA 115 Precalculus Trigonometry or Precal Algebra-Trigonometry

**Hours 14-15**

### Second Year

#### Fall

CH 201 & 201L Organic Chemistry I and Organic Chemistry I Lab 4

PH 114 & 114L Physics with Algebra-Trig I or Calculus-Based Physics I and Calculus-Based Physics I Lab  
or PH 201 and PH 201L

Fine Arts Elective Area II, B<sup>1</sup> 3

History Area IV, A<sup>1</sup> 3

### Milestone Notes

CH 132 & 132L General Chemistry II and General Chemistry II Lab (with a grade of C or better)

BLY 121 & 121L General Biology I and General Biology I Lab (with a grade of C or better)

**Hours 14-15**

### Spring

CH 202 & 202L Organic Chemistry II and Organic Chemistry II Lab<sup>2</sup> 4

PH 115 & 115L Physics with Algebra -Trig II<sup>2</sup> or Calculus-Based Physics II and Calculus-Based Physics II Lab  
or PH 202 and PH 202L

ST 210 or ST 305 Stat Reason and Application or Applied Stat Health Sciences 3

CA 110 Public Speaking 3

### Milestone Notes

CH 132 & 132L General Chemistry II and General Chemistry II Lab (with a grade of C or better)

**Hours 14-15**

### Third Year

#### Fall

BMD 311 Human Anatomy 3

BMD 321 Biochemistry I-Molecular Biol 3

BMD 334 Human Physiology I 3

History Area IV, B (History #2 for Sequence or Social Science Elective)<sup>1</sup> 3

Literature Area II, C<sup>1</sup> 3

### Milestone Notes

BLY 122 & 122L General Biology II and General Biology II Laboratory (with a grade of C or better)

CH 201 & 201L Organic Chemistry I and Organic Chemistry I Lab (with a grade of C or better)

PH 114 Physics with Algebra-Trig I (with a grade of C or better)

**Hours 15**

### Spring

BMD 322 Biochemistry II-Metabolism 3

BMD 323 Biochemistry Laboratory 2

BMD 335	Human Physiology II	3
BMD 336	Physiology Lab - W	2
BMD Elective	Major Elective <sup>3</sup>	3
Literature	Area II, D. (Literature #2 for Sequence or Humanities Elective) <sup>1</sup>	3
<b>Hours</b>		<b>16</b>

**Fourth Year****Fall**

BMD 401	Immunology	3
BMD 403 or BMD 430	Molecular Basis of Cancer <sup>4</sup> or Neurosciences	3-4
BMD Electives	Major Electives <sup>3</sup>	7
Social Science	Area IV, B. Social Science Elective <sup>1</sup>	3

**Milestone Notes**

BMD 311	Human Anatomy (with a grade of C or better)	
<b>Hours</b>		<b>16-17</b>

**Spring**

BMD 350	Human Genetics and Genomics	3
BMD 402	Medical Microbiology	4
BMD 493 or BMD 351	Ethical Issues in Health - W or Global Health-W	3
BMD Elective	Major Elective <sup>3</sup>	3
General Elective	Elective <sup>1</sup>	3
<b>Hours</b>		<b>16</b>

**Total Hours** 120-124

<sup>1</sup> See General Education Requirements

<sup>2</sup> Not required, recommended for students pursuing Health Professions Programs or Graduate School

<sup>3</sup> See Major Electives Requirements

<sup>4</sup> Pre-Health Professions (PHP) Elective, see Major PHP Concentration Requirements for options

**Notes**

- (W) Writing-Intensive Course

**Major Milestones**

Effective for fall, 2016 Major Milestones are used in all concentrations of the Biomedical Sciences major to help students stay on track for timely graduation. Each regular semester in the Biomedical Sciences major is a tracking term. In order to remain on track, students must complete the milestone requirements for each tracking term. These requirements are viewable in the Milestone Notes above.

Major milestone requirements apply only to full-time, degree-seeking students who first entered Fall 2016 or later. Milestone requirements do not apply to transfer students in the Biomedical Sciences program.

The sample academic plan is designed to ensure graduation in the Biomedical Sciences major in four years. Several academic plans are available – consult with your academic advisor for the plan that is the best fit for you. For specific course requirements, refer to the program requirements above and the General Education requirement of the College of Allied Health Professions.

**Biomedical Sciences (MS)**

The Master of Science in Biomedical Sciences degree is a one-year, non-thesis degree designed to enhance the scientific foundation and

academic credentials of students who seek further academic training or employment in the health and biomedical fields.

Each applicant must be qualified for admission to the University of South Alabama Graduate School with a bachelor's degree from an accredited institution of higher education. Additional requirements also include:

1. An undergraduate minimum GPA of 3.0 is required for regular admission. Conditional admission may be granted in certain cases for lower GPAs.
2. Undergraduate degrees should be from disciplines related to biomedical sciences or other STEM disciplines.
3. An appropriate advanced degree may be used in lieu of other requirements for Regular Standing.
4. Official transcripts from all institutions attended.
5. Two letters of recommendation attesting to the prospective student's scholarship and potential for success in a graduate program.
6. A Statement of Purpose that reflects the rationale for the chosen graduate program and includes examples of personal and professional experience relevant to the program.

Code	Title	Hours
<b>Program of Study</b>		
<b>Core</b>		<b>21</b>
SLP 510	Intro to Research Design	
BMD 507	Advanced Physiology	
BMD 508	Human Gross Anatomy	
BMD 594	Directed Studies	
BMD 500	Graduate Seminar	
<b>Electives</b>		<b>9</b>
BMD 501	Immunology	
BMD 502	Medical Microbiology	
BMD 503	Molecular Basis of Cancer	
BMD 511	Women's Health	
BMD 520	Pharmacology	
BMD 530	Neurosciences	
BMD 590	Special Topics	
HS 563		
BLY 511	Developmental Biology	
BLY 544	Molecular Biology	
BLY 590	Special Topics -	
<b>Total Hours</b>		<b>30</b>

**Biomedical Sciences Minor****Degree Requirements**

A minor in Biomedical Sciences, requires 18 total credit hours, of which 12 must be completed in BMD.

Code	Title	Hours
<b>Biochemistry I</b>		
Select one of the following:		<b>3</b>
BMD 321	Biochemistry I-Molecular Biol	
CH 440	Biochemistry I	
BLY 440	Biochemistry I	
<b>Human Physiology</b>		

Select one of the following: 3-4

BMD 334	Human Physiology I	
BLY 350	Human Physiology	
BMD 251	Human Anatomy & Physiology I	

#### Human Anatomy

BMD 311	Human Anatomy	3-4
or BMD 252	Human Anatomy & Physiology II	

#### BMD Electives

Select 7-9 hours of electives. Recommended to include: 7-9

BMD 322	Biochemistry II-Metabolism	
CH 441	Biochemistry II	
BLY 441	Biochemistry II	

**Total Hours** 16-20

## Emergency Medical Services

### Department Information

(251) 461-1832

Department of Emergency Medical Services website  
<https://www.southalabama.edu/colleges/alliedhealth/ems/index.html>  
[\(https://www.southalabama.edu/colleges/alliedhealth/ems/\)](https://www.southalabama.edu/colleges/alliedhealth/ems/)

### Department of Emergency Medical Services Faculty

Title	Name
Chair	Charles Erwin
Program Directors	Clifford, Elizie, McKenna
Medical Director	Steve Bowden, M.D.
Professor	Frazer
Instructors	Brooks, Clifford, Coaker, Ellzie, Erwin, McKenna
Academic Advisors	McKenna
Part-time Instructors	Payne
Clinical Coordinator, Instructor	McKenna
CME Coordinator	Montalban

The Department of EMS prepares students for careers in Emergency Medical Services. To meet the expanding role of prehospital providers, the Department of EMS offers three certificate programs, EMT, AEMT and Paramedic, as well as a Bachelor of Science in Emergency Medical Services.

### Degrees, Programs, or Concentrations

- Advanced EMT (AEMT) Certificate Program (p. 851)
- Emergency Medical Services (BS) (p. 851)
- Emergency Medical Services Minor (p. 854)
- EMT Certification Program (p. 854)
- Paramedic Certificate Program (p. 854)
- Professional Health Sciences (BS) (p. 855)

## Courses

### Emergency Medical Svcs (EMS)

#### EMS 100 Cardiopulmonary Resuscitation 1 cr

Cardiopulmonary Resuscitation (CPR) emphasizes the scope and magnitude of cardiovascular disease causes of sudden death, and the effects of prudent heart living as a tool to reduce risk factors associated with cardiovascular disease. The skills component identifies and measures competence in one-person CPR, two person adult CPR, infant and child CPR, and management of airway obstruction. Course completion cards are issued by the American Heart Association.

#### EMS 104 First Aid/CPR 1 cr

This American Heart Association course includes the basics of First Aid and Cardiopulmonary Resuscitation (CPR) for Adults, Children and Infants. Course content includes instruction on recognition and management of medical and trauma emergencies including environmental emergencies. The skills component includes competence in one-person adult, infant and child CPR, and management of airway obstruction as well as skills associated with trauma and medical emergencies. Course completion cards are issued by the American Heart Association.

#### EMS 110 Emergency Medical Responder 3 cr

A skills approach in helping the student to intervene in any medical or traumatic emergency situation before emergency personnel arrive. Emphasis is placed on care of the airway, CPR, control of bleeding, splinting and bandaging, and overall management. Clinical rotations include emergency department and ambulance. American Heart Association Healthcare Provider CPR certification will be awarded. Successful completion of this course permits the student to sit for the National Registry exam for Emergency Medical Responder. Upon successful completion of the National Registry exam the student may apply for a license with the Alabama Department of Public Health as an Emergency Medical Responder.

#### EMS 112 EMT Emergency Care 6 cr

Includes all required modules of the 2009 National EMS Educational Standard Curriculum. Topics include pathophysiology, patient assessment, airway management, hemorrhage control, management of fractures, care of individuals with special needs, emergency childbirth, care of infants and children, medical emergencies, environmental emergencies, transportation of the sick and injured, operations and radio communications. Prerequisite: AHA BLS for Health Care Providers.

**Corequisite:** EMS 113, EMS 115

#### EMS 113 EMT Skills Lab 1 cr

Emergency Medical Technician Skills practicum, Designed to allow EMT students extensive practice of required psychomotor skills.

**Corequisite:** EMS 112, EMS 115

#### EMS 115 EMT Clinical Internship 1 cr

Pre-hospital care and transportation of the sick and injured using principles of basic life support, correlated with emergency department experience. Time distributed between emergency department and ambulance.

**Corequisite:** EMS 112, EMS 113

**EMS 140 Advanced EMT 6 cr**

This course includes theoretical concepts and competencies outlined in the National EMS Education Standards for Advanced EMT's. Major topical areas include EMS operations, airway management, assessment and management of the medical and trauma patient, pharmacology for the A-EMT, public health and life span development, among others.

**Prerequisite:** EMS 112 Minimum Grade of B and EMS 113 Minimum Grade of S and EMS 115 Minimum Grade of S and EMS 210 (may be taken concurrently) Minimum Grade of B

**Corequisite:** EMS 141, EMS 143

**EMS 141 Advanced EMT Skills Lab 1 cr**

This course is designed to integrate previously learned theory on advanced pre-hospital assessment, treatment and documentation of the medical and traumatic emergency patient. The course includes psychomotor skills and competencies outlined in the DOT's National EMS Education Standards for Advanced EMTs.

**Prerequisite:** (EMS 210 (may be taken concurrently) Minimum Grade of B or EMT 210 Minimum Grade of B) and (EMS 200 (may be taken concurrently) Minimum Grade of B or EMT 310 Minimum Grade of B) and (EMS 140 (may be taken concurrently) Minimum Grade of B or EMT 321 Minimum Grade of B) and (EMS 143 (may be taken concurrently) Minimum Grade of S or EMT 371 (may be taken concurrently) Minimum Grade of S)

**EMS 143 Advanced EMT Internship 2 cr**

Supervised clinical and field experiences emphasizing patient care in the hospital and out-of-hospital environments. Time distributed between hospital emergency departments, fire rescue departments, and ambulance services, among others.

**Prerequisite:** (EMS 210 (may be taken concurrently) Minimum Grade of B or EMT 210 Minimum Grade of B) and (EMS 200 (may be taken concurrently) Minimum Grade of B or EMT 310 Minimum Grade of B) and (EMS 140 (may be taken concurrently) Minimum Grade of B or EMT 321 Minimum Grade of B) and (EMS 141 (may be taken concurrently) Minimum Grade of S or EMT 361 Minimum Grade of S)

**EMS 200 Human Systems/Pathophysiology 3 cr**

An overview of the human body systems and disease processes. Emphasis is placed on the functions of human systems and subsystems relative to pathophysiology. Includes concepts of pathophysiology included in the National Standard Curriculum for the Paramedic and the requirements set forth by the Alabama Department of Public Health.

**EMS 210 Medical Terminology 3 cr**

Medical vocabulary including prefixes, suffixes and their etymological derivation. Proper pronunciation stressed as well as logic, grammar, and spelling. Course includes an overview of human anatomy and physiology.

**EMS 212 Paramedic Foundations 3 cr**

This course introduces issues related to the practice of pre-hospital advanced life support as a career, with a focus on issues common to all health care professions. Content areas include: paramedic roles and responsibilities, well-being of the paramedic, illness and injury prevention, medical-legal-ethical issues, therapeutic communication, pharmacology and advance airway management. Upon course completion, student will have met the objectives as outlined in the National Standard Curriculum for the Paramedic.

**Prerequisite:** (EMS 210 Minimum Grade of B or EMT 210 Minimum Grade of B) and (EMS 140 Minimum Grade of B or EMT 321 Minimum Grade of B) and (EMS 141 Minimum Grade of S or EMT 361 Minimum Grade of S) and (EMS 143 Minimum Grade of S or EMT 371 Minimum Grade of S) and (EMS 200 Minimum Grade of B or EMT 310 Minimum Grade of B) or (BMD 114 Minimum Grade of C or BLY 151 Minimum Grade of C or CLS 114 Minimum Grade of C) and (BMD 115 Minimum Grade of C or BLY 152 Minimum Grade of C or CLS 115 Minimum Grade of C) and (EMS 214 (may be taken concurrently) Minimum Grade of B or EMT 340 Minimum Grade of B) and (EMS 216 (may be taken concurrently) Minimum Grade of B or EMT 350 Minimum Grade of B) and (EMS 217 (may be taken concurrently) Minimum Grade of S or EMT 465 Minimum Grade of S)

**EMS 214 Introduction to EMS Cardiology 3 cr**

Rhythm interpretation in Lead II EKG. Rapid recognition, defibrillation and/or therapeutic management of potentially lethal rhythms and myocardial infarction. Objectives include twelve lead placement and basic rhythm recognition.

**Prerequisite:** (EMS 210 Minimum Grade of B or EMT 210 Minimum Grade of B) and (EMS 140 Minimum Grade of B or EMT 321 Minimum Grade of B) and (EMS 141 Minimum Grade of S or EMT 361 Minimum Grade of S) and (EMS 143 Minimum Grade of S or EMT 371 Minimum Grade of S) and (EMS 200 Minimum Grade of B or EMT 310 Minimum Grade of B) or ((BMD 114 Minimum Grade of C or BLY 151 Minimum Grade of C or CLS 114 Minimum Grade of C) and (BMD 115 Minimum Grade of C or BLY 152 Minimum Grade of C or CLS 115 Minimum Grade of C)) and EMS 212 Minimum Grade of C and (EMS 216 (may be taken concurrently) Minimum Grade of B or EMT 350 Minimum Grade of B) and (EMS 217 (may be taken concurrently) Minimum Grade of S or EMT 465 Minimum Grade of S)

**EMS 216 Patient Assess/Mgt & EMS Oper 3 cr**

Includes history taking, physical examination, clinical decision making, communications, documentation, assessment-based management of medical and trauma patients, ambulance operations, incident command rescue, Hazmat and crime scene awareness.

**Prerequisite:** (EMS 210 Minimum Grade of B or EMT 210 Minimum Grade of B) and (EMS 140 Minimum Grade of B or EMT 321 Minimum Grade of B) and (EMS 141 Minimum Grade of S or EMT 361 Minimum Grade of S) and (EMS 143 Minimum Grade of S or EMT 371 Minimum Grade of S) and (EMS 200 Minimum Grade of B or EMT 310 Minimum Grade of B) or ((BMD 114 Minimum Grade of C or BLY 151 Minimum Grade of C or CLS 114 Minimum Grade of C) and (BMD 115 Minimum Grade of C or BLY 152 Minimum Grade of C or CLS 115 Minimum Grade of C)) and EMS 212 (may be taken concurrently) Minimum Grade of B and (EMS 214 (may be taken concurrently) Minimum Grade of B or EMT 340 Minimum Grade of B) and (EMS 217 (may be taken concurrently) Minimum Grade of S or EMT 465 Minimum Grade of S)

**EMS 217 Paramedic Clinical I 3 cr**

Supervised clinical experiences emphasizing patient care in the hospital and outpatient clinical settings as outlined in the National Standard Curriculum for the Paramedic.

**Prerequisite:** (EMS 210 Minimum Grade of B or EMT 210 Minimum Grade of B) and (EMS 140 Minimum Grade of B or EMT 321 Minimum Grade of B) and (EMS 141 Minimum Grade of S or EMT 361 Minimum Grade of S) and (EMS 143 Minimum Grade of S or EMT 371 Minimum Grade of S) and (EMS 200 Minimum Grade of B or EMT 310 Minimum Grade of B or ((BMD 114 Minimum Grade of B or BLY 151 Minimum Grade of B or CLS 114 Minimum Grade of B) and BMD 115 Minimum Grade of B or BLY 152 Minimum Grade of B or CLS 115 Minimum Grade of B)) and EMS 212 (may be taken concurrently) Minimum Grade of B and (EMS 214 (may be taken concurrently) Minimum Grade of B or EMT 340 Minimum Grade of B) and (EMS 216 (may be taken concurrently) Minimum Grade of B or EMT 350 Minimum Grade of B)

**EMS 240 EMS Resp. Special Populations 3 cr**

This course relates pathophysiology and assessment findings to the formation of field impressions and treatment plans specific to special populations. Subject matter will include gynecology, obstetrics, abuse and assault, neonatology, pediatrics, special needs and the geriatric community. Upon course completion, students will have met the objectives for special populations as outlined in the National Standard Curriculum for the Paramedic.

**Prerequisite:** EMS 212 Minimum Grade of B and (EMS 214 Minimum Grade of B or EMT 340 Minimum Grade of B) and (EMS 216 Minimum Grade of B or EMT 350 Minimum Grade of B) and (EMS 217 Minimum Grade of S or EMT 465 Minimum Grade of S) and (EMS 242 (may be taken concurrently) Minimum Grade of B or EMT 355 Minimum Grade of B) and (EMS 244 (may be taken concurrently) Minimum Grade of B or EMT 425 Minimum Grade of B) and (EMS 245 (may be taken concurrently) Minimum Grade of S or EMT 455 Minimum Grade of S) and (EMS 247 (may be taken concurrently) Minimum Grade of S or EMT 466 Minimum Grade of S)

**EMS 242 Paramedic Emergency Care I 3 cr**

Includes pathophysiology, assessment and management of patients suffering from pulmonary and cardiovascular diseases. Additional modules may be added in accordance to standards and guidelines in the National Standard Curriculum for the Paramedic and the American Heart Association. Student will receive an ACLS provider certification upon successful completion.

**Prerequisite:** EMS 212 Minimum Grade of B and (EMS 214 Minimum Grade of B or EMT 340 Minimum Grade of B) and (EMS 216 Minimum Grade of B or EMT 350 Minimum Grade of B) and (EMS 217 Minimum Grade of S or EMT 465 Minimum Grade of S) and (EMS 240 (may be taken concurrently) Minimum Grade of B or EMT 375 Minimum Grade of B) and (EMS 244 (may be taken concurrently) Minimum Grade of B or EMT 425 Minimum Grade of B) and (EMS 245 (may be taken concurrently) Minimum Grade of S or EMT 455 Minimum Grade of S) and (EMS 247 (may be taken concurrently) Minimum Grade of S or EMT 466 Minimum Grade of S)

**EMS 244 Paramedic Emergency Care II 3 cr**

Includes pathophysiology, assessment and management of patients suffering from medical emergencies not included in EMS 240 and EMS 242 in accordance to the National Standard Curriculum for the Paramedic.

**Prerequisite:** EMS 212 Minimum Grade of B and (EMS 214 Minimum Grade of B or EMT 340 Minimum Grade of B) and (EMS 216 Minimum Grade of B or EMT 350 Minimum Grade of B) and (EMS 217 Minimum Grade of S or EMT 465 Minimum Grade of S) and (EMS 240 (may be taken concurrently) Minimum Grade of B or EMT 375 Minimum Grade of B) and (EMS 242 (may be taken concurrently) Minimum Grade of B or EMT 355 Minimum Grade of B) and (EMS 245 (may be taken concurrently) Minimum Grade of S or EMT 455 Minimum Grade of S) and (EMS 247 (may be taken concurrently) Minimum Grade of S or EMT 466 Minimum Grade of S)

**EMS 245 Paramedic Skills Lab 1 cr**

Advanced out-of-hospital practicum. Designed to integrate all previously learned theory, management concepts and behavioral objectives as outlined in the National Standard Curriculum for the Paramedic.

**Prerequisite:** EMS 212 Minimum Grade of B and (EMS 214 Minimum Grade of B or EMT 340 Minimum Grade of B) and (EMS 216 Minimum Grade of B or EMT 350 Minimum Grade of B) and (EMS 217 Minimum Grade of S or EMT 465 Minimum Grade of S) and (EMS 240 (may be taken concurrently) Minimum Grade of B or EMT 375 Minimum Grade of B) and (EMS 242 (may be taken concurrently) Minimum Grade of B or EMT 355 Minimum Grade of B) and (EMS 244 (may be taken concurrently) Minimum Grade of B or EMT 425 Minimum Grade of B)

**EMS 247 Paramedic Clinical II 2 cr**

Supervised clinical experiences emphasizing patient care in the hospital and outpatient clinical settings as outlined in the National Standard Curriculum for the Paramedic.

**Prerequisite:** EMS 212 Minimum Grade of B and (EMS 214 Minimum Grade of B or EMT 340 Minimum Grade of B) and (EMS 216 Minimum Grade of B or EMT 350 Minimum Grade of B) and (EMS 217 Minimum Grade of S or EMT 465 Minimum Grade of S) and (EMS 240 (may be taken concurrently) Minimum Grade of B or EMT 375 Minimum Grade of B) and (EMS 242 (may be taken concurrently) Minimum Grade of B or EMT 355 Minimum Grade of B) and (EMS 244 (may be taken concurrently) Minimum Grade of B or EMT 425 Minimum Grade of B) and (EMS 245 (may be taken concurrently) Minimum Grade of S or EMT 455 Minimum Grade of S)

**EMS 270 PALS 3 cr**

Course based on American Heart Association's Emergency Cardiovascular Care program. Includes assessment and management of pediatric cardiovascular and respiratory emergencies. Upon successful completion, the student will receive PALS provider certification. Recommended for health care providers and health care provider students.

**EMS 280 Advanced Cardiac Life Support 3 cr**

Course based on American Heart Association's Emergency Cardiovascular Care program. Includes in-depth review of all cases required for a full ACLS course. Recommended for health care providers and health care provider students. Upon successful completion, the student will receive ACLS certification.

**EMS 295 Paramedic Field Internship 4 cr**

Supervised field experiences with an out-of-hospital advanced life support service emphasizing patient care and team leadership skills as outlined in the National Standard Curriculum for the Paramedic.

**Prerequisite:** (EMS 240 Minimum Grade of B or EMT 375 Minimum Grade of B) and (EMS 242 Minimum Grade of B or EMT 355 Minimum Grade of B) and (EMS 244 Minimum Grade of B or EMT 425 Minimum Grade of B) and (EMS 245 Minimum Grade of S or EMT 455 Minimum Grade of S) and (EMS 247 Minimum Grade of S or EMT 466 Minimum Grade of S) and (EMS 297 (may be taken concurrently) Minimum Grade of S or EMT 495 (may be taken concurrently) Minimum Grade of S)

**EMS 296 Special Topics in EMS 1-3 cr**

Selected topics in Emergency Medical Services and Emergency Response Training. Topics will vary according to needs and interest of students. Course may be repeated for credit when content varies.

**EMS 297 Paramedic Comp Review/Exams 3 cr**

Culmination of paramedic education. Includes practical skills lab designed to prepare the student for state licensure exams. A final practical and written exam will be administered as a final evaluation of student progress.

**Prerequisite:** (EMS 240 Minimum Grade of B or EMT 375 Minimum Grade of B) and (EMS 242 Minimum Grade of B or EMT 355 Minimum Grade of B) and (EMS 244 Minimum Grade of B or EMT 425 Minimum Grade of B) and (EMS 245 Minimum Grade of S or EMT 455 Minimum Grade of S) and (EMS 247 Minimum Grade of S or EMT 466 Minimum Grade of S) and (EMS 295 (may be taken concurrently) Minimum Grade of S or EMT 475 (may be taken concurrently) Minimum Grade of S)

**EMS 298 Directed Studies in EMS 1-3 cr**

Selected topics in Emergency Medical Services and Emergency Response Training. Topics will vary according to needs and interest of students. Course may be repeated for credit when content varies.

**EMS 300 Human Systems/Pathophysiology 3 cr**

An overview of the human body systems and disease processes. Emphasis is placed on the functions of human systems and subsystems relative to pathophysiology. Includes concepts of pathophysiology included in the National Standard Curriculum for the Paramedic and the requirements set forth by the Alabama Department of Public Health.

**EMS 310 Intro to EMS Systems 3 cr**

This course provides students with an introduction to Emergency Medical Services (EMS) Systems. Theoretical concepts and issues will be discussed and examined in order to provide students with a conceptual basis for understanding and analyzing EMS systems and organizations. Particular emphasis will be placed on system components, system integration and the roles and responsibilities of management and leadership in EMS organizations.

**EMS 315 EMS Administration 3 cr**

This course provides a general overview of management and administration functions required of EMS managers today including planning, directing, budgeting, staffing and evaluation. Particular emphasis will be placed on issues relating to human resources, EMS operations, and organizational planning.

**EMS 320 EMS Law and Legal Issues-W 3 cr**

This course will provide a general overview of the origins of law in the United States with particular emphasis on health laws and regulations affecting pre-hospital providers. Topics include issues relating to malpractice, litigation, consent and refusal of medical treatment, advanced directives, patient confidentiality, and expert witness preparation, among others.

**EMS 325 Instructional Methods in EMS 3 cr**

This course presents theoretical and practical foundations necessary for entry level EMS instructors and coordinators. Topics include instructor roles and responsibilities, learning theory, lesson plan development, test writing and validation, and program evaluation. Additional emphasis will be placed on instructional techniques for the adult learner.

**EMS 340 Disaster Mgt & Event Planning 3 cr**

Considerations of the theoretical and practical foundations necessary to manage incidents involving multiple casualties and multiple agencies as well as the planning and management of other large scale events. Topics include disaster planning, incident command, WMD, response issues, and scene control, among others.

**EMS 350 Critical Care Paramedic 3 cr**

This course provides paramedics with advanced skills and knowledge in critical care medicine. Students successfully completing this course and its subsequent internship (EMS 375) will be eligible to sit for national certification as a Critical Care Paramedic.

**EMS 375 Crit Care Paramedic Internship 3 cr**

An advanced clinical internship course for licensed paramedics who have successfully completed EMS 350. Internship is conducted in an approved critical care setting or facility. Successful completion of this course allows the student to sit for national certification examination as a Critical Care Paramedic.

**EMS 401 Seminar in HP 3 cr**

This course is designed to provide students with an overview of different health professions and their scope of practice and also to provide information about health administration.

**EMS 410 Concepts of Prof Paramedic 6 cr**

This bridge course is designed for licensed (or nationally certified) paramedics who are admitted to the Department's Paramedic to BS in EMS Track. This course provides critical updates and information related to paramedic practice and enhances the student's overall patient assessment and critical thinking skills. Focus of the course is on selected theories and concepts integrated throughout the curriculum. Additional emphasis will be on the professional roles of paramedics. Prerequisite: Paramedic to BSEMS Track.

**EMS 440 Health Insurance/Managed Care 3 cr**

This course provides an overview of the basic concepts and principles in the health insurance and managed care environments. Particular emphasis will be placed on issues relating to the costs, quality and access to emergency medical services. Topics include Medicare and Medicaid reimbursement, Managed Care contracting and EMS Quality Management, among others.

**EMS 445 EMS Research - W 3 cr**

An introduction to basic research methods and basic statistical procedures used in Emergency Medical Services research. Students will use this information in order to assist them with reading, interpreting and evaluating articles in the pre-hospital healthcare literature.

**EMS 460 Issues and Trends in EMS 3 cr**

Explores issues and trends at the federal, state and local levels facing EMS leaders and EMS organizations. Particular emphasis is on new and proposed programs, policies and practices which affect pre-hospital healthcare providers.

**EMS 475 EMS Internship 3 cr**

Structured field experience providing the student to work in an EMS administration, management or educational environment; observation of leadership processes within an EMS organization; application of EMS leadership theory and techniques.

**EMS 494 Directed Studies 1-3 cr**

Student completes an individual project in a specific EMS area under the guidance and supervision of an EMS faculty member.

**EMS 495 EMS Comp/Review Exam 1 cr**

The comprehensive examination is the capstone of the Emergency Medical Services degree program. A written examination based on the program objectives of the EMS degree program will be administered as a final evaluation of the student's progress.

**Emergency Med Training (EMT)****EMT 100 Cardiopulmonary Resuscitation 1 cr**

Cardiopulmonary Resuscitation (CPR) emphasizes the scope and magnitude of cardiovascular disease, causes of sudden death, and the effects of prudent heart living as a tool to reduce risk factors associated with cardiovascular disease. The skills component identifies and measures competence in one-person CPR, two-person CPR, infant and child CPR, and management of airway obstruction. Course completion cards are issued by the American Heart Association.

**EMT 110 First Responder 3 cr**

A skills approach in helping the student to intervene in any medical or traumatic emergency situation before the emergency personnel arrive. Emphasis is placed on care of the airway, CPR, control of bleeding, splinting and bandaging, AED use, and overall management.

**EMT 200 Basic Emergency Care 6 cr**

Includes all required modules of the 1994 EMT Basic National Standard Curriculum. Assessment of patients, airway management, AED use, hemorrhage control, management of fractures, care of special injuries, emergency childbirth, environmental emergencies, transportation of the sick and injured, and radio communications.

**EMT 205 Basic Emergency Clinic Intern 1 cr**

Pre-hospital care and transportation of the sick and injured using principles of basic life support, correlated with emergency room experience. Time distributed between emergency room, ambulance, communications center, and interfacility transport vehicle.

**EMT 206 Basic Skills Lab 1 cr**

Basic Emergency Medical Technician Skill Practicum. Designed to allow Basic EMT students extensive practice of required psychomotor skills.

**EMT 210 Medical Terminology 3 cr**

Medical vocabulary including prefixes, suffixes and their etymological derivation. Proper pronunciation stressed as well as logic, grammar, and spelling.

**EMT 255 Hazardous Environment Managment 3 cr**

Theory behind management of hazardous environment emergencies with some application of theory in a practical setting. Instruction on chemical and physical nature of hazardous materials relative to control of emergency situations involving chemical spills.

**EMT 290 Special Topics - 1-3 cr**

Selected topics in Emergency Medical Services and Emergency Response Training. May be repeated for credit when course content varies.

**EMT 310 Human Systems-Disease Process 3 cr**

An overview of the human body and its systems. Emphasis is placed on the understanding of the functions of human systems and subsystems. Includes concepts of pathophysiology included in the 1998 DOT Paramedic Curriculum.

**EMT 315 EMS Pharmacology I 3 cr**

Introduction to pharmacology for the EMS professional. Includes drug classification, dosage calculations, routes and methods of administration, and IV access.

**EMT 321 Advanced EMT 6 cr**

This course includes theoretical concepts and competencies outlined in the National EMS Education Standards for Advanced EMT's. Major topical areas include EMS Operations, Airway Management, Assessment and Management of the Medical and Trauma Patient, Pharmacology for the A-EMT, Public Health and Life Span Development, among others.

**Prerequisite:** EMT 200 Minimum Grade of B and EMT 210 (may be taken concurrently) Minimum Grade of B and EMT 310 (may be taken concurrently) Minimum Grade of B or (BMD 114 Minimum Grade of C or BLY 151 Minimum Grade of C or CLS 114 Minimum Grade of C) and (BMD 115 (may be taken concurrently) Minimum Grade of C or BLY 152 (may be taken concurrently) Minimum Grade of C or CLS 115 (may be taken concurrently) Minimum Grade of C)

**Corequisite:** EMT 361, EMT 371

**EMT 335 Essentials of Paramedicine 3 cr**

Preparatory course for ALS EMS students. Includes airway management, EMS Systems, therapeutic communications, responsibilities, injury prevention, and legal issues.

**EMT 340 Introduction to EMS Cardiology 3 cr**

Rhythm interpretation in Lead II EKG. Rapid recognition, defibrillation and therapeutic management of potentially lethal rhythms and myocardial infarction. Twelve lead placement and basic recognition.

**EMT 345 EMS Pharmacology II 3 cr**

Advanced course with emphasis on specific drugs within classifications, drug names, actions, indications, contraindications, side effects, precautions, dosages, clinical applications and listings of prescriptions and over-the-counter medications.

**EMT 350 Patient Assessment-Management 3 cr**

Includes history taking, physical examination, clinical decision making, communications, documentation and assessment based management of medical and trauma patients.

**EMT 355 Paramedic Emergency Care I 3 cr**

Includes pulmonary and cardiology, including ACLS. Additional modules may be added in accordance with State and Department of Transportation guidelines.

**EMT 361 Advanced EMT Skill Lab 1 cr**

This course is designed to integrate previously learned theory on advanced pre-hospital assessment, treatment and documentation of the medical and traumatic emergency patient. The course includes psychomotor skills and competencies outlined in the DOT's National EMS Education Standards for Advanced EMTs.

**Corequisite:** EMT 321, EMT 371

**EMT 365 Advanced Trauma Management 3 cr**

Includes trauma systems, mechanism of injury, management of hemorrhage, shock, burns, soft tissue, head and facial, spinal, thoracic, abdominal and musculoskeletal trauma.

**EMT 371 Advanced EMT Internship 2 cr**

Supervised clinical and field experiences emphasizing patient care in the hospital and out-of-hospital environments. Time distributed between hospital emergency departments, fire rescue departments, and ambulance services, among others.

**Corequisite:** EMT 321, EMT 361

**EMT 375 EMS Response Women-Children 3 cr**

The unique problems for the EMS provider when responding to women or children. Includes gynecology, obstetrics, abuse and assault, pediatrics and neonatology.

**EMT 394 Directed Studies - 1-3 cr**

Directed study, under the guidance of a faculty advisor, of a topic in the fields of Emergency Medical Services or Emergency Response Training. Requires permission of Department Chair.

**EMT 425 Paramedic Emergency Care II 3 cr**

Includes all medical emergency modules of the National Paramedic Curriculum not included in EMT 355 and 375.

**EMT 440 EMS Op and Sp Considerations 3 cr**

Includes special circumstances regarding geriatric patient, abuse and assault, patients with special challenges, acute interventions for the chronic care patient, ambulance operations, incident command, rescue, hazmat, and crime scene awareness.

**EMT 455 Paramedic Skills Laboratory 1 cr**

Advanced skills practicum. Designed to integrate all previously learned theory, management concepts and behavioral objectives of the 1999 National Standard Paramedic training curriculum.

**Prerequisite:** EMT 210 Minimum Grade of B and EMT 315 Minimum Grade of B and EMT 335 Minimum Grade of B and EMT 340 Minimum Grade of B and EMT 345 Minimum Grade of B

**EMT 465 Paramedic Clinical Intern I 3 cr**

The first of two clinical internship courses required of paramedic students. Supervised clinical experiences emphasizing patient care in the hospital and outpatient clinical settings.

**Prerequisite:** EMT 210 Minimum Grade of B and EMT 315 Minimum Grade of B and EMT 335 Minimum Grade of B and EMT 340 Minimum Grade of B and EMT 345 Minimum Grade of B

**EMT 466 Paramedic Clinical Intern II 3 cr**

The second of two clinical internship courses required of paramedic students. Supervised clinical experiences emphasizing patient care in the hospital and outpatient clinical settings.

**Prerequisite:** EMT 355 Minimum Grade of B and EMT 375 Minimum Grade of B

**EMT 475 Paramedic Field Internships 6 cr**

Supervised field experiences with an out of hospital advanced life support service emphasizing patient care and team leadership skills.

**Prerequisite:** EMT 350 Minimum Grade of B and EMT 466 Minimum Grade of S

**EMT 485 Advanced Cardiac Life Support 3 cr**

Course based on American Heart Association's ACLS Program.

Includes in depth review of all cases required for a full ACLS course. Recommended for health care providers and health care provider students.

**EMT 490 Special Topics - 1-3 cr**

Selected topics in Emergency Medical Services and Emergency Response Training. Topics will vary according to needs and interests of students. Course may be repeated for credit when content varies.

**EMT 494 Directed Studies - 1-3 cr**

Directed study, under the guidance of a faculty advisor, of a topic in the fields of Emergency Medical Services or Emergency Response Training. Requires the permission of department chair.

**EMT 495 Comprehensive Review-Exam 1 cr**

Culmination of paramedic education. Includes practical skills labs designed to prepare the graduate for state licensure exams. A final practical and written exam will be administered as a final evaluation of student progress.

**Prerequisite:** EMT 350 Minimum Grade of B and EMT 466 Minimum Grade of S

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
BROOKS, JASON LEE (jbrooks@southalabama.edu)	Emerg Medical Serv Training	Senior Instructor	BA, Judson College MA, American Public University EDD, Walden University
CLIFFORD, AMANDA MCDONALD (aclifford@southalabama.edu)	Emerg Medical Serv Training	Instructor	BS, University of South Alabama MA, American Public University
COAKER, JOSHUA CALEB (jcoaker@southalabama.edu)	Emerg Medical Serv Training	Instructor	EMTB, University of South Alabama EMTP, University of South Alabama BS, University of South Alabama MHAI, Louisiana State U-Shreveport BSEMS, University of South Alabama
ELLZIE, JOEL THOMAS (jellzie@southalabama.edu)	Emerg Medical Serv Training	Instructor	MHAI, Louisiana State U-Shreveport
ERWIN, CHARLES OWEN (cerwin@southalabama.edu)	Emerg Medical Serv Training	Senior Instructor	BA, University of South Alabama MA, American Public University EDD, University of South Alabama
FRAZER, GREGORY H. (frazer@southalabama.edu)	Emerg Medical Serv Training	Professor	BA, Indiana University-Bloomington MA, Ball State University PHD, Southern Illinois U-Carbondale
MCKENNA, KRISTEN NICOLE (kmckenna@southalabama.edu)	Emerg Medical Serv Training	Instructor	BSEMS, University of South Alabama  MA, American Public University

MONTALBAN, WILLIAM MICHAEL Emerg Medical Serv Training  
(wmontalban@southalabama.edu)

Instructor EMTB, University of South Alabama  
EMTP, University of South Alabama  
BS, University of South Alabama

## Advanced EMT (AEMT) Certificate Program

### Degree Requirements

The EMT certificate program can be completed in one academic semester and is a prerequisite to the Advanced EMT (AEMT) certificate program.

The AEMT certificate program can be completed in one academic semester and is a prerequisite to the Paramedic certificate program.

The Paramedic certificate program can be completed in three academic semesters. Together, these programs can be completed in five semesters. Students may, however, elect to complete only the EMT level of education, or the AEMT level of education.

After successful completion of each level of education, the student is eligible to sit for the National Registry of EMT's (NREMT) certification examination. Successful completion of this examination is mandatory for licensure to practice in the State of Alabama. State licensure as an EMT is required to apply for AEMT education. Those who complete any level of education and licensure are qualified to work in escalating roles (by level) in many areas of out-of-hospital emergency medical care, including ambulance services, fire rescue departments, and industrial health and safety settings.

Code	Title	Hours
EMS 210	Medical Terminology	3
EMS 200	Human Systems/Pathophysiology	3
or BMD 251 & BMD 252	Human Anatomy & Physiology I and Human Anatomy & Physiology II	
EMS 140	Advanced EMT	6
EMS 141	Advanced EMT Skills Lab	1
EMS 143	Advanced EMT Internship	2
<b>Total Hours</b>		<b>15</b>

## Emergency Medical Services (BS)

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 851)		44-49
<b>Major Requirements</b>		
<i>Emergency Medical Services Requirements</i>		
A. Complete the following:		
EMS 112	EMT Emergency Care	6
EMS 140	Advanced EMT	6
EMS 113	EMT Skills Lab	1
EMS 115	EMT Clinical Internship	1
EMS 141	Advanced EMT Skills Lab	1
EMS 143	Advanced EMT Internship	2
EMS 200	Human Systems/Pathophysiology	3
EMS 210	Medical Terminology	3
EMS 212	Paramedic Foundations	3
EMS 214	Introduction to EMS Cardiology	3

EMS 216	Patient Assess/Mgt & EMS Oper	3
EMS 217	Paramedic Clinical I	3
EMS 240	EMS Resp. Special Populations	3
EMS 242	Paramedic Emergency Care I	3
EMS 244	Paramedic Emergency Care II	3
EMS 245	Paramedic Skills Lab	1
EMS 247	Paramedic Clinical II	2
EMS 297	Paramedic Comp Review/Exams	3
EMS 295	Paramedic Field Internship	4
EMS 310	Intro to EMS Systems	3
EMS 315	EMS Administration	3
EMS 320	EMS Law and Legal Issues-W	3
EMS 325	Instructional Methods in EMS	3
EMS 340	Disaster Mgt & Event Planning	3
EMS 440	Health Insurance/Managed Care	3
EMS 445	EMS Research - W	3
EMS 460	Issues and Trends in EMS	3
EMS 475	EMS Internship	3
EMS 495	EMS Comp/Review Exam	1
MGT 300	Management Theory and Practice	3

### Minor Requirements

A minor is not required for this degree program 0

**Total Hours** 129-134

### General Education Requirements

Code	Title	Hours
<b>Area I - Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II - Humanities &amp; Fine Arts</b>		
A. Complete the following:		
CA 110	Public Speaking	3
B. Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/allied-health/emergency-medical-services/footnote1/">http://bulletin.southalabama.edu/programs-az/allied-health/emergency-medical-services/footnote1/</a> ) <sup>1</sup>		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
C. Select one of the following: 3		
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	

D. Select three hours from the following: 3

AFR 101	Intro to African Amer Studies
ARH 100	Survey of Art
ARH 103	Art History I
ARH 123	Art History II
ARH 203	Survey of Non-Western Art
ARS 101	Art Appreciation
CLA 110	Intro Anc Greek Roman Culture
DRA 110	Introduction to Theatre
EH 215	Brit Lit before 1785
EH 216	Brit Lit after 1785
EH 225	Am Lit before 1865
EH 226	Am Lit after 1865
EH 235	World Lit before 1650
EH 236	World Lit after 1650
LG 101	Introductory Latin I
LG 102	Introductory Latin II
LG 111	Introductory French I
LG 112	Introductory French II
LG 121	Introductory Chinese I
LG 122	Introductory Chinese II
LG 131	Introductory Spanish I
LG 132	Introductory Spanish II
LG 141	Intro Classical Greek I
LG 142	Intro Classical Greek II
LG 151	Introductory German I
LG 152	Introductory German II
LG 153	Accelerated Intro German
LG 171	Introductory Russian I
LG 172	Introductory Russian II
LG 173	Accelerated Intro Russian
LG 201	Intermediate Latin I
LG 202	Intermediate Latin II
LG 211	Intermediate French I
LG 212	Intermediate French II
LG 213	Accelerated Inter French - H
LG 221	Intermediate Chinese I
LG 222	Intermediate Chinese II
LG 231	Intermediate Spanish I
LG 232	Intermediate Spanish II
LG 234	Inter Spanish Accel -H
LG 241	Interm Classical Greek I
LG 242	Interm Classical Greek II
LG 251	Intermediate German I
LG 252	Intermediate German II
LG 271	Intermediate Russian I
LG 272	Intermediate Russian II
LG 273	Intensive Second Year Russian
LGS 101	Introductory Japanese I
LGS 102	Introductory Japanese II
LGS 106	Introductory Arabic I
LGS 107	Introductory Arabic II

LGS 110	Intro American Sign Language I
LGS 111	Intro American Sign Lang II
LGS 171	Introductory Korean I
LGS 172	Introductory Korean II
LGS 201	Intermediate Japanese I
LGS 202	Intermediate Japanese II
LGS 206	Intermediate Arabic I
LGS 207	Intermediate Arabic II
LGS 210	Intermediate ASL I
LGS 211	Intermediate ASL II
MUL 101	Introduction to Music
PHL 110	Introduction to Philosophy
PHL 120	Critical Thinking
PHL 121	Introduction to Logic
PHL 131	Introduction to Ethics
PHL 231	Social Ethics
PHL 240	Western Philosophy: Classical
REL 100	Intro to the Study of Religion
REL 200	Old Testament/Hebrew Bible
REL 201	Survey of the New Testament

**Area III – Natural Sciences & Mathematics**

A. Select three hours from the following: 3

MA 110	Finite Mathematics
MA 112	Precalculus Algebra
MA 113	Precalculus Trigonometry
MA 115	Precal Algebra-Trigonometry
MA 120	Calculus and Its Applications
MA 125	Calculus I
MA 126	Calculus II
MA 227	Calculus III
MA 237	Linear Algebra I
MA 238	Differential Equations I

B. Select 8-10 hours from the following: 8-10

BLY 101 & 101L	Life Science I and Life Science I Laboratory
or BLY 121 & 121L	General Biology I and General Biology I Lab
BLY 102 & 102L	Life Science II and Life Science II Lab
or BLY 122 & 122L	General Biology II and General Biology II Laboratory
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab
CH 131 & 131L	General Chemistry I and General Chemistry I Lab
CH 132 & 132L	General Chemistry II and General Chemistry II Lab
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab
GY 111 & 111L	Physical Geology and Physical Geology Lab

GY 112 & 112L	Earth History and Earth History Lab	
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab	
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory	
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab	
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab	
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	

**Area IV – History, Social & Behavioral Sciences (<http://bulletin.southalabama.edu/programs-az/allied-health/emergency-medical-services/footnote1/>)<sup>1</sup>**

A. Select one of the following:		3
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
B. Complete the following:		
PSY 120	Introduction to Psychology	3
C. Select one of the following:		
SY 109	Introductory Sociology	3
SY 112	Social Problems	3
D. Select one of the following:		3
AN 100	Intro to Cultural Anthropology	
AN 101	Intro Archaeology-Bio Anthro	
CA 100	Intro to Communication	
CA 211	Interpersonal Comm	
CJ 105	Introduction to Criminal Justice	
ECO 215	Prin of Microeconomics	
ECO 216	Prin of Macroeconomics	
GEO 114	People, Places, Environment	
GEO 115	World Regional Geography	
GS 101	Intro to Gender Studies	
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
IS 100	Global Issues	
IST 201	Seasons of Life	
NAS 101	Intro Native American Studies	
PSC 130	Intro to US Government	
PSY 120	Introduction to Psychology	
PSY 250	Life Span Development	
SY 109	Introductory Sociology	
SY 112	Social Problems	

**Area V**

A. Complete the following:		
CIS 150	Intro to Computer Applications (or pass computer proficiency exam)	0-3

B. Complete the following:		
MGT 300	Management Theory and Practice	3
<b>Total Hours</b>		<b>47-52</b>

**Footnote**

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 135 & HY 136).

**Notes**

- If students have passed BMD 252 with a grade of B or higher, they are exempt from taking EMS 200
- All undergraduates must complete two designated writing credit (W) courses, at least one of which must be in the student's major or minor.
- EMS 410 - Concepts of Professional Paramedics, 6 credits (Bridge Course). Required. This track is designed especially for licensed paramedics who have earned their paramedic education elsewhere. In addition to the EMS 410 course, students are required to meet all admissions requirements. Upon completion of EMS 410, up to 40 semester hours will be awarded to the student's previous paramedic training during the final semester before graduation.

**Graduation Plan**

(126 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I	3
Lab Science	Area III, B	4
History	Area IV, A <sup>1</sup>	3
Fine Arts	Area II, C	3
<b>Hours</b>		<b>13</b>
<b>Spring</b>		
EH 102	English Composition II	3
Lab Science	Area III, B	4
SY 109	Introductory Sociology	3
MA 110 or MA 112	Finite Mathematics or Precalculus Algebra	3
Humanities	Area II, D	3
CA 110	Public Speaking	3
<b>Hours</b>		<b>19</b>
<b>Second Year</b>		
<b>Fall</b>		
Literature	Area II, B <sup>1</sup>	3
PSY 120	Introduction to Psychology	3
EMS 112	EMT Emergency Care	6
EMS 113	EMT Skills Lab	1
EMS 115	EMT Clinical Internship	1
EMS 210	Medical Terminology	3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
2nd History or Literature	Area IV, B or Area II, B <sup>1</sup>	3
EMS 200	Human Systems/Pathophysiology	3
EMS 140	Advanced EMT	6
EMS 141	Advanced EMT Skills Lab	1
EMS 143	Advanced EMT Internship	2
<b>Hours</b>		<b>15</b>

## Third Year

Fall		
MGT 300	Management Theory and Practice	3
EMS 212	Paramedic Foundations	3
EMS 214	Introduction to EMS Cardiology	3
EMS 216	Patient Assess/Mgt & EMS Oper	3
EMS 217	Paramedic Clinical I	3
<b>Hours</b>		<b>15</b>
Spring		
EMS 240	EMS Resp. Special Populations	3
EMS 242	Paramedic Emergency Care I	3
EMS 244	Paramedic Emergency Care II	3
EMS 245	Paramedic Skills Lab	1
EMS 247	Paramedic Clinical II	2
<b>Hours</b>		<b>12</b>
Fourth Year		
Fall		
EMS 295	Paramedic Field Internship	4
EMS 297	Paramedic Comp Review/Exams	3
EMS 310	Intro to EMS Systems	3
EMS 315	EMS Administration	3
EMS 320	EMS Law and Legal Issues-W	3
EMS 460	Issues and Trends in EMS	3
<b>Hours</b>		<b>19</b>
Spring		
EMS 325	Instructional Methods in EMS	3
EMS 340	Disaster Mgt & Event Planning	3
EMS 440	Health Insurance/Managed Care	3
EMS 445	EMS Research - W	3
EMS 475	EMS Internship	3
EMS 495	EMS Comp/Review Exam	1
<b>Hours</b>		<b>16</b>
<b>Total Hours</b>		<b>126</b>

<sup>1</sup> Must complete a two semester series of either Literature or History.

## Emergency Medical Services Minor Degree Requirements

If a minor is required in your degree program, at least 9 (lower and/or upper-division) hours of courses in the minor must be completed at the University.

Code	Title	Hours
EMS 112	EMT Emergency Care	6
EMS 113	EMT Skills Lab	1
EMS 115	EMT Clinical Internship	1
EMS 140	Advanced EMT	6
EMS 141	Advanced EMT Skills Lab	1
EMS 143	Advanced EMT Internship	2
EMS 200	Human Systems/Pathophysiology	3
or BMD 252	Human Anatomy & Physiology II	
EMS 210	Medical Terminology	3
<b>Total Hours</b>		<b>23</b>

## EMT Certification Program

### Degree Requirements

The EMT certificate program can be completed in one academic semester and is a prerequisite to the Advanced EMT (AEMT) certificate program. The AEMT certificate program can be completed in one academic semester and is a prerequisite to the Paramedic certificate program. The Paramedic certificate program can be completed in three academic semesters. Together, these programs can be completed in five semesters. Students may, however, elect to complete only the EMT level of education, or the AEMT level of education. After successful completion of each level of education, the student is eligible to sit for the National Registry of EMT's (NREMT) certification examination. Successful completion of this examination is mandatory for licensure to practice in the State of Alabama. State licensure as an EMT is required to apply for AEMT education. State licensure as an AEMT is required to apply for Paramedic education. Those who complete any level of education and licensure are qualified to work in escalating roles (by level) in many areas of out-of-hospital emergency medical care, including ambulance services, fire rescue departments, and industrial health and safety settings.

Code	Title	Hours
First Semester		
EMS 112	EMT Emergency Care	6
EMS 113	EMT Skills Lab	1
EMS 115	EMT Clinical Internship	1
<b>Total Hours</b>		<b>8</b>

## Paramedic Certificate Program

### Degree Requirements

The EMT certificate program can be completed in one academic semester and is a prerequisite to the Advanced EMT (AEMT) certificate program. The AEMT certificate program can be completed in one academic semester and is a prerequisite to the Paramedic certificate program. The Paramedic certificate program can be completed in three academic semesters. Together, these programs can be completed in five semesters. Students may, however, elect to complete only the EMT level of education, or the AEMT level of education.

After successful completion of each level of education, the student is eligible to sit for the National Registry of EMT's (NREMT) certification examination. Successful completion of this examination is mandatory for licensure to practice in the State of Alabama. State licensure as an EMT is required to apply for AEMT education. State licensure as an AEMT is required to apply for Paramedic education.

Those who complete any level of education and licensure are qualified to work in escalating roles (by level) in many areas of out-of-hospital emergency medical care, including ambulance services, fire rescue departments, and industrial health and safety settings.

Code	Title	Hours
First Semester		
EMS 212	Paramedic Foundations	3
EMS 214	Introduction to EMS Cardiology	3
EMS 216	Patient Assess/Mgt & EMS Oper	3
EMS 217	Paramedic Clinical I	3
Second Semester		

EMS 240	EMS Resp. Special Populations	3
EMS 242	Paramedic Emergency Care I	3
EMS 244	Paramedic Emergency Care II	3
EMS 245	Paramedic Skills Lab	1
EMS 247	Paramedic Clinical II	2
<b>Third Semester</b>		
EMS 295	Paramedic Field Internship	4
EMS 297	Paramedic Comp Review/Exams	3
<b>Total Hours</b>		<b>31</b>

**Special Notes**

Academic advising is required of all new and existing students prior to each semester. It is the responsibility of each student to schedule an advising session with the academic faculty advisor prior to registration each semester.

## Professional Health Sciences (BS)

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 855)		62-66
<b>Major Requirements</b>		
<i>Professional Health Sciences</i>		
A. Complete the following:		
PRH 310	Intro into Health Care Mgmt	3
PRH 320	Legal/Law in Health Care Admin	3
or EMS 320	EMS Law and Legal Issues-W	
PRH 340	Disaster Mgt & Event Planning	3
or EMS 340	Disaster Mgt & Event Planning	
PRH 401	Seminar in Health Professions	3
PRH 440	Health Insurance/Managed Care	3
or EMS 440	Health Insurance/Managed Care	
PRH 460	Issues & Trends in Health Care	3
B. Complete the following:		
CA 275	Decision Making - Small Groups	3
EH 372	Technical Writing - W	3
FIN 300	Personal Finance	3
IST 450	The Job Campaign	3
MGT 300	Management Theory and Practice	3
C. Select 15-18 hours of General Electives or an Approved Minor		15-18
<b>Minor Requirements</b>		
A minor is not required for this degree program		0
<b>Total Hours</b>		<b>110-117</b>

### Healthcare Management Concentration

Code	Title	Hours
MGT 306	Organizational Comm Non Bus	3
MGT 341	Organizational Behavior	3
MGT 351	Human Resource Management	3
MKT 320	Principles of Marketing	3
<b>Total Hours</b>		<b>12</b>

### Healthcare Informatics Concentration

Code	Title	Hours
HI 300	Health Info Clinical Environme	3
HI 410	Health Informatics	3
HI 450	Health Data Secur/Compliance	3
HI 455	HLth Data Mgt & Decision Supp	3
<b>Total Hours</b>		<b>12</b>

### General Education Requirements

Code	Title	Hours
<b>Area I - Written Composition</b>		
A. Complete the following:		3
EH 101	English Composition I	
B. Complete the following:		3
EH 102	English Composition II	
<b>Area II - Humanities &amp; Fine Arts</b>		
A. Complete the following:		3
CA 110	Public Speaking	
B. Complete one of the following: <sup>1</sup>		3
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
C. Complete one of the following:		3
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	
D. Complete one of the following:		3
AFR 101	Intro to African Amer Studies	
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARH 203	Survey of Non-Western Art	
ARS 101	Art Appreciation	
CLA 110	Intro Anc Greek Roman Culture	
DRA 110	Introduction to Theatre	
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
LG 101	Introductory Latin I	
LG 102	Introductory Latin II	
LG 111	Introductory French I	
LG 112	Introductory French II	
LG 121	Introductory Chinese I	

LG 122	Introductory Chinese II
LG 131	Introductory Spanish I
LG 132	Introductory Spanish II
LG 141	Intro Classical Greek I
LG 142	Intro Classical Greek II
LG 151	Introductory German I
LG 152	Introductory German II
LG 153	Accelerated Intro German
LG 171	Introductory Russian I
LG 172	Introductory Russian II
LG 173	Accelerated Intro Russian
LG 201	Intermediate Latin I
LG 202	Intermediate Latin II
LG 211	Intermediate French I
LG 212	Intermediate French II
LG 213	Accelerated Inter French - H
LG 221	Intermediate Chinese I
LG 222	Intermediate Chinese II
LG 231	Intermediate Spanish I
LG 232	Intermediate Spanish II
LG 234	Inter Spanish Accel -H
LG 241	Interm Classical Greek I
LG 242	Interm Classical Greek II
LG 251	Intermediate German I
LG 252	Intermediate German II
LG 271	Intermediate Russian I
LG 272	Intermediate Russian II
LG 273	Intensive Second Year Russian
LGS 101	Introductory Japanese I
LGS 102	Introductory Japanese II
LGS 106	Introductory Arabic I
LGS 107	Introductory Arabic II
LGS 110	Intro American Sign Language I
LGS 111	Intro American Sign Lang II
LGS 171	Introductory Korean I
LGS 172	Introductory Korean II
LGS 201	Intermediate Japanese I
LGS 202	Intermediate Japanese II
LGS 206	Intermediate Arabic I
LGS 207	Intermediate Arabic II
LGS 210	Intermediate ASL I
LGS 211	Intermediate ASL II
MUL 101	Introduction to Music
PHL 110	Introduction to Philosophy
PHL 120	Critical Thinking
PHL 121	Introduction to Logic
PHL 131	Introduction to Ethics
PHL 231	Social Ethics
PHL 240	Western Philosophy: Classical
REL 100	Intro to the Study of Religion
REL 200	Old Testament/Hebrew Bible
REL 201	Survey of the New Testament

**Area III – Natural Sciences & Mathematics**

A. Complete one of the following:		3-4
MA 110	Finite Mathematics	
MA 111	Math in Society	
MA 112	Precalculus Algebra	
MA 113	Precalculus Trigonometry	
MA 115	Precal Algebra-Trigonometry	
MA 120	Calculus and Its Applications	
MA 125	Calculus I	
MA 126	Calculus II	
MA 227	Calculus III	
MA 237	Linear Algebra I	
MA 238	Differential Equations I	
B. Complete one of the following:		4
BLY 101	Life Science I	
& 101L	and Life Science I Laboratory	
or BLY 121	General Biology I	
& 121L	and General Biology I Lab	
C. Complete one of the following:		4
BLY 102	Life Science II	
& 102L	and Life Science II Lab	
or BLY 122	General Biology II	
& 122L	and General Biology II Laboratory	
CH 101	Survey of Inorg and Org Chem	
& 101L	and Survey Inorg-Org Chem Lab	
CH 131	General Chemistry I	
& 131L	and General Chemistry I Lab	
CH 132	General Chemistry II	
& 132L	and General Chemistry II Lab	
GEO 101	Environmental Geography	
& 101L	and Environmental Geography Lab	
GEO 102	Earth and the Environment	
& 102L	and Earth and the Environment Lab	
GY 111	Physical Geology	
& 111L	and Physical Geology Lab	
GY 112	Earth History	
& 112L	and Earth History Lab	
PH 101	Introduction to Astronomy	
& 101L	and Introduction to Astronomy Lab	
PH 104	Concepts of Physics	
& 104L	and Concepts of Physics Laboratory	
PH 114	Physics with Algebra-Trig I	
& 114L	and Alg-Trig Based Physics I Lab	
PH 115	Physics with Algebra -Trig II	
& 115L	and Alg-Trig Based Physics II Lab	
PH 201	Calculus-Based Physics I	
& 201L	and Calculus-Based Physics I Lab	
PH 202	Calculus-Based Physics II	
& 202L	and Calculus-Based Physics II Lab	
Area IV – History, Social & Behavioral Sciences <sup>1</sup>		
A. Complete one of the following:		3
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 121	World Civilization I	
HY 122	World Civilization II	

HY 135	US History to 1877	
HY 136	US History since 1877	
B. Complete the following:		3
SY 109	Introductory Sociology	
or SY 112	Social Problems	
C. Complete the following:		3
PSY 120	Introduction to Psychology	
D. Complete one of the following:		3
AN 100	Intro to Cultural Anthropology	
AN 101	Intro Archaeology-Bio Anthro	
CA 100	Intro to Communication	
CA 211	Interpersonal Comm	
CJ 105	Introduction to Criminal Justice	
ECO 215	Prin of Microeconomics	
ECO 216	Prin of Macroeconomics	
GEO 114	People, Places, Environment	
GEO 115	World Regional Geography	
GS 101	Intro to Gender Studies	
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 121	World Civilization I	
HY 122	World Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
IS 100	Global Issues	
IST 201	Seasons of Life	
NAS 101	Intro Native American Studies	
PSC 130	Intro to US Government	
PSY 250	Life Span Development	

**Area V**

A. Complete the following:		
BMD 110	Introduction to A & P I	4
or BMD 251	Human Anatomy & Physiology I	
B. Complete the following:		
BMD 111	Introduction to A & P II	4
or BMD 252	Human Anatomy & Physiology II	
C. Complete the following:		
BLY 213	Microbiology	3
or BMD 210	Microbiology in Healthcare	
D. Complete the following:		
EMS 104	First Aid/CPR	1
or HS 170	First Aid	
E. Complete the following:		3-
EMS 110	Emergency Medical Responder (or Lab Science Elective - 4)	3
F. Complete the following:		
ST 210	Stat Reason and Application	3
or ST 305	Applied Stat Health Sciences	
or BUS 245	Data Analytics I	
G. Complete the following:		
EMS 210	Medical Terminology	3

**Total Hours 65-63****Footnote**

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102, or HY 121 & HY 122, or HY 135 & HY 136).

All undergraduates must complete at least two designated writing credit (W) courses, both of which are already required in the major.

**Graduation Plan**

(122 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I	3
MA 112	Precalculus Algebra	3
BLY 101	Life Science I	4
& 101L	or General Biology I <b>and</b> General Biology I Lab	
or BLY 121 <b>and</b>		
BLY 121L		
Fine Arts Elective		3
CIS 150	Intro to Computer Applications	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
EH 102	English Composition II	3
CA 110	Public Speaking	3
SY 109	Introductory Sociology	3
2nd Lab Science Elective		4
History Elective		3
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
BMD 110	Introduction to A & P I	4
or BMD 251	or Human Anatomy & Physiology I	
PRH 401	Seminar in Health Professions	3
2nd History or Social Science Elective		3
PSY 120	Introduction to Psychology	3
<b>Hours</b>		<b>13</b>
<b>Spring</b>		
BMD 111	Introduction to A & P II	4
or BMD 252	or Human Anatomy & Physiology II	
PRH 310	Intro into Health Care Mgmt	3
2nd literature or Humanities Electives		3
EMS 110	Emergency Medical Responder	3
EMS 210	Medical Terminology	3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
BLY 213	Microbiology (or BMD Infectious Disease in Healthcare)	3
PRH 460	Issues & Trends in Health Care	3
MGT 300	Management Theory and Practice	3
PRH 440	Health Insurance/Managed Care	3
EMS 104	First Aid/CPR	1
PRH 320	Legal/Law in Health Care Admin	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ST 210	Stat Reason and Application	3
CA 275	Decision Making - Small Groups	3
PRH 340	Disaster Mgt & Event Planning	3

MGT 306	Organizational Comm Non Bus	3
General Elective		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
EH 372	Technical Writing - W <sup>1</sup>	3
FIN 300	Personal Finance	3
MGT 351	Human Resource Management	3
MKT 320	Principles of Marketing	3
General Elective		3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
IST 450	The Job Campaign	3
MGT 341	Organizational Behavior	3
General Elective		3
General Elective		3
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>119</b>

<sup>1</sup> A minimum of two Intensive Writing (W) courses are required.

### Notes

A two-course sequence is required in Literature or History: EH 215 & EH 216; EH 225 & EH 226; EH 235 & EH 236 or HY 101 & HY 102; HY 135 & HY 136.

## Occupational Therapy Department Information

(251) 445-9222

### Department of Occupational Therapy Staff

Title	Name
Chair	Donna A. Wooster, PhD.
Associate Professor	Wooster
Assistant Professors	Brock, Deacy, Hassell, O'Connor, Somerville, Thompson
Instructors	

### Mission Statement

To provide high-quality, socially relevant, and evidence-based occupational therapy education, to discover and disseminate new knowledge in the field, and to provide professional and volunteer service in order to reduce health disparities, improve health and quality of life, and meet the occupational needs of the community

### Vision Statement

Our vision is to become a highly regarded, well-recognized, inclusive occupational therapy program through the provision of innovative and effective educational opportunities, scholarly contributions to the profession, and service to underserved populations in the greater Gulf Coast community.

### Introduction

Occupational Therapy is a healthcare profession devoted to providing skilled treatment that helps individuals achieve independence in all aspects of their lives. Occupational therapists work with persons with

acute and chronic physical, psychosocial, mental, and developmental disabilities. An occupational therapist may aid in the growth and development of premature babies; create a learning environment for physically and mentally challenged children; adapt home environments for persons with stroke, cerebral palsy, spinal cord injury, and other disabilities; or create activities that are designed to restore mental health for persons with emotional, mental, or substance abuse problems. Occupational therapy focuses on "skills for the job of living" which includes all of the necessary skills for individuals to "live life to its fullest" and lead independent and satisfying lives.

**The Occupational Therapy Doctorate Degree (OTD)** is an entry-level professional program designed to enable the student to develop advanced critical reasoning skills and to prepare the graduate for professional practice in a variety of settings. Graduates will also have the capability of assuming responsibilities in the areas of administration, program development, consultation, clinical practice, and research in occupational therapy.

The program consists of 114 semester hours and is eight consecutive semesters in length. This includes 24 weeks of full-time Level II Fieldwork as required by accreditation standards. Level II Fieldwork is available in a variety of medical and community sites representing a diverse range of learning opportunities for students. Students must meet the specific site requirements (immunizations, training, background checks, drug screens, etc.) for each clinical fieldwork site in order to be eligible to attend these sites. All Level II Fieldwork must be completed within 12 months following completion of academic requirements.

This program also includes the required 14-week doctoral capstone experience and project which affords a variety of options for continued professional development. We strive to provide a high-quality, socially relevant, and evidence-based occupational therapy education that cultivates student competence. This must be completed within 12 months following completion of all level II fieldwork and academic requirements.

The program is designed to accommodate applicants who have an earned baccalaureate degree in another field.

See the Occupational Therapy Department website for specifics regarding semester-by-semester course requirements for graduation.

Accreditation Status: Candidacy Status Achieved

### ACOTE Address:

c/o Accreditation Department  
Accreditation Council for Occupational Therapy Education (ACOTE)  
7501 Wisconsin Ave., Suite 510E  
Bethesda, MD 20814  
Phone: (301) 652-AOTA  
Website: <http://www.acoteonline.org/>

**The Master of Science in Occupational Therapy (MSOT)** is an entry-level professional program designed to enable the student to develop advanced critical reasoning skills and to prepare the graduate for professional practice in a variety of settings. Graduates will also have the capability of assuming responsibilities in the areas of administration, program development, consultation, and research in occupational therapy.

The program consists of 95 semester hours and is seven consecutive semesters in length. This includes 24 weeks of full-time Level II Fieldwork as required by accreditation standards. Level II Fieldwork is available

in a variety of medical and community sites representing a diverse range of learning opportunities for students. All Level II Fieldwork must be completed within 12 months following completion of academic requirements.

The program is designed to accommodate applicants who have a baccalaureate degree in another field.

**Accreditation by:**

The University of South Alabama Occupational Therapy Program is Accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA)

**Status is: Currently accredited until 2032**

**ACOTE Address:**

c/o Accreditation Department  
Accreditation Council for Occupational Therapy Education (ACOTE)  
7501 Wisconsin Ave, Suite 510E  
Bethesda, MD 20814  
Phone: (301) 652-AOTA  
Website: <http://www.acoteonline.org/>

**\*\*\* Note we are no longer admitting students into the MSOT program**

We are only accepting applications to enter the OTD program each fall. See Areas of Study- Occupational Therapy Doctorate (OTD)

## Degrees, Programs, or Concentrations

- Occupational Therapy (MS) (p. 865)
- Occupational Therapy (OTD) (p. 867)

## Courses

### Occupational Therapy (OT)

**OT 201 Intro to Occupational Therapy 3 cr**

An introduction to the occupational therapy profession and the scope of occupational therapy practice. Includes self assessment and development strategies to enhance students' readiness for the professional component of the occupational therapy curriculum. Familiarizes students with the functions, policies and services of the University, College and Department and includes an exploration of related allied health professions.

**OT 499 Senior Honors Project - H - W 3-6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project relevant to the field of Occupational Therapy study that will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty members chaired by the honors mentor. This course is required for Honors recognition and may be repeated for up to 6 credit hours.

**OT 500 Occupation in Context 3 cr**

An in depth study of human occupation in context with emphasis on analysis of the person, the environment, and the task utilizing official occupational therapy documents. Includes an introduction to the evidence-based occupational science literature and discussion of the impact of occupation on health and wellbeing.

**OT 501 Occupational Development 4 cr**

This course will include the study of typical human development throughout the life span with emphasis on best practice screening and assessment, theories of development, and normative and non-normative influences on development.

**OT 504 Neurosci Basis of Occ Perform 3 cr**

Study of the neural development, chemistry, structure, function and pathology of the nervous system. Emphasizes the application of basic science knowledge as it relates to human occupational performance.

**OT 505 Scientific Inquiry I 2 cr**

An introduction to qualitative and quantitative research concepts and statistical methods with emphasis on evidence-based practice and outcomes research. Includes library search strategies, critical analysis of scientific literature, application of statistical methods and research designs, and scientific writing skills.

**OT 506 Research Design 1 cr**

An introduction to writing a research design proposal. Students will work in small groups and be mentored by faculty to complete a research proposal.

**OT 507 ADL/IADL Eval & Intervention 2 cr**

Occupational therapy best practice assessment and evidence-based interventions to improve participation in ADL/IADL skills in children and adolescence.

**OT 508 Experiential Learning-Peds 2 cr**

This course will consist of experiential learning activities focused on occupational therapy evaluation and interventions for ADL and IADL participation in children and adolescence.

**OT 509 OT Foundations 3 cr**

This course will promote student knowledge of the theories, frames of reference, historical and sociopolitical influences, and professional documents guiding the profession of occupational therapy. Active participation in OT professional organizations will be encouraged.

**OT 511 Neuromusculoskeletal Assessmen 1 cr**

This course is a study of the structure and function of human body in order to enhance foundational knowledge for evaluation of occupational performance. Instruction include an emphasis on biomechanical assessment of limb range of motion and manual muscle testing.

**OT 513 Neuromusculoskeletal Experient 2 cr**

This course will provide experiential learning of the structure and function of the human body and assessment of limb range of motion and muscle strength. Students will learn to administer assessments of client factors using appropriate and safe procedures and protocols.

**OT 515 Psychosocial Eval & Intervent 3 cr**

This course will promote OT best practice evaluation and evidence-based psychosocial interventions for individual and groups to promote occupational performance in various environments.

**OT 517 Occupational Evaluation I 3 cr**

An overview of the evaluation process in occupational therapy. Includes the theoretical basis of evaluation, selection of appropriate data gathering methods, use of standardized and non-standardized assessment tools, interpretation of results and documentation of evaluation findings.

**OT 521 Practicum I 1 cr**

Observation and limited participation in clinical and community-based settings. Emphasis on assessment and intervention in performance of occupations.

**OT 525 Documentation 3 cr**

Overview of basic professional writing skills including: reporting evaluation data, intervention plans, progress notes, and discharge summaries. Includes understanding the varied purposes of documentation as well as legal and ethical issues in documentation.

**OT 526 OT for Adults 2 cr**

This course explores conditions and provides instruction on occupational therapy assessments and interventions for adults with acquired impairments and disabilities affecting self-care, ADL, and IADL skills. The course will take a life span approach with emphasis on occupational performance components and context. Therapeutic interventions will emphasize current evidence and student problem-solving, critical reasoning, and performance synthesis to enhance occupational performance and adaptation.

**OT 528 Adult Experiential Learning 2 cr**

This course will consist of hands on experiences with student reflection focusing on occupational therapy assessments and interventions for adults with acquired impairments and disabilities affecting ADLs and IADLS. This course will require students to synthesize information and apply evidence-based interventions to enhance occupational performance and adaptation.

**OT 529 Profess Developmt Seminar II 1 cr**

Seminar preparing the student for group work in fieldwork settings. The role of fieldwork in education, the role of the student and fieldwork supervisor will be discussed. Problem-solving strategies will be used to facilitate professional growth. Group dynamics will be emphasized.

**OT 531 Practicum II 1 cr**

Observation and limited participation in clinical and community-based settings. Emphasis on assessment and intervention in performance of occupations.

**OT 535 Foundations Low Vision Rehab 2 cr**

An in-depth examination of conditions causing low vision and the assessment and evidence-based intervention planning in low vision rehabilitation. Includes the conditions causing low vision, assessments used in the evaluation, interpretation of assessment results and documentation of evaluation findings in intervention planning of low vision rehabilitation.

**OT 539 Professional Dev Seminar 1 cr**

Designed to facilitate students' transition from didactic and part-time fieldwork components of the curriculum to the required full-time fieldwork experience. Emphasizes professional behavior, clinical reasoning and ethical issues.

**OT 545 Scientific Inquiry II 2 cr**

The application of qualitative and quantitative research concepts and statistical methods in the development and implementation of a scholarly project. Includes data collection and preliminary analysis.

**OT 547 Research Implementation 1 cr**

Students will work in small groups with faculty mentor to conduct research study and collect data. The focus will be seeking participants, obtaining informed consent, and conducting data collection. It will include creation of spreadsheets and conducting preliminary data analysis based on data collected to date.

**OT 548 Advanced Technology in OT 2 cr**

An introduction to microcomputer utilization in Occupational Therapy. Includes an examination of software, hardware and peripheral devices that facilitate computer access and productivity. Uses of computer technology in Occupational Therapy evaluation, treatment and administration will be explored. Special fee.

**OT 549 Profess Developmt Seminar IV 1 cr**

Designed to facilitate students' transition from didactic and part-time fieldwork components of the curriculum to the required full-time fieldwork experience.

**OT 550 Level II Fieldwork - A 6 cr**

A directed experience in evaluation, planning and implementing occupational therapy services under the supervision of an experienced, certified occupational therapist. Designed to emphasize clinical reasoning, entry-level skill acquisition and integration of didactic knowledge with practice.

**OT 551 Pract. IV Psych/Soc 1 cr**

Observation and limited participation in clinical and community-based settings serving clients with psychosocial and behavioral needs. Students will study evidence-based interventions that promote performance of various age appropriate and culturally relevant occupations. Emphasis will be placed on the behavioral, psychological and/or social factors promoting or hindering performance.

**OT 552 OT School-Based Practice 3 cr**

This course will focus on Occupational Therapy in School-Based Practice Settings. Emphasis will be on evidence-based practices to enhance occupational performance in the context of school. Therapeutic interventions will emphasize problem-solving, critical reasoning, and occupational performance synthesis to enhance occupational performance and adaptation. This course will explore current legislation impacting the role of OT in the schools, the evaluation process and assessment tools for this environment and populations, working within various educational team models, transition planning, and promotion of life skill development.

**OT 553 OT and the Older Adult 2 cr**

This course focuses on the practice of occupational therapy with the older adult. Course content includes conceptual foundations in gerontology, age-related changes affecting occupational performance, evidence-based interventions, the gerontological continuum of care and the intradisciplinary and interprofessional collaborations that impact the delivery of services to this population.

**OT 554 OT & the Older Adult Exp Learn 2 cr**

This course focuses on the practice of occupational therapy with the older adult. Course content includes demonstration and analysis of assessments and evidence-based interventions used with the older adult population. This course also applies the OT process inside the gerontological continuum of care and emphasizes the intradisciplinary and interprofessional collaborations that impact the delivery of services to this population.

**OT 555 Level II Fieldwork - B 6 cr**

A directed experience in evaluation, planning and implementing occupational therapy services under the supervision of an experienced, certified occupational therapist. Designed to emphasize clinical reasoning, entry-level skill acquisition and integration of didactic knowledge with practice.

**OT 557 OT for the Young Child 3 cr**

This course will provide the best practice knowledge regarding occupational therapy for children birth to 5 years of age. Emphasis will be on early intervention and preschool services. Focus will be placed on client- and family- centered, occupation-based practice, which includes current and emerging practice areas for this population. Emphasis will be on OT evaluations and intervention planning.

**OT 558 Tech & Environ Interven in OT 3 cr**

An introduction to technology and environmental intervention (TEI; including but not limited to assistive, electronic, information, and rehabilitative) strategies used to increase, maintain or improve functional capabilities of individuals with disabilities and/or to design and implement accessible environments to support full participation in life activities. This course is designed to meet the basic level of competency in TEI for the entry level occupational therapist.

**OT 560 Professional Issues 3 cr**

A discussion of a variety of issues of professional concern including, but not limited to: OT's role in non-traditional practice arenas; professional ethics; implications of cultural diversity for health care service delivery; credentialing; health care reform; and current controversies in the field.

**OT 565 Scientific Inquiry III 3 cr**

Completion of a scholarly project and preparation of the results for presentation in professional formats.

**OT 566 Leadership 3 cr**

Explores concepts and theories of leadership, profiles occupational therapy leaders throughout history, and provides training in leadership skills needed by future professionals. Emphasizes the importance of leadership in context, interdisciplinary teaming and the nature of change processes and diffusion of innovations.

**OT 567 OT for UE Injuries and Work 2 cr**

Occupational therapy assessments and intervention for persons with developmental and acquired impairments and disabilities with emphasis on UE impairments impacting daily life skills and work. Emphasis will be placed specifically on UE and hand injuries and appropriate interventions. Therapeutic interventions will emphasize problem-solving, critical reasoning, and occupational performance synthesis to enhance occupational performance and adaptation.

**OT 568 UE Injuries & Work Experientia 2 cr**

This course will consist of hands-on experiences with student reflection that focuses on occupational therapy assessments and interventions for persons with developmental and acquired impairments and disabilities. This course emphasizes UE conditions and impairments impacting daily life skills and work.

**OT 571 Interprofessional Collaboratio 1 cr**

This course will provide in depth knowledge on OT best practice for working collaboratively with a variety of interprofessional teams. Content will include examination of IPEC competencies as well as experiential practice sessions with other disciplines.

**OT 572 Eval and Intervention Child an 2 cr**

This course will provide in depth knowledge on best practices OT evaluation and intervention for middle childhood to adolescence. Emphasis will be on outpatient settings and include both individual and group interventions. Content will included transition planning, community mobility, and best practice evidence based evaluations and interventions.

**OT 573 OT in Acute Care 2 cr**

Occupational therapy assessments and intervention for persons in the acute hospital setting with acquired impairments and/or disabilities affecting self-care and functional mobility skills. This course will have emphasis on physical rehabilitation, occupational performance components and context. Therapeutic interventions will emphasize problem-solving, critical reasoning, and occupational performance synthesis to enhance occupational performance and adaptation.

**OT 574 OT and Wellness 3 cr**

This course will provide in depth knowledge on OT best practice for prevention, health promotion, and wellness. Focus will be on development of prevention/improvement for high-risk, high-need population based interventions.

**OT 575 Advanced Professional Writing 2 cr**

Covers a variety of types of professional writing useful to occupational therapists including: grant proposals; journal articles; books; client education materials; and presentation proposals and papers. Includes both the form and content of a range of technical documents as well as the processes of writing, peer review and critique.

**OT 576 Res Analysis and Presentation 1 cr**

Students will work in small groups with faculty mentor to conduct research study and collect data. Students will complete the data analysis started in previous research classes and then complete a poster presentation of their research.

**OT 577 Management and Supervision 3 cr**

Explores the application of the principles of organizational management and supervision to the development and administration of occupational therapy programs and occupational therapy personnel.

**OT 578 Intervention Competencies 2 cr**

This course will provide an overview of evaluation and interventions to promote student clinical reasoning and hands on practice in preparation for clinical fieldwork. Content will be comprehensive of previous courses with emphasis on case-based clinical reasoning skills and appropriate selection and accurate and safe demonstration of OT evaluations and interventions. Three comprehensive practical competency exams are required. One comprehensive written exam is required. Students must pass with grade B or better to proceed to fieldwork.

**OT 580 Level II Fieldwork - C 4 cr**

A directed experience in evaluation, planning and implementing occupational therapy services under the supervision of an experienced, certified occupational therapist. Designed to emphasize clinical reasoning, entry-level skill acquisition and integration of didactic knowledge with practice.

**OT 581 Clinical Practice I 2 cr**

Explores concepts and theories of leadership and emphasizes the importance of leadership in context, interdisciplinary teaming and the nature of change processes and diffusion of innovations. Also includes a focus on clinical practice and preparing for the board exam.

**OT 582 Clinical Practice II 2 cr**

Explores concepts and theories of leadership and emphasizes the importance of leadership in context, interdisciplinary teaming and the nature of change processes and diffusion of innovations. Also includes a focus on clinical practice and preparing for the board exam. This course is a continuation of OT 581 Clinical Practice I.

**OT 585 Level II Fieldwork - D 4-12 cr**

A directed experience in evaluation, planning and implementing occupational therapy services under the supervision of an experienced, certified occupational therapist. Designed to emphasize clinical reasoning, entry-level skill acquisition and integration of didactic knowledge with practice.

**OT 590 Special Topics - 1-6 cr**

A variable topics course covering areas not available in other occupational therapy courses. A subtitle identifying the topic will be entered on the student's record.

**OT 598 Independent Study in OT 1-6 cr**

Special studies directly relevant to the practice of occupational therapy. The student will select an area of interest in which they wish to become more proficient. A faculty member will provide guided study, supervision and assistance in developing appropriate learning experiences.

**Occupational Therapy Doctorate (OTD)****OTD 611 Occupation in Context 3 cr**

An in-depth study of human occupation in context with emphasis on analysis of the person, the environment, and the task utilizing official occupational therapy documents. Includes an introduction to the evidence-based occupational science literature and discussion of the impact of occupation on health and wellbeing.

**OTD 612 Occupational Development 4 cr**

This course will include the study of typical human development throughout the life span with emphasis on best practice screening and assessment, theories of development, and normative and non-normative influences on development.

**OTD 613 OT Foundations 3 cr**

This course will promote student knowledge of the theories, frames of reference, historical and sociopolitical influences, and professional documents guiding the profession of occupational therapy. Active participation in OT professional organizations will be encouraged.

**OTD 614 Neuromusculoskeletal Assessment 1 cr**

This course is a study of the structure and function of the human body in order to enhance foundational knowledge for evaluation of occupational performance. Instruction includes an emphasis on biomechanical assessment of limb range of motion and manual muscle testing.

**OTD 615 Neuromusculoskeletal Exp. Lear 2 cr**

This course will provide experiential learning of the structure and function of the human body and assessment of limb range of motion and muscle strength. Students will learn to administer assessments of client factors using appropriate and safe procedures and protocols.

**OTD 616 Applied Neuroscience 3 cr**

Introduction to the science of the nervous system, with emphasis on principles related occupational therapy practice. Provides a framework for understanding the nervous system and the area of applied neurosciences. Includes selected laboratory study of anatomic specimens to enhance lecture, discussion, and reading materials.

**OTD 617 Professional Development Seminar 1 cr**

This course provides an overview of self-reflection and self-assessment related to continuing competence, professional behaviors, understanding and appreciation of diversity, and ethics in occupational therapy.

**OTD 621 AT Adults ADL/IADL 2 cr**

This course explores conditions and provides instruction on occupational therapy assessments and interventions for adults with acquired impairments and disabilities affecting self-care, ADL, and IADL skills. Therapeutic interventions will emphasize current evidence and student problem-solving, critical reasoning, and performance synthesis to enhance occupational performance and adaptation.

**OTD 622 Adult Experiential Learning 2 cr**

This course will consist of hand-on experiences with student reflection focusing on occupational therapy assessments and interventions for adults with acquired impairments and disabilities affecting ADLs and IADLs. This course will require students to synthesize information and apply evidence-based interventions to enhance occupation performance and adaptation.

**OTD 623 Psychosocial Eval and Intervene 3 cr**

This course will promote OT best practice evaluation and evidence based psychosocial interventions for individuals and groups to promote occupational performance in various environments.

**OTD 624 Peds ADL/IADL Eval and Intervene 2 cr**

Occupational therapy best practice assessment and evidence-based interventions to improve participation in ADL/IADL skills in children and adolescence.

**OTD 625 Peds Experiential Learning 2 cr**

This course will consist of experiential learning activities focused on occupational therapy evaluation and interventions for ADL and IADL participation in children and adolescence.

**OTD 626 Scientific Inquiry I 2 cr**

An introduction to qualitative and quantitative research concepts and statistical methods with emphasis on evidence-based practice and outcomes research. Includes library search strategies, critical analysis of scientific literature, application of statistical methods and research designs, and scientific writing skills. Students enrolled in this course will also be enrolled in OTD 627 at the same time for completion of research design proposal.

**OTD 627 Research Design 1 cr**

An introduction to writing a research proposal. Students will work in small groups with a faculty mentor to complete a written research proposal.

**OTD 628 OT Evaluation 3 cr**

An overview of the evaluation process in occupational therapy. Includes the theoretical basis of evaluation, selection of appropriate data gathering methods, use of standardized and non-standardized assessment tools, interpretation of results and documentation of evaluation findings.

**OTD 630 Level I Fieldwork PSY/MH 1 cr**

Observation and limited participation in clinical and community-based settings serving clients with psychosocial and behavioral needs. Emphasis will be placed on behavioral, psychosocial factors, and/or factors promoting or hindering performance.

**OTD 631 OT for the Young Child 3 cr**

This course will provide the best practice knowledge regarding occupational therapy for children birth to 5 years of age. Emphasis will be on early intervention and preschool services. The focus will be placed on the client-and family-centered occupation-based practice, which includes current and emerging practice areas for this population. Emphasis will be on OT evaluations and intervention planning.

**OTD 632 Documentation 3 cr**

Overview of basic professional documentation skills including: reporting evaluation data, intervention plans, progress notes, and discharge summaries. This course also includes understanding the varied purposes of documentation as well as legal and ethical issues in documentation.

**OTD 634 Foundations in Low Vision Rehabilitation 2 cr**

An in-depth examination of conditions causing low vision and the assessment and evidence-based intervention planning in low vision rehabilitation. Includes the conditions causing low vision, assessments used in the evaluation, interpretation of assessment results and documentation of evaluation findings in intervention planning of low vision rehabilitation.

**OTD 635 Technology & Environmental Interventions 3 cr**

An introduction to technology and environmental intervention (TEI: including but not limited to assistive, electronic, information, and rehabilitative) strategies used to increase, maintain, or improve functional capabilities of individuals with disabilities and/or to design and implement accessible environments to support full participation in life activities. This course is designed to meet the basic level of competency in TEI for the entry level occupational therapist.

**OTD 640 Level II Fieldwork-Physical Disability 1 cr**

Observation and participation in clinical and community-based setting. Emphasis on assessment and intervention in performance of occupations.

**OTD 641 Scientific Inquiry II 2 cr**

The application of qualitative and quantitative research concepts and statistical methods in conducting research and research data analysis. Presentation of scholarly research.

**OTD 642 Research Implementation 1 cr**

Students will work in small groups with faculty mentor to conduct research studies and collect data. The focus will be on recruiting research participants, obtaining informed consent, and data collection. This course will include conducting preliminary data analysis and making revisions to the scholarly report.

**OTD 643 OT School Based Practice 3 cr**

This course will focus on Occupational Therapy in School-Based Practice Settings. Emphasis will be on evidence-based practices to enhance occupational performance in the context of school. Therapeutic interventions will emphasize problem-solving, critical reasoning, and occupational performance synthesis to enhance occupational performance and adaptation. This course will explore current legislation impacting the role of OT in the schools, the evaluation process and assessment tools for this environment and populations, working within various educational team models, transition planning, and promotion of life skill development.

**OTD 644 OT for UE and Work Injuries 2 cr**

This course will provide instruction on common upper extremity conditions and work-related injuries that impact occupational performance. Students will learn to select and justify evidence-based, client-centered, and occupation-based measures and interventions affecting the upper extremity and work performance.

**OTD 645 OT UE Exp Learning 2 cr**

This course will provide experiential learning of common upper extremity conditions and work injuries with hands-on training of assessments and occupational therapy intervention strategies that facilitate occupational performance. Emphasis will be placed on selection and justification of evidence-based, occupation-based, and client-centered measures and interventions.

**OTD 646 OT & the Older Adult 2 cr**

This course focuses on the practice of occupational therapy with the older adult. Course content includes conceptual foundations in gerontology, age related changes affecting occupational performance, evidenced based interventions, the gerontological continuum of care and the intra-disciplinary and inter-professional collaborations that impact the delivery of services to this population.

**OTD 647 OT & the Older Adult Experiential Learning 2 cr**

This course focuses on the practice of occupational therapy with the older adult. Course content includes demonstration and analysis of assessments and evidenced-based interventions used with the older adult population. This course also applies the OT process inside the gerontological continuum of care and emphasizes the intra-disciplinary and inter-professional collaborations that impact the delivery of services to this population.

**OTD 648 Interprofessional Practice & Collaboration 1 cr**

This course will provide in depth knowledge on OT best practice for working collaboratively with a variety of interprofessional teams. Content will include examination of IPEC competencies as well as experiential practice sessions with other disciplines.

**OTD 650 Level I Fieldwork 1 cr**

Observation and participation in clinical and community-based settings. Emphasis on assessment and intervention in performance of occupations.

**OTD 651 Professional Development Seminar II 1 cr**

Designed to facilitate students' transition from didactic and part-time fieldwork components of the curriculum to the required full-time fieldwork experience. Emphasizes professional behavior, clinical reasoning and ethical issues.

**OTD 652 Management & Supervision 3 cr**

Explores the application of the principles of organizational management and supervision to the development and administration of occupational therapy programs and occupational therapy personnel.

**OTD 653 OT Child and Adolescent 2 cr**

This course will provide in depth knowledge on best practice OT evaluation and intervention for middle childhood to adolescence. Emphasis will be on outpatient settings and include both individual and group interventions. Content will include transition planning, community mobility, and best practice evidence based evaluations and interventions.

**OTD 654 OT in Acute Care 2 cr**

Occupational therapy assessments and intervention for persons in the acute hospital setting with acquired impairments and/or disabilities affecting self-care and functional mobility skills. This course will have emphasis on physical rehabilitation, occupational performance components and context. Therapeutic interventions will emphasize problem-solving, critical reasoning, and occupational performance synthesis to enhance occupational performance and adaptation.

**OTD 655 OT and Wellness 3 cr**

This course will provide in depth knowledge on OT best practice for prevention, health promotion, and wellness. Focus will be on development of prevention/improvement for high-risk, high-need population based interventions.

**OTD 656 Advanced Professional Writing 2 cr**

Covers a variety of types of professional writing useful to occupational therapists including: grant proposals, journal articles, books, client education materials, and presentation proposals and papers. Includes both the form and content of a range of technical documents as well as the processes of writing, peer review and critique.

**OTD 657 Research Analysis 1 cr**

Students will complete the data collection, conduct data analysis, and finalize the research started in previous research classes. Each research group completes their research projects, analyze the data and disseminates the results.

**OTD 658 Intervention Comps 2 cr**

This course will provide an overview of evaluation and interventions to promote student clinical reasoning and hands-on practice in preparation for clinical fieldwork. Content will be comprehensive of previous courses with emphasis on case-based clinical reasoning skills and appropriate selection and accurate and safe demonstration of OT evaluations and interventions. Three comprehensive practical competency exams are required. One comprehensive written exam is required. Students must pass this course with a grade of 80% or higher to proceed to fieldwork.

**OTD 661 Clinical Practice I 2 cr**

Explores concepts and theories of leadership and emphasizes the importance of leadership in context, interdisciplinary teaming and the nature of change processes and diffusion of innovations. Also includes a focus on clinical practice and preparing for the board exam.

**OTD 681 Capstone Development I 2 cr**

This course provides the foundational work for development of the 14-week Capstone Experience and Project. Students will engage in an examination of their interest area(s) for the capstone experience and related capstone project. Students create a professional development plan with an initial draft of learning objectives for the capstone focused on developing in-depth exposure (beyond a generalist level).

**OTD 682 Capstone Development II 1 cr**

This course is taken in sequence following OTD 681. Students will determine a site for their DEC experience based on their interest area, engage in communication with the DEC site, complete a needs assessment for the DEC experience and capstone and develop a strategic plan for the DEC experience.

**OTD 683 Doctoral Project/Research I 1 cr**

This course is designed to utilize collaboration of the faculty mentor, the student, peers, and the onsite supervisor to determine the focus of the capstone project. Students will seek and critique research articles related to project and acquire further in-depth knowledge as they prepare a preliminary focus area for the project.

**OTD 684 Capstone Development III 1 cr**

This course is taken in sequence following OTD 682. The course provides ongoing foundational work for development of the 14-week Capstone Experience and Project (OTD 680 DEC experience, OTD Doctoral Project and OTD 688 Research Project Dissemination)

**OTD 685 Doctoral Project/Research II 1 cr**

This course will promote student self-directed learning, improve the synthesis of in-depth knowledge, and require development of a project that utilizes their unique skill set and is supported by research evidence to meet the needs of a site, community, or population.

**OTD 686 Capstone Dev. IV 1 cr**

This course is taken in sequence following OTD 684. The course provides ongoing foundational work for development of the 14 week Capstone Experience and Project (OTD 680 DEC Experience, OTD Doctoral Project and OTD 688 Research Project Dissemination.)

**OTD 690 Special Topics in OT 1-6 cr**

A variable topics course covering areas not available in other occupational therapy courses. A subtitle identifying the topic will be entered on the student's record. This will allow students to further explore selected OT practice areas. Topics will vary.

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
BROCK, CATHERINE W. (cwbrock@southalabama.edu)	Occupational Therapy	Assistant Professor	BS, Univ of Alabama-Birmingham OTD, Univ of Alabama-Birmingham
DEACY, ROBIN MELINDA (rdeacy@southalabama.edu)	Occupational Therapy	Assistant Professor	BS, Univ of Alabama-Birmingham CERT, Univ of Alabama-Birmingham MS, Univ of Alabama-Birmingham CERT, Univ of Alabama-Birmingham PHD, Univ of Alabama-Birmingham
HASSELL, MATTHEW JENNINGS (mhassell@southalabama.edu)	Occupational Therapy	Assistant Professor	BA, Auburn University MBA, Auburn University MSOT, University of South Alabama OTD, Univ of Alabama-Birmingham
O'CONNOR, TRACY LYNN (toconnor@southalabama.edu)	Occupational Therapy	Assistant Professor	BS, Auburn University MS, Auburn University BS, Tuskegee University DOT, University of St Augustin- HS
SOMERVILLE, SUE ELLEN (sesomerville@southalabama.edu)	Occupational Therapy	Assistant Professor	BS, Mount Mary College MS, Mount Mary College DOT, Mount Mary College
THOMPSON, TARA JADE (tarathompson@southalabama.edu)	Occupational Therapy	Assistant Professor	BGS, Univ of Louisiana at Monroe MSOT, University of South Alabama OTD, University of St Augustin- HS
WOOSTER, DONNA M. (dawooster@southalabama.edu)	Occupational Therapy	Associate Professor	AS, Quinsigamond Community College BS, Worcester State College MS, University of Connecticut PHD, University of South Alabama

# Occupational Therapy (MS)

## Degree Requirements

Effective December 2021

Code	Title	Hours
OT 500	Occupation in Context	3
OT 501	Occupational Development	4
OT 504	Neurosci Basis of Occ Perform	3
OT 505	Scientific Inquiry I	2
OT 506	Research Design	1
OT 507	ADL/IADL Eval & Intervention	2
OT 508	Experiential Learning-Peds	2
OT 509	OT Foundations	3
OT 511	Neuromusculoskeletal Assessmen	1
OT 513	Neuromusculoskeletal Experient	2
OT 515	Psychosocial Eval & Intervent	3
OT 517	Occupational Evaluation I	3
OT 521	Practicum I	1
OT 525	Documentation	3
OT 526	OT for Adults	2
OT 528	Adult Experiential Learning	2
OT 531	Practicum II	1
OT 535	Foundations Low Vision Rehab	2
OT 539	Professional Dev Seminar	1
OT 545	Scientific Inquiry II	2
OT 547	Research Implementation	1
OT 550	Level II Fieldwork - A	6
OT 551	Pract. IV Psych/Soc	1
OT 552	OT School-Based Practice	3
OT 553	OT and the Older Adult	2
OT 554	OT & the Older Adult Exp Learn	2
OT 555	Level II Fieldwork - B	6
OT 557	OT for the Young Child	3
OT 558	Tech & Environ Interven in OT	3
OT 567	OT for UE Injuries and Work	2
OT 568	UE Injuries & Work Experientia	2
OT 571	Interprofessional Collaboratio	1
OT 572	Eval and Intervention Child an	2
OT 573	OT in Acute Care	2
OT 574	OT and Wellness	3
OT 575	Advanced Professional Writing	2
OT 576	Res Analysis and Presentation	1
OT 577	Management and Supervision	3
OT 578	Intervention Competencies	2
OT 581	Clinical Practice I	2
OT 582	Clinical Practice II	2
Elective Course		1
<b>Total Hours</b>		<b>95</b>

## Expenses

Students admitted in the Occupational Therapy program will be charged a matriculation deposit of \$300 required to secure a seat in the entering

class. This amount is not refundable but will be applied towards tuition expenses after classes begin.

Students should be prepared for extra expenses associated with professional studies including books, local travel to and from fieldwork sites and out-of-town travel and living expenses during Level II Fieldwork assignments. Special lab fees are assessed for the following courses:

Abbr	Course Description	Fee
OT 500	Occupation in Context	\$30.00
OT 501	Occupational Development I	\$21.00
OT 504	Neuroscientific Basis of Occup Perf	\$70.00
OT 508	Experiential Learning	\$26.00
OT 513	Neuromusculoskeletal Experiential Learning	\$30.00
OT 515	Psychosocial Evaluation & Intervention	\$26.00
OT 517	Occupational Evaluation I	\$50.00
OT 521	Practicum I	\$50.00
OT 528	OT for Adult Experiential Learning	\$65.00
OT 531	Practicum II	\$50.00
OT 535	Foundations in Low Vision Rehabilitation	\$32.00
OT 545	Scientific Inquiry II	\$25.00
OT 550	Level II Fieldwork (A)	\$5.00
OT 551	Practicum III	\$50.00
OT 552	School Based OT Practice	\$38.00
OT 554	OT and the Older Adult Experiential Learning	\$32.00
OT 555	Level II Fieldwork (B)	\$5.00
OT 557	OT for the Young Child	\$35.00
OT 558	Technology and Environmental Interventions in OT	\$50.00
OT 568	UE/Work Experiential Learning	\$85.00
OT 572	Evaluation & Intervention Child & Adolescence	\$33.00
OT 573	OT in Acute Care	\$30.00
OT 574	OT & Wellness	\$13.00
OT 578	Intervention Competencies	\$40.00
OT 582	Clinical Practice 2	\$25.00

Retention Policies In accordance with the Policies of the University of South Alabama Graduate School:

- A minimum overall 3.0 GPA on all work attempted in the student's specific program of study is required. A maximum of two courses with the grade of "C" may be counted toward a degree program.

- Any term in which a graduate student drops below a 3.0 GPA, the student is placed on probationary status and has a period of two terms to attain a 3.0 GPA or be dismissed from the Graduate School.

In addition, the following Departmental Retention Policies apply:

- Students in the Master of Science in Occupational Therapy degree program are required to achieve a minimum grade of "C" in each course in the occupational therapy curriculum. This minimum grade of "C" reflects only the letter grade since many courses will require an 80% or 90% competency in order to be considered passing level.
- A student who receives a grade below "C" will be academically dismissed.
- Any combination of nine (9) semester hours of grades of "C" in OT courses will result in academic dismissal.
- Students who earn more than two "C" grades in any OT courses will result in academic dismissal
- If for any reason a student must withdraw from the occupational therapy program, re-admission will require approval of the department chairperson and the Dean of the Pat Capps Covey College of Allied Health Professions.
- All occupational therapy coursework taken prior to Level II Fieldwork must be successfully completed with a grade of "C" or better and a minimum GPA of 3.0 in order for a student to be eligible to proceed with Level II Fieldwork.
- Level II Fieldwork will be graded as Pass/Fail using the criterion scores developed by the American Occupational Therapy Association. A student will be allowed to withdraw from fieldwork, without penalty, under special circumstances, for example, a serious illness/newly acquired disability. Withdrawal from Level II Fieldwork requires the recommendation of the Academic Fieldwork Coordinator and the permission of the Department Chairperson. All repeat fieldwork experiences must be completed within one year.
- If a student fails a Level II Fieldwork course (OT 550, OT 555), a "U" or unsatisfactory will be recorded as the grade. If the student is permitted to repeat the Level II Fieldwork course, the student may be required to complete remediation tasks prior to repeating the course. The Academic Fieldwork Coordinator will schedule the repeated fieldwork at the earliest available time, but no later than 12 months following completion of all other academic requirements. A student failing to satisfactorily complete two out of three attempts of the 12-week fieldwork placements (OT 550, OT 555) shall be dismissed from the program.

**Note:** In some semesters, courses may not start and/or finish during the regular University beginning and ending dates for the semester. For example, one course may start at the beginning of a semester and finish at the semester midpoint, while another course starts at the midpoint of the semester and finishes at the semester's end. Accreditation: The Department of Occupational Therapy MSOT Program is accredited by:

Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA)  
4720 Montgomery Lane, Suite 200  
Bethesda, MD 20814

ACOTE's phone number is (301) 652-6611 (x2914). Graduates of the program will be eligible to sit for the national certification examination for the occupational therapist administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be an Occupational Therapist, Registered (OTR). Most states require licensure in order to practice;

however, state licenses are usually based on the results of NBCOT Certification Examination. A felony conviction may adversely affect a graduate's ability to sit for the NBCOT certification examination or attain state licensure.

Clinical fieldwork placements will be provided, as safely available, to our students and may require variations in dates for starting and for completion of the clinical rotations. In addition, simulation may be utilized for the completion of level I fieldwork

## Graduation Plan

(95 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
OT 500	Occupation in Context	3
OT 501	Occupational Development	4
OT 509	OT Foundations	3
OT 511	Neuromusculoskeletal Assessment	1
OT 513	Neuromusculoskeletal Experient	2
OT 517	Occupational Evaluation I	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
OT 505	Scientific Inquiry I	2
OT 506	Research Design	1
OT 507	ADL/IADL Eval & Intervention	2
OT 508	Experiential Learning-Peds	2
OT 515	Psychosocial Eval & Intervent	3
OT 526	OT for Adults	2
OT 528	Adult Experiential Learning	2
OT 535	Foundations Low Vision Rehab	2
OT 521	Practicum I (- 101)	1
<b>Hours</b>		<b>17</b>
<b>Summer</b>		
OT 525	Documentation	3
OT 552	OT School-Based Practice	3
OT 553	OT and the Older Adult	2
OT 554	OT & the Older Adult Exp Learn	2
OT 551	Pract. IV Psych/Soc	1
OT 590 or AHP 510	Special Topics - or IPE Autism Spectrum Disorders	1
<b>Hours</b>		<b>12</b>
<b>Second Year</b>		
<b>Fall</b>		
OT 504	Neurosci Basis of Occ Perform	3
OT 545	Scientific Inquiry II	2
OT 547	Research Implementation	1
OT 557	OT for the Young Child	3
OT 558	Tech & Environ Intervent in OT	3
OT 567	OT for UE Injuries and Work	2
OT 568	UE Injuries & Work Experientia	2
OT 531	Practicum II (- 101)	1
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
OT 539	Professional Dev Seminar	1
OT 571	Interprofessional Collaboratio	1
OT 572	Eval and Intervention Child an	2
OT 573	OT in Acute Care	2
OT 574	OT and Wellness	3
OT 575	Advanced Professional Writing	2
OT 576	Res Analysis and Presentation	1

OT 577	Management and Supervision	3
OT 578	Intervention Competencies	2
<b>Hours</b>		<b>17</b>
<b>Summer</b>		
OT 550	Level II Fieldwork - A	6
OT 581	Clinical Practice I (online)	2
<b>Hours</b>		<b>8</b>
<b>Third Year</b>		
<b>Fall</b>		
OT 555	Level II Fieldwork - B	6
OT 581	Clinical Practice I (online)	2
<b>Hours</b>		<b>8</b>
<b>Total Hours</b>		<b>95</b>

See Degree Requirements

## Occupational Therapy (OTD)

### Department of Occupational Therapy Website

<http://www.southalabama.edu/colleges/alliedhealth/ot> (<https://www.southalabama.edu/colleges/alliedhealth/ot/>)

Go to the programs drop down menu- choose Occupational Therapy Doctorate Program

Occupational Therapy is a healthcare profession devoted to providing skilled treatment that helps individuals achieve independence in all aspects of their lives. Occupational therapists work with persons with acute and chronic physical, psychosocial, mental, and developmental disabilities. An occupational therapist may aid in the growth and development of premature babies; create a learning environment for physically and mentally challenged children; adapt home environments for persons with stroke, cerebral palsy, spinal cord injury, and other disabilities; or create activities that are designed to restore mental health for persons with emotional, mental, or substance abuse problems. Occupational therapy focuses on "skills for the job of living" which includes all of the necessary skills for individuals to "live life to its fullest" and lead independent and satisfying lives.

**The Doctorate in Occupational Therapy (OTD)** is an entry-level professional program designed to enable the student to develop advanced critical reasoning skills and to prepare the graduate for professional practice in a variety of settings. Graduates will also have the capability of assuming responsibilities in the areas of administration, program development, consultation, advocacy, and research in occupational therapy.

The program consists of 114 semester hours and is eight consecutive semesters in length. Courses include a variety of topics and include lectures, hands-on labs with experiential learning, simulation online, and simulation live with standardized patients in our state of the art USA Simulation building. Most courses in the program are web-blended allowing for a combination of in-seat and online learning. Fully online courses are embedded during the last year while students are out at clinical and DEC sites

### Level I Fieldwork

Students will complete level I fieldwork at various clinical and community sites while taking related coursework. These experiences will enhance student knowledge and understanding of OT practice. Each student will complete three level I fieldwork experiences allowing them

to explore a variety of sites and populations. Students must meet the site-specific requirements to be accepted at that site. Level I fieldwork performance is graded by the onsite supervisor and students must pass these experiences to progress in the coursework.

### Level II Fieldwork

After completion of all required OT coursework with adequate grades from the first five semesters, students will progress to level II fieldwork. This includes 24 weeks of full-time Level II Fieldwork as required by accreditation standards. OTD students will complete two Level II rotations, 12 weeks each. Level II Fieldwork is available in a variety of medical and community sites representing a diverse range of learning opportunities for students. All Level II Fieldwork must be completed within 12 months following completion of academic requirements. Students must meet the specific site requirements (immunizations, background checks, drug screens, prior training, etc..) for each clinical fieldwork site to be eligible to attend these sites. Student performance is graded by the onsite supervisor and students must demonstrate adequate performance in a variety of OT skills to pass each rotation. Students must pass both Level II fieldwork rotations to be eligible to progress to the Doctoral Capstone Experience (DEC) component of the curriculum.

### Doctoral Capstone Experience (DEC)

The DEC is an integral part of our OT curriculum. The goal is to provide in-depth exposure to one or more of the following- clinical practice research, administration, leadership, program and policy development, advocacy, education, and theory development. It consists of two parts the capstone project and the capstone experience. The DEC includes a student-centered project designed through collaboration with faculty and the DEC setting. Each student will complete an individual capstone project to demonstrate the synthesis and application of newly gained knowledge based on the individualized specific objectives and aligns with our OTD mission and curriculum and also aligns with the needs of the onsite partner. Each student will complete a 14-week capstone experience with a partner agency which must be started after completion of all coursework, Level I and Level II fieldwork, and completion of preparatory activities. The Capstone must be completed within 12 months following completion of all academic requirements and Level II fieldwork.

### Accreditation

The University of South Alabama entry-level Occupational Therapy Doctoral (OTD) degree program has applied for accreditation and has been granted Candidacy Status by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA).

#### ACOTE Contact Information

Address:

7501 Wisconsin Ave, Suite 510E, Bethesda, MD 20814

Phone:

(301) 652-AOTA

Website:

[www.acoteonline.org](http://www.acoteonline.org) (<https://acoteonline.org/>)

Current Status: **Candidacy Granted**

This new OTD program must have a pre-accreditation review, complete an on-site evaluation, and be granted Accreditation Status before its

graduates will be eligible to sit for the national certification examination for the occupational therapist administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be an Occupational Therapist, Registered (OTR). In addition, all states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination. Note that a felony conviction may affect a graduate's ability to sit for the NBCOT certification examination or attain state licensure.

OTD students must successfully complete 24 weeks of Level II fieldwork, as well as, the individual 14-week capstone experience within 12 months following the completion of the didactic portion of the program. The doctoral capstone experience must be started after completion of all required coursework and Level II fieldwork as well as completion of preparatory activities defined in the 2023 OTD Standard D.1.3.

ACOTE® accredited occupational therapy and occupational therapy assistant educational programs satisfy the states' educational requirements in all states, the District of Columbia, and Puerto Rico. Students graduating from an ACOTE® accredited occupational therapy and occupational therapy assistant educational program are eligible to take the National Board for Certification in Occupational Therapy (NBCOT) certification exam and apply for licensure in all states, the District of Columbia, and Puerto Rico. For more information regarding state qualifications and licensure requirements, please refer to the AOTA State Licensure webpage (<https://www.aota.org/career/state-licensure/>).

The University of South Alabama Occupational Therapy Program is Accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA)

## Degree Requirements

The requirements for the Occupational Therapy Doctorate Degree include all of the following:

1- Students must pass with grade C or better each course within the OTD program

\*\* Note the number of C grades allowed is very limited

2- Students must complete all 114 graduate credit hours with appropriate grades to meet graduate school and OT department requirements

3- Students must perform well on level II fieldwork and receive passing grades on the student evaluations for two different rotations

4- Students must perform well and complete all aspects of the doctoral experience and the doctoral project to earn passing grades on these courses as well

\*\*The grading system for graduate-level includes "A", "B", "C", and "F". A minimum overall Grade Point Average (GPA) of 3.0 must be maintained throughout the program. A maximum of eight-semester credits OR two-course grades with the grade of "C" may be counted toward the OTD clinical degree program. Students who earn more than 8 credit hours of C grade or final C grade in more than 2 courses will be dismissed from the program. Students may, with the approval of the departmental faculty, repeat a course in which a "C" has been earned. Any grade lower than a "C" in any course will result in academic dismissal from the program.

Students may appeal dismissal in accordance with the CAHP Appeals Process for Academic Dismissal, but reinstatement is not automatically granted and will be evaluated on a case-by-case basis.

## Graduation Plan- 114 credit hours, two level II fieldwork rotations, DEC

### Year One Fall

*OTD 611 Occ in Context	3 cr
*OTD 612 Occ Development	4 cr
*OTD 613 OT Foundations	3 cr
OTD 614 NMS Assessment	1 cr
OTD 615 NMS Exp Learning	2 cr
*OTD 616 Applied Neuro	3 cr
OTD 617 Prof Dev Sem I	1 cr

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Total = 17 credits

### Year One Spring

*OTD 621 OT Adults ADL-	2 cr
OTD 622 Adult Exp Learning	2 cr
*OTD 623 OT Psych/Cog	3 cr
*OTD 624 OT Peds ADL/IADL	2 cr
OTD 625 Peds Exp Learning	2 cr
*OTD 626 Scientific Inq. I	2 cr
*OTD 627 Research Design	1 cr
*OTD 628 OT Evaluation	3 cr

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Total= 17 credits

### Year One Summer

OTD 630-FW I Psy/MH (Clinical)	1 cr
*OTD 631 OT Young Child	3 cr
*OTD 632 Documentation	3 cr
*OTD 690 or AHP 510- Elective	1 cr
*OTD 634 Low Vision	2 cr
*OTD 635 Technology	3 cr
*OTD 681 Capstone Dev I	2 cr

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Total= 15 credits

### Year Two Fall

OTD 640-FW I Phys Dys (Clinical)	1 cr
*OTD 641 Sci Inquiry II	2 cr
*OTD 642 Research Imp.	1 cr
*OTD 643 School-Based OT	3 cr
*OTD 644 OT UE Inj/Work	2 cr
OTD 645 OT UE Exp Learning	2 cr
*OTD 646 OT Older Adults	2 cr
OTD 647 Older Adult Exp	2 cr
*OTD 648 IPP & Coll	1 cr
*OTD 682 Capstone Dev II	1 cr

\*OTD 683 Doc Project/Res I 1 cr

Total= 18 credits

**Year Two Spring**

OTD 650 FW I – General (Clinical) 1 cr  
 OTD 651 Prof Dev Seminar II 1 cr  
 \*OTD 652 Management & Sup 3 cr  
 \*OTD 653 OT Child/Adol. 2 cr  
 \*OTD 654 OT Acute Care 2 cr  
 \*OTD 655 OT and Wellness 3 cr  
 \*OTD 656 Adv Prof Writing 2 cr  
 \*OTD 657 Research Analysis 1 cr  
 OTD 658 Intervention Comps 2 cr  
 OTD 684 Capstone Dev. III 1 cr  
 \*OTD 685 Doc Project/ Res II 1 cr

Total= 19 credits

**Year Two Summer**

OTD 660 FW II (A) (12-week clinical rotation) 6 cr  
 OTD 661 OT Clinical Practice (online) 2 cr  
 OTD 686 Capstone Dev IV (online) 1 cr

Total= 9 credits

**Year Three Fall**

OTD 670 FW II (B)- (12- week clinical rotation) 6 cr  
 OTD 671 Clinical Practice II (online) 2 cr  
 OTD 687 Doc Project III (online) 1 cr

Total= 9 credits

**Year Three Spring**

OTD 680 DEC Experience (14-week capstone rotation) 8 cr  
 \*OTD 688 Research Project Dissemination 2 cr

Total= 10 credits

\* means web-blended course

Total Overall= 114 credits

## Physical Therapy Department Information

(251) 445-9330

Department of Physical Therapy website

<https://www.southalabama.edu/colleges/alliedhealth/pt> (<https://www.southalabama.edu/colleges/alliedhealth/pt/>)

## Mission Statement

The University of South Alabama Department of Physical Therapy develops compassionate physical therapists, who are movement specialists and primary care leaders in health and wellness, prepared to provide excellent evidence-based care and service while engaging in scientific inquiry to meet the healthcare needs of diverse communities.

## Physical Therapy Administrative Staff

Title	Name
Chair/DPT Program Director	Shawn Drake
Department Secretary	Angela Smith
Coord. for Admissions and Clinical Edu	Jennifer Patterson

A physical therapist (PT) is a healthcare professional who provides direct patient care to persons that have movement dysfunction. They treat functional limitations resulting from mechanical, physiological, and/or developmental impairments to help individuals maximize physical function, activity, and participation. Physical therapists have the necessary training to meet the total range of primary patient care responsibilities involved in preventing disabilities and promoting restoration of function to the physically impaired, including musculoskeletal, neuromuscular, cardiovascular/pulmonary and integumentary disorders that interfere with physical function. The Physical Therapist performs an examination and then uses clinical reasoning to plan and implement patient-centered PT intervention. Physical Therapists practice in rehabilitation centers, private practices, hospital-based and outpatient-based centers, home health care, sports medicine centers, school systems, and in universities to restore movement and function.

## Degrees, Programs, or Concentrations

- Physical Therapy (DPT) (p. 873)

### PT 600 Human Anatomy I 3 cr

A comprehensive study of human anatomy concentrating on the nervous, skeletal, arthrodiol, muscular and circulatory systems of the superficial back, upper extremities, head, neck, and face. Lab consists of prosected material and dissection of aforementioned body parts. Skeletal models and diagnostic imaging will be introduced of each area of dissection. Labs also include surface palpation on live human subjects. Special fee.

### PT 601 Human Anatomy II 3 cr

A comprehensive study of human anatomy concentrating on the nervous, skeletal, arthrodiol, muscular and circulatory systems of the deep back, trunk, pelvis, and lower extremity. Lab consists of prosected material and dissection of the aforementioned body parts. Skeletal models and diagnostic imaging will be introduced for each area of dissection. Labs also include surface palpation on live human subjects. Special fee.

**Prerequisite:** PT 600 (may be taken concurrently) Minimum Grade of C

### PT 602 Life Span Human Development 2 cr

A study of the process of typical human development and aging across the life span, including neuromotor development in childhood and changes associated with aging.

**Prerequisite:** PT 682 Minimum Grade of S

**PT 603 Neuroscience in Phys Therapy 3 cr**

A survey of the structure and function of the nervous system, with emphasis on principles related to physical therapy practice. Includes laboratory study of anatomic specimens. Special fee.

**Prerequisite:** PT 601 Minimum Grade of C and PT 682 Minimum Grade of S

**PT 604 Pathophysiology I 2 cr**

A physiological approach to the study of pathological changes in the human body brought about by trauma or disease, including cell injury, inflammation, immunopathology, neoplasia, infections, and the musculoskeletal and endocrine systems.

**Prerequisite:** PT 601 Minimum Grade of C

**PT 605 Human Learning 1 cr**

This course incorporates application of the principles of human learning to patient/client management including patient, family/caregivers, and community education. Roles of the physical therapist as a clinical educator and academician are discussed as well as opportunities/responsibilities for lifelong learning and professional development.

**Prerequisite:** PT 673 Minimum Grade of C

**PT 606 Pharmacology in Rehabilitation 2 cr**

A study of pharmacological principles in relation to rehabilitation, with emphasis on the possible benefits and side-effects of chemotherapeutic agents on patients receiving physical therapy treatment.

**Prerequisite:** PT 607 Minimum Grade of C and PT 682 Minimum Grade of S

**PT 607 Pathophysiology II 2 cr**

A physiological approach to the study of pathological changes in the human body brought about by trauma or disease, including vascular, hematopoietic, nutritional, neurologic, urogenital, GI and hepatobiliary systems.

**Prerequisite:** PT 604 Minimum Grade of C

**PT 610 Principles of Research & EBP 2 cr**

An introduction to evidence-based practice as it relates to physical therapy, including basic understanding of research designs and research statistics, formulating appropriate clinical questions based on patient/client, accessing current evidence using databases and other resources to answer clinical/practice issues, and summarizing evidence for clinical case application.

**PT 611 Applied Research in Physical Therapy 1 cr**

This course prepares students with essential skills and knowledge required to excel in conducting and critically evaluating clinical research within the field of physical therapy. Students will develop a comprehensive understanding of key concepts, methodologies and statistical analyses relevant to contemporary research in physical therapy.

**PT 612 Advanced Healthcare Analytics: Statistical Methods and Health Informatics 2 cr**

In today's data-driven world, the intersection of statistical methods and health informatics plays a crucial role in shaping healthcare research and decision-making. This research course is designed to equip students with the skills and knowledge needed to conduct cutting-edge research in the field of healthcare analytics.

**Prerequisite:** PT 611 Minimum Grade of P

**PT 613 Clinical Case Report 2 cr**

This course allows the student to develop a clinical case report based on a patient the student has treated during a full-time internship, an administrative/education process or a clinical risk management situation. An in-depth analysis of research from recent publications related to the case is required. The student will prepare a written case report and a presentation in seminar format.

**Prerequisite:** PT 612 Minimum Grade of C and PT 674 Minimum Grade of C

**PT 620 Clinical Kinesiology 3 cr**

A study of human movement as it relates to clinical physical therapy practice, with an emphasis on biomechanical principles.

**Prerequisite:** (PT 600 Minimum Grade of C and PT 601 Minimum Grade of C)

**PT 621 Introductory PT Skills 4 cr**

An introduction to the principles and techniques of patient care utilized in physical therapy practice. These basic therapeutic skills include, but are not limited to, positioning, draping, patient transfers, assistive gait devices, wheelchair use, and basic examination. Techniques including assessment of joint range of motion, muscle strength and length testing, massage, and soft tissue mobilization are presented. Includes laboratory study.

**PT 622 Clinical Exercise Physiology 4 cr**

A study of the effect of physical activity on human physiology with an emphasis on the musculoskeletal, cardiovascular, and endocrine systems. Modes of exercise, environmental considerations, and selected clinical populations are also covered in this course. Includes laboratory study.

**PT 623 Movement Analysis 1 cr**

This course is designed as an introduction to motor control and movement analysis focusing on normal postural control and gait in adult populations.

**Prerequisite:** PT 601 Minimum Grade of C

**PT 624 Movement Analysis II 1 cr**

This course is designed to expose students to concepts of motor control and movement analysis for various functional tasks in adult populations.

**PT 625 Therapeutic Intervention 4 cr**

A study of specific techniques of therapeutic intervention in physical therapy practice including electrophysical agents and manual therapy techniques. The electrophysical agents unit will include the physical principles, physiological effects, therapeutic uses and clinical application of thermal, mechanical, electrical and photic energy. The manual intervention unit will include manual therapy techniques including soft tissue massage. Includes laboratory study. Special fee.

**Prerequisite:** PT 621 Minimum Grade of C

**PT 626 Health Prom & Prev in PT 2 cr**

A course to identify disablement risk factors and provide educational intervention to prevent certain diseases and facilitate a positive change in the health behavior of patients.

**Prerequisite:** PT 622 Minimum Grade of C

**PT 627 Medical Screening 2 cr**

A course focusing on the use of screening tests and clinical tools to enhance the therapist's role as an independent practitioner with the ability to identify medical conditions of concern that require referral to an appropriate health care provider.

**Prerequisite:** PT 607 Minimum Grade of C

**PT 628 Mobility Ortho & Prosthetics 2 cr**

**Prerequisite:** PT 620 Minimum Grade of C

**PT 631 Musculoskeletal Disorders I 3 cr**

Etiology, pathophysiology, medical management, and physical therapy examination of selected musculoskeletal disorders. Includes laboratory studies.

**Prerequisite:** (PT 601 Minimum Grade of C and PT 600 Minimum Grade of C and PT 620 Minimum Grade of C and PT 621 Minimum Grade of C and PT 622 Minimum Grade of C)

**PT 632 Musculoskeletal Disorders II 4 cr**

A continuation of PT 631 that emphasizes physical therapy examination, diagnostic procedures, and radiology associated with select musculoskeletal disorders. Includes laboratory study.

**Prerequisite:** PT 631 (may be taken concurrently) Minimum Grade of C

**PT 633 Musculoskeletal Disorders III 2 cr**

A continuation of PT 632 that includes emphasizes physical therapy intervention of selected musculoskeletal disorders. Includes laboratory study.

**Prerequisite:** PT 632 Minimum Grade of C

**PT 634 Musculoskeletal Disorders IV 3 cr**

A continuation of PT 633 that includes etiology, diagnostic procedures and radiography, medical management, physical therapy examination, evaluation, and intervention of selected musculoskeletal disorders with an emphasis on the cervical and thoracic spine. Includes laboratory study.

**Prerequisite:** PT 633 (may be taken concurrently) Minimum Grade of C

**PT 635 Musculoskeletal Disorders V 2 cr**

Special topics in the management of musculoskeletal conditions including, but not limited to, industrial medicine, sports physical therapy, and chronic musculoskeletal issues. Includes laboratory study.

**Prerequisite:** PT 634 Minimum Grade of C

**PT 640 Neuromusc PT Exam/Eval 4 cr**

This course includes study of the principles and concepts of normal human movement and PT examination/evaluation in patients with disorders of the neuromuscular systems. The course will focus on examination (patient/client history, systems review, tests and measurements), evaluation of examination data (clinical decision-making), with formulation of problem list, functional goals and PT plan of care. Includes laboratory study.

**Prerequisite:** PT 602 Minimum Grade of C and PT 603 Minimum Grade of C

**PT 641 Ped Neuromusc PT Exam/Eval 2 cr**

This course prepares the student to provide services to children with special health care needs/disabilities and their families in a manner consistent with family-centered care; includes patient/family history, systems review, and tests and measures and opportunities for clinical decision-making and establishing a plan of care based on examination data with emphasis on prognosis for a wide variety of pediatric diseases, conditions, and syndromes impacting typical development. Review of pediatric practice settings and legislation, medical management, pharmacologic treatment, radiographic imaging and other diagnostic testing related to neuromuscular disorders and developmental delay are included.

**PT 642 Neuromuscular PT Intervention 4 cr**

A course to follow PT 640 with added emphasis on principles and concepts of physical therapy intervention in patients with disorders of the neuromuscular systems. Includes laboratory study.

**Prerequisite:** PT 640 Minimum Grade of C

**PT 643 Physical Therapy in Neuromuscular Case Applications 2 cr**

This course includes the application of current neuromuscular physical therapy principles in developing a client centered physical therapy examination, evaluation, and intervention plan. The course will focus on developing clinical reasoning through application to patient cases.

**Prerequisite:** PT 642 Minimum Grade of C

**PT 644 PT Pediatric Interventions 2 cr**

This course is the second in a sequence of two courses that provides an in-depth exploration of assessment and intervention procedures used with pediatric patient populations. The focus of this course will be on conditions present from birth or acquired in childhood. Clinical competence in the treatment of children with movement dysfunction is to be developed.

**Prerequisite:** (PT 641 Minimum Grade of C)

**PT 645 Physical Therapy for Aging Adults 1 cr**

The course will focus on primary and secondary aging processes and their impact on the physical therapy management of aging adults.

The course will include an overview of physiological changes and psychosocial aspects of aging, as well as consideration of the aging process in the evaluation and treatment of this population.

**PT 650 PT in Integumentary Disorders 4 cr**

A study of the practice of physical therapy in management of skin disorders and underlying disease with an emphasis on the patient with open wounds, including burns. Includes laboratory study.

**Prerequisite:** PT 604 Minimum Grade of C

**PT 660 PT Cardio/Pulmonary Disorders 4 cr**

A study of the principles and practice of physical therapy for patients with cardiovascular and pulmonary disease, including radiography, and medical and surgical management. Includes laboratory study.

**Prerequisite:** PT 607 Minimum Grade of C and PT 622 Minimum Grade of C and PT 682 Minimum Grade of S

**PT 671 Clinical Case Studies I 1 cr**

A case-based course providing opportunities to develop clinical judgment as part of patient management including establishment of differential diagnosis, patient prognosis, and development of a plan of care for patients with musculoskeletal disorders of peripheral joints. Students will also analyze cases involving ethical, legal and psychosocial concerns for which professional decisions and interprofessional practice or referrals are necessary.

**PT 672 Clinical Case Studies II 1 cr**

A case-based seminar designed to provide opportunities to develop clinical reasoning and communication skills as part of patient management. Students will develop skills in communicating with the healthcare team, recognizing and ameliorating barriers to patient outcomes, and developing plans of care for patients with complex health and psychosocial issues.

**Prerequisite:** PT 671 Minimum Grade of C and PT 682 Minimum Grade of S

**PT 673 Clinical Case Studies III 1 cr**

A case-based course to provide opportunities to apply clinical reasoning to promote evidence-based physical therapy practice by integrating best available evidence for patient management and to challenge the status quo of practice to raise it to the most effective level of care.

**Prerequisite:** PT 672 Minimum Grade of C

**PT 674 Clinical Synthesis & Pat Mgmt 1 cr**

A review and synthesis of physical therapy examination, evaluation, and development of a plan of care in patient management for specific clinical disorders, emphasizing clinical decision-making based on clinical experience and evidence.

**Prerequisite:** PT 627 Minimum Grade of C and PT 635 Minimum Grade of C and PT 642 Minimum Grade of C

**PT 675 Comprehensive Capstone 1 cr**

A comprehensive review of didactic material covered within the curriculum that prepares students for taking the National Physical Therapy Examination. All students must pass the final capstone exam to be awarded the DPT degree.

**PT 676 Advanced Topics in PT 1 cr**

This elective course involves advanced study (beyond entry level) of selected topics within physical practice, research, education and leadership. Topics vary from year to year.

**Prerequisite:** PT 673 Minimum Grade of S and PT 635 Minimum Grade of C and PT 642 Minimum Grade of C and PT 650 Minimum Grade of C and PT 660 Minimum Grade of C

**PT 677 Physical Therapy Licensure Board Preparation 0 cr**

This course will provide additional preparation to the physical therapy licensure exam.

**PT 680 Professional PT Practice 2 cr**

A study of physical therapy as a profession with emphasis on the history of physical therapy; role and scope of practice; professional, ethical, and legal responsibilities; licensure; physical therapy education; contemporary practice issues; and professional communication.

**PT 681 Clinical Practice Issues - W 2 cr**

This course is designed to prepare the student for clinical practice by incorporating the patient management model, clinical decision-making models, health care systems, patient documentation including electronic health records, cultural competence, universal precautions, and risk management.

**Prerequisite:** PT 680 Minimum Grade of C

**PT 682 PT Internship I 6 cr**

A planned learning experience of clinical education designed to integrate previous didactic knowledge in a full time, supervised clinical internship in Physical Therapy practice settings.

**Prerequisite:** PT 620 Minimum Grade of C and PT 625 Minimum Grade of C and PT 632 Minimum Grade of C

**PT 683 PT Internship II 8 cr**

A continuation of PT 682, providing another planned learning experience, designed to integrate previous knowledge in a full time, supervised clinical internship in Physical Therapy practice settings. Good Academic Standing with no required course retakes pending.

**Prerequisite:** PT 635 Minimum Grade of C and PT 642 Minimum Grade of C and PT 650 Minimum Grade of C and PT 660 Minimum Grade of C and PT 682 Minimum Grade of S

**PT 684 PT Internship III 6 cr**

A continuation of PT 682 and 683, providing another planned learning experience, designed to integrate previous knowledge in a full time, supervised clinical internship in Physical Therapy practice settings. Good Academic Standing with no required course retakes pending.

**Prerequisite:** (PT 683 Minimum Grade of C

**PT 685 Management of PT Practice 3 cr**

A study of current organizational and management principles and issues related to health care delivery systems with special emphasis on the current and future roles of Physical Therapy.

**Prerequisite:** PT 687 Minimum Grade of C

**PT 686 PT Internship IV 6 cr**

A continuation of PT 682, 683 and 684, providing another planned learning experience, designed to integrate previous knowledge in a full time, supervised clinical internship in physical therapy practice settings. Good academic standing with no required retakes pending.

**Prerequisite:** (PT 684 (may be taken concurrently) Minimum Grade of S

**PT 687 Collaborative Practice in Physical Therapy 1 cr**

This course offers an in-depth exploration of collaborative practice within the profession of physical therapy, emphasizing interprofessional teamwork, effective communication strategies, and person- and family-centered care. Students will examine the importance of collaboration in optimizing patient outcomes and promoting holistic care. Through interactive case studies, guest lectures, and class discussions, students will develop essential skills for effective collaboration, such as shared decision-making, role delineation, and cultural sensitivity.

**Prerequisite:** PT 681 Minimum Grade of C

**PT 689 Evidence Library Skills 1 cr**

Discussion of evidence-based practice (EBP) and the importance of literature searching and information management skills.

**PT 690 Update in Exercise Physiology 1 cr**

This course reviews the effects of exercise intervention upon human physiology and the acute and chronic adaptations associated with physical activity.

**PT 691 Clinical Reasoning 2 cr**

This course should be one of the first courses taken and will include principles of evidence-based practice, access and evaluation of scientific literature, and application to clinical decision making in specific patient populations.

**PT 692 Applied Human Movement 2 cr**

This course will focus on recent advances in the understanding of human movement with particular emphasis on biomechanics, kinesiology and motor control.

**PT 693 Adv in Musculoskeletal PT 2 cr**

An interactive discussion and exploration of physical therapy practice for populations with orthopedic disorders, including examination, intervention and outcome. The focus will be on evidence-based clinical practice. Course topics will include updated research on operative and non-operative procedures for the peripheral joints and spine, spinal and peripheral joint diagnostic imaging (radiography), pharmacology, therapeutic exercise, clinical reasoning, and lifespan issues with a focus on geriatrics.

**PT 694 Adv in Neuromuscular PT 2 cr**

An interactive discussion and exploration of physical therapy practice for populations with neuromuscular disorders, including examination through intervention and outcomes. The focus will be on clinical practice in this population based on evidence. The course will include diagnostic imaging (radiography), pharmacology, therapeutic exercise, clinical reasoning, and lifespan issues with a focus on geriatrics.

**PT 695 Adv in Integumentary PT 2 cr**

An interactive discussion of new developments in skin and wound care with an emphasis on development of a plan of care that evolves over the episode of care, prevention of recurrence, and the interaction with the patient and other health care providers.

**PT 696 Adv in Cardiovasc/Pulmonary PT 2 cr**

An in-depth, interactive discussion of issues related to the examination, evaluation, and plan of care for patients/clients with primary and secondary cardiovascular and pulmonary disorders across the lifespan. Clinical reasoning, pharmacology and imaging techniques will be emphasized.

**PT 697 DPT Directed Study 1-3 cr**

Directed research or comprehensive review of evidence-based literature completed in a clinical area of interest under the supervision of a faculty mentor. The student will document incorporation of course content into their current clinical practice. This course may be repeated up to two times with a different focus-topic each time.

**PT 698 Professional Issues/Ethics 2 cr**

Discussion of current professional issues including clinical practice, management, legal, ethical/moral and psychosocial topics embedded within the current health care market faced by health care providers. This course will include interactive discussions among students and instructor and will include literature to support discussion topics.

**PT 699 DPT Seminar - 1-8 cr**

An elective seminar to update information in specific areas of study. Course number may be repeated three times.

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
ANDREWS, TARA CHILDERS (andrews@southalabama.edu)	Physical Therapy	Assistant Professor	BS, Auburn University DPT, University of South Alabama
BURLEY, TROY RAYMOND (troyburley@southalabama.edu)	Physical Therapy	Assistant Professor	BS, California Polytechnic-San Luis Obispo MPT, Western U Of Health Sciences PHD, Rocky Mtn Univ of Health Professions
CAHANIN, RICHARD LOUIS (rcahanin@southalabama.edu)	Physical Therapy	Assistant Professor	BS, Louisiana State University DPT, University of South Alabama PHD, Rocky Mtn Univ of Health Professions
COALE, TRACEY LYNNE (traceycoale@southalabama.edu)	Physical Therapy	Assistant Professor	AS, Coastal Alabama Comm College BSPT, University of South Alabama DPT, Boston University
DRAKE, SHAWN M. (sdrake@southalabama.edu)	Physical Therapy	Professor	BS, Arkansas State University-Main Campus MS, Arkansas State University-Main Campus PHD, University of Southern Mississippi MPT, Arkansas State University-Main Campus
SAALE, BLAIR PURCELL (bsaale@southalabama.edu)	Physical Therapy	Assistant Professor	BA, Furman University DPT, Belmont University
STREHLER, KEVIN YANNICK EMANUEL (kstreher@southalabama.edu)	Physical Therapy	Assistant Professor	BS, Minnesota St University-Mankato  PHD, University of Florida DPT, University of Florida
WARREN, PRESTON PALMER (ppwarren@southalabama.edu)	Physical Therapy	Assistant Professor	BFA, University of South Alabama DPT, University of South Alabama MD, University of South Alabama
WHITE, LAURA WILSON (laurawhite@southalabama.edu)	Physical Therapy	Assistant Professor	BS, Baylor University MS, Univ of Alabama-Birmingham DSCPT, Univ of Alabama-Birmingham

### Emeritus Faculty

Dennis Fell, PT, MD

Charles Grey, DPT

Elizabeth Kennedy, PT, PhD, PCS

James C. Wall, PhD

## Physical Therapy (DPT)

### Admissions

The degree offered by the department is the Doctor of Physical Therapy (DPT), designed as a first-professional degree for students who want to enter the physical therapy profession. The entry-level Doctor of Physical Therapy (DPT) program consists of eight consecutive semesters of full-time professional graduate study. The DPT is a clinical doctorate degree, not a research degree, and is awarded after successful completion of the prescribed sequence of 121 semester hours including classroom and

clinical laboratory coursework and 34 weeks of full-time physical therapy internships.

## Application Process

1. All applicants must apply to Physical Therapy Centralized Application Service (PTCAS (<https://ptcasdirectory.apta.org/?Seqn=6071>)). **The PTCAS application must be completed and submitted to PTCAS by September 3, 2024 (Priority Deadline) or November 1, 2024 (Hard/Final Deadline).** Please allow up to **four weeks** for verification. **Transcripts:** Official transcripts from every college or university attended are considered part of the PTCAS application and must be sent directly to PTCAS. *Applications will not be verified until all official transcripts have been received by PTCAS.*
2. **Application Fee: \$75 non-refundable Application Fee is required.** A copy of your receipt must be emailed to the Dept. of Physical Therapy ([ptdept@southalabama.edu](mailto:ptdept@southalabama.edu)) no later than the September 3, 2024 (Priority Deadline) or November 1, 2024 (Hard/Final Deadline).
3. **International applicants** must have a TOEFL (internet) score  $\geq 100$ , or IELTS  $\geq 7.5$  and must submit application requirements to the Department of Physical Therapy by **September 15** of the year prior to admission.
4. For information regarding immigration and student visas, please contact the USA Office of Immigration

Meisler Hall, Suite 2200

390 Student Center Circle

Mobile, AL 36688-0002

Phone: (251) 460-6050

[immigration@southalabama.edu](mailto:immigration@southalabama.edu)

<https://www.southalabama.edu/departments/immigration/>

5. All applicants must have a minimum 3.0 (A=4.0) overall grade point average (GPA).
6. **Graduate Record Examination (GRE):** Preferred GRE verbal and quantitative combined minimum score of 290. GRE scores must be officially reported to PTCAS (**use Institution Code 7799**) by September 3, 2024 (Priority Deadline) or November 1, 2024 (Hard/Final Deadline). No copies are accepted. **USA PT Studies Institution Code 7799** will allow GRE scores to be sent to your designated PTCAS application and USA Admissions. GRE must have been taken within the last 5 years. Verbal, Quantitative and Analytical Writing sections may be utilized. **We strongly recommend that you take the GRE BEFORE August 15 (Priority Deadline) or October 1 (Hard/Final Deadline), so that there is sufficient time for PTCAS to receive and verify the scores before the September 3, 2024 (Priority Deadline) or November 1, 2024 (Hard/Final Deadline).**
7. Students accepted to the DPT program must submit **completed health and physical exam forms** to include required immunizations. Accepted students must also read, sign and submit the Core Performance Standards (<https://www.southalabama.edu/colleges/alliedhealth/pt/coreperstands.html>) document outlining fundamental tasks of which applicants should be capable upon entering the DPT program. The Core Performance Standards document is included in the application packet and available upon request.
8. Acceptance into the DPT program is provisional pending completion of any additional required **prerequisite courses** (see below) with a

grade of "C" or better and submission of required medical forms as supplied in the acceptance packet. Failure to make a grade of "C" or better in any required prerequisite course will result in a nullification of acceptance into the professional program. Applicants may have a maximum of 2 Science prerequisite courses remaining by the application deadline (September 3rd or November 1st). The remaining prerequisites must be completed in the spring and summer prior to the start of the program.

9. A minimum of 50 Observation Hours are required and must be completed by the application deadline. (Priority deadline Sept 3, 2024 or Hard/Final Deadline of November 1, 2024). These must be submitted and verified electronically through PTCAS. These hours must have been completed under the supervision of a licensed Physical Therapist. Applicants must include name, dates worked, and contact information of the Physical Therapist(s) under whom they shadowed, as well as the name and address of the facility or facilities at which they shadowed. This information should be uploaded to PTCAS for verification. There is no additional form required for submitting hours.
10. As an entry-level program, the DPT is designed as a first PT degree and is not appropriate for students who already hold a PT degree. Graduates of the program are eligible to take the National Physical Therapy Exam for licensure.

## DPT Early Acceptance Program (DPTEAP)

The Department of Physical Therapy Early Acceptance Program (DPTEAP) allows for some highly qualified high school seniors who meet the qualifications to gain early acceptance to the graduate program prior to starting college.

Details are described in the Early Acceptance Program (<https://www.southalabama.edu/departments/admissions/earlyacceptance/>) section of the Office of Admissions Website. In addition, a link to the application for this program is also found on this webpage.

## Minimum Requirements for All Applicants

1. The applicant must meet all applicable requirements including prerequisites.
2. Graduate Record Exam (GRE) scores must be officially reported to the University of South Alabama Office of Admissions by November 1st (**You must use institution code 7799**). The GRE must have been taken within the last 5 years. Verbal, Quantitative and Analytical Writing sections will be utilized.
3. Regular Graduate applicants must have a minimum 3.0 (A=4.0) overall grade point average (GPA).
4. All applicants must have a minimum grade of "C" in each of the prerequisite courses.
5. Observation or work experience in Physical Therapy (50 hours minimum) under the supervision of a licensed Physical Therapist must be documented and submitted to PTCAS.
6. Applicants may only have a maximum of 2 science course prerequisites remaining by the application deadline. The remaining prerequisites must be completed in the spring and summer prior to the start of the program.

**Note:** If selected for interview, the applicant must achieve a satisfactory interview score, and if accepted into the program, must submit a health form and physical examination which includes required immunizations.

## Program Prerequisites <sup>1</sup>

Prerequisites Required For All Applicants:

- English Composition (2 courses)
- Social Sciences (3 courses--at least two of which must be Psychology)
- Precalculus Algebra/Trigonometry or Higher Mathematics (1 course)
- Statistics (1 course)
- College Physics - with labs (2 semester or 3 quarter sequence)
- General Chemistry for science majors - with labs (2 semester or 3 quarter sequence)
- General or Cell Biology for science majors - with labs<sup>2</sup> (2 semester or 3 quarter sequence)
- Human Physiology, or a course sequence in Anatomy and Physiology (minimum 6 credits). Human Physiology is preferred.

For optimal preparation, online science labs are discouraged. Electives should be concentrated in a back-up major of the student's choice.

<sup>1</sup> For all prerequisite courses, credit older than ten years from the application deadline must be repeated or validated by examination or other appropriate mechanism.

<sup>2</sup> Botany may not be used to satisfy this prerequisite.

## Essential Functions

Core Performance Standards, which are fundamental tasks that must be performed to successfully complete the program, have been outlined and are available upon request from the program and on the department's website (<https://www.southalabama.edu/colleges/alliedhealth/pt/coreperfstands.html>).

## Expenses

Students admitted in the Physical Therapy program will be charged a matriculation deposit of \$300 required to secure a seat in the entering class. This amount is not refundable but will be applied towards tuition expenses after registration (after Drop/Add period ends).

Students should be prepared for extra expenses (estimates available on the website) associated with professional studies including books, local travel to and from clinical facilities and for out-of-town travel and living expenses during the 34 weeks of clinical internship in the first year and the final year. Students are required to have a laptop computer (Windows or Mac only). A tablet, or iPad is not an acceptable device as Android, iOS, and Linux are not supported by ExamSoft. Special lab fees are assessed for the following courses:

Abbr	Course Description	Fee
PT 600	Human Anatomy	\$75.00
PT 601	Human Anatomy II	\$200.00
PT 603	Neuroscience	\$15.00
PT 612	Research Project	\$50.00
PT 621	Introductory PT Skills	\$20.00
PT 625	Therapeutic Intervention	\$20.00
PT 675	Comprehensive Capstone	\$81.00
PT 682	PT Internship I	\$83.00

PT 683	PT Internship II	\$83.00
PT 684	PT Internship III	\$83.00
PT 686	PT Internship IV	\$83.00

\* A Resource Fee of \$169/semester is charged to all Allied Health Professions students.

\* A \$25.00 professional liability fee is assessed annually (\$12.00 each in fall and spring and \$1.00 in summer).

\* A \$16.00 program fee for the use of HealthStream will be charged each fall semester.

## Scholarships

The Department of Physical Therapy currently has eight scholarships that are awarded to students in either their 2nd or 3rd year. Scholarships are awarded on a competitive basis and are listed on the department webpage.

## Accreditation and Licensure

The entry-level Doctor of Physical Therapy program at the University of South Alabama is accredited by:

The Commission on Accreditation in Physical Therapy Education (CAPTE)

3030 Potomac Avenue, Suite 100

Alexandria, VA 22305-3085

Telephone: (703) 706-3245

Web site: <http://www.capteonline.org>

E-mail: [accreditation@apta.org](mailto:accreditation@apta.org)

Graduates of the program are eligible to sit for the National Physical Therapy Examination (NPTE) to gain licensure. Applicants are hereby informed that a history of felony conviction, use of drugs or intoxicating liquors, which affects professional competence, or narcotic law conviction may prevent physical therapy licensure.

See Alabama Board of Physical Therapy site: <http://www.pt.alabama.gov/>

## Degree Plan

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
PT 600	Human Anatomy I	3
PT 601	Human Anatomy II	3
PT 610	Principles of Research & EBP	2
PT 621	Introductory PT Skills	4
PT 622	Clinical Exercise Physiology	4
PT 680	Professional PT Practice	2
		<b>Hours</b>
		<b>18</b>
<b>Spring</b>		
PT 604	Pathophysiology I	2
PT 620	Clinical Kinesiology	3
PT 623	Movement Analysis	1
PT 625	Therapeutic Intervention	4
PT 631	Musculoskeletal Disorders I	3
PT 632	Musculoskeletal Disorders II	4
PT 681	Clinical Practice Issues - W	2
		<b>Hours</b>
		<b>19</b>

<b>Summer</b>		
PT 607	Pathophysiology II	2
PT 633	Musculoskeletal Disorders III	2
PT 624	Movement Analysis II	1
PT 682	PT Internship I	6
<b>Hours</b>		<b>11</b>
<b>Second Year</b>		
<b>Fall</b>		
PT 602	Life Span Human Development	2
PT 603	Neuroscience in Phys Therapy	3
PT 611	Applied Research in Physical Therapy	1
PT 634	Musculoskeletal Disorders IV	3
PT 640	Neuromusc PT Exam/Eval	4
PT 650	PT in Integumentary Disorders	4
PT 671	Clinical Case Studies I	1
<b>Hours</b>		<b>18</b>
<b>Spring</b>		
PT 606	Pharmacology in Rehabilitation	2
PT 612	Advanced Healthcare Analytics: Statistical Methods and Health Informatics	2
PT 628	Mobility Ortho & Prosthetics	2
PT 642	Neuromuscular PT Intervention	4
PT 660	PT Cardio/Pulmonary Disorders	4
PT 672	Clinical Case Studies II	1
PT 687	Collaborative Practice in Physical Therapy	1
<b>Hours</b>		<b>16</b>
<b>Summer</b>		
PT 627	Medical Screening	2
PT 635	Musculoskeletal Disorders V	2
PT 641	Ped Neuromusc PT Exam/Eval	2
PT 673	Clinical Case Studies III	1
<b>Hours</b>		<b>7</b>
<b>Third Year</b>		
<b>Fall</b>		
PT 644	PT Pediatric Interventions	2
PT 645	Physical Therapy for Aging Adults	1
PT 674	Clinical Synthesis & Pat Mgmt	1
PT 675	Comprehensive Capstone	1
PT 676	Advanced Topics in PT or AHP 510 or IPE Autism Spectrum Disorders	1
PT 683	PT Internship II	8
PT 685	Management of PT Practice	3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
PT 613	Clinical Case Report	2
PT 684	PT Internship III	6
PT 686	PT Internship IV	6
<b>Hours</b>		<b>14</b>
<b>Total Hours</b>		<b>120</b>

## Physician Assistant Studies

### Department Information

(251) 445-9334

Department of Physician Assistant Studies website  
<https://www.southalabama.edu/colleges/alliedhealth/pa> (<https://www.southalabama.edu/colleges/alliedhealth/pa/>)

## Physician Assistant Studies Faculty

Title	Name
Chair	Stephanie McGilvray, PA-C, MMSC
Medical Director	Shannon Tyler, M.D.
Assistant Professor	Largue, Lunn, McGilvray, Minton, Kersey, Minton, Stringfellow, Rockwell

## Physician Assistant Program Master of Health Science Degree

### What is a Physician Assistant?

Physician Assistants (PAs) are highly skilled nationally certified and state-licensed medical professionals who practice medicine on healthcare teams with physicians and other members of the health professions. The quality and value of the services they provide is well recognized in virtually all medical and surgical specialties and subspecialties to include: physicians practices (private and group, institutional settings, correctional institutions, rural and urban community health centers, the uniformed services and other federal government agencies, nursing homes, schools and other university-based facilities and retail clinics.

Physician Assistants take medical histories, perform physical examinations, order and analyze diagnostic data (i.e. laboratory and imaging studies), and perform major and minor therapeutic procedures. The Physician Assistant develops and implements a patient-centered treatment plan, to include appropriate decisions regarding referral and interprofessional collaboration with other members of the healthcare team. Physician Assistants prescribe medications in all 50 states, the District of Columbia and all U.S. territories, to include scheduled pharmaceuticals per State law.

Culturally appropriate patient education and counseling are important aspects of a physician assistant's daily activities. Physician Assistants advise patients concerning health promotion and disease prevention, with special emphasis on social determinants of health, health screenings, health disparities and health risk behaviors.

To perform at this level of responsibility, the education of Physician Assistants is provided by physicians and highly skilled physician assistants to assure patient-care functions provided by the Physician Assistant are equivalent in quality to those of the physician who delegates them.

## Mission, Vision, and Goals

### Mission

The mission of the University of South Alabama Physician Assistant Program is to educate compassionate and competent individuals from diverse backgrounds to become highly qualified physician assistants in accordance with the highest professional standards to provide a broad spectrum of preventative and curative health care to patients in various communities and clinical settings with physician supervision including underserved populations in Alabama both rural and urban. The emphasis of the program is one of primary care, including a broad foundation in the medical and surgical specialties.

### Vision

The Physician Assistant Studies Program curriculum is closely related to the goals of the University of South Alabama as well as to the degree. The program fosters an environment that promotes the acquisition and application of culturally sensitive, patient-oriented clinical knowledge

and skills to produce a diverse workforce of primary care physician assistants who practice medicine with competence, professionalism, and compassion, driven by academic excellence and a spirit of service to the community.

## Goals

The goals of the PA program are to:

1. Emphasize in rural and medically underserved communities;
2. Promote excellence in healthcare by preparing competent physician assistants to practice evidence-based medicine in all clinical settings;
3. To recruit, select, and educate a highly qualified student body;
4. Prepare physician assistant students to provide patient-centered healthcare services as part of an inter-professional, collaborative team in a variety of clinical settings;
5. Charge physician assistant students to become graduates who reflect high standards of professionalism;
6. Foster the growth and development of PA education by preparing physician assistant graduates who possess depth of knowledge and clinical skills for excellence in practice;
7. Promote in our physician assistant students the importance of ongoing professional development to meet and/or exceed contemporary performance standards within their area(s) of clinical practice.

## Measures of Success

View the Measures of Success (<http://www.southalabama.edu/colleges/alliedhealth/pa/mission.html>) for the USA Physician Assistant Studies Program.

## Degrees, Programs, or Concentrations

- Physician Assistant Studies (MHS) (p. 882)

## Courses

### PA 501 Clinical Preceptorship I 4 cr

The student is assigned to a clinical setting to obtain knowledge, skills and attitudinal/behaviors professional components. These competencies are to be obtained while engaging in all aspects of patient care through: the medical interview, history and physical exam, critical thinking, knowledge base, diagnosis, treatment plan, and patient education. As well as appropriate health maintenance and disease prevention measures.

### PA 502 Clinical Preceptorship II 4 cr

The student is assigned to a clinical setting to obtain knowledge, skills and attitudinal/ behavioral professional components. These competencies are to be obtained while engaging in all aspects of patient care through: the medical interview, history, and physical exam, critical thinking, knowledge base, diagnosis, treatment plan, and patient education. As well as appropriate health maintenance and disease prevention measures.

### PA 503 Clinical Preceptorship III 4 cr

The student is assigned to a clinical setting to obtain knowledge, skills and attitudinal/behavioral professional components. These competencies are to be obtained while engaging in all aspects of patient care through: the medical interview, history and physical exam, critical thinking, knowledge base, diagnosis, treatment plan, and patient education. As well as appropriate health maintenance and disease prevention measures.

### PA 504 Clinical Preceptorship IV 4 cr

The student is assigned to a clinical setting to obtain knowledge, skills, and attitudinal/behavioral professional components. These competencies are to be obtained while engaging in all aspects of patient care through: the medical interview, history and physical exam, critical thinking, knowledge base, diagnosis, treatment plan, and patient education. As well as appropriate health maintenance and disease prevention measures.

### PA 505 Clinical Preceptorship V 4 cr

The student is assigned to a clinical setting to obtain knowledge, skills and attitudinal/behavioral professional components. These competencies are to be obtained while engaging in all aspects of patient care through the medical interview, history and physical exam, critical thinking, knowledge base, diagnosis, treatment plan, and patient education. As well as appropriate health maintenance and disease prevention measures.

### PA 506 Clinical Preceptorship VI 4 cr

The student is assigned the a clinical setting to obtain knowledge, skills and attitudinal/behavioral professional components. These competencies are to be obtained while engaging in all aspects of patient care through: the medical interview, history and physical exam, critical thinking, knowledge base, diagnosis, treatment plan, and patient education. As well as appropriate health maintenance and disease prevention measures.

### PA 507 Clinical Preceptorship VII 4 cr

The student is assigned to clinical setting to obtain knowledge, skills and attitudinal/behavioral professional components. These competencies are to be blended while engaging all aspects of patient care through medical interview, history and physical exam, critical thinking, knowledge base, diagnosis, treatment plan, and patient education. As well as appropriate health maintenance and disease prevention measures.

### PA 508 Clinical Preceptorship VIII 4 cr

The student will choose from a variety of available elective rotations in order to engage in all aspects of patient care including: the medical interview, history, and physical exam, critical thinking, knowledge base, diagnosis, and treatment plan, patient education, appropriate health maintenance and disease prevention measures. The goal of elective rotations is to provide the student the opportunity to explore area of interest for further employment and increase knowledge in area of weakness.

### PA 509 Clinical Preceptorship IX 4-8 cr

The student will choose from a variety of available elective rotations in order to engage in all aspects of patient care including: the medical interview, history, and physical exam, critical thinking, knowledge base, diagnosis and treatment plan, patient education, appropriate health maintenance and disease prevention measures. The goal of elective rotations is to provide the student the opportunity to explore areas of interest for further employment or increase knowledge in areas of weakness.

**PA 510 Clinical Medicine I 4 cr**

Clinical Medicine I (PA 510) is the introductory course in a four part series covering primary care clinical medicine. It is designed to incorporate and integrate topics and content both horizontally and vertically throughout the didactic and clinical curricula. The course is divided into lecture and lab sections that will be graded separately and will provide opportunities for the student to develop critical thinking skills essential to patient evaluation and management. The use of patient simulations is included. Introductory subject matter covered during this first course will include physical examination skills and use of medical instruments, patient history taking, patient counseling, patient education, interpersonal and communication skills, and epidemiology. Additional topics will include an introduction to behavioral medicine, professionalism, interprofessional education, medical research methods, introduction to medical literature, introduction to laboratory diagnosis and introduction to nutrition. Finally, medical and social topics addressed will include the primary care medical home, rural and medically underserved populations, social determinants of health, healthy people 2020, public health issues and community health.

**PA 510L CM I Lab 1 cr**

Clinical Medicine I Lab provides introductory foundational skills in conducting a thorough history and a head to toe physical examination in a systematic manner. Students will learn through standardized patient encounters employing interviewing skills, medical history taking, and clinical note writing. Students will learn and practice physical exam skills with assigned partners from their class cohort. Clinical medicine I lab sets the groundwork so the student will have a successful progression through the entire clinical medicine series.

**PA 511 Human Gross Anatomy 5 cr**

This is a course in gross anatomy of the human body systems utilizing human cadavers and prosections. Emphasis is placed on the relationships between structure and function.

**PA 512 Physiology 6 cr**

Physiology (PA 512) is the scientific basis of medicine. This course will provide the PA student with sufficient in-depth knowledge of cellular and organ physiology necessary for understanding of normal and abnormal human body function and for advancement to courses in pathophysiology, pharmacology, and clinical medicine. This course is divided into six sections which present the basic scientific concepts of human physiology with clinical applications and relevance to disease states: 1) cellular, neuromuscular, autonomic, and cardiac physiology; 2) circulatory physiology; 3) respiratory physiology; 4) renal, electrolyte, and acid-base physiology; 5) gastrointestinal and metabolic physiology; 6) endocrinology.

**PA 514 Intro to Infectious Disease 1 cr**

This course is designed to provide PA students a solid foundation in basic immunology, microbial genetics, structure, nutrition and basic host-parasite relationships. The course will place particular emphasis on the role and application of these subject matters in disease manifestations as well as use/development of diagnostic and treatment modalities. Vulnerability of special populations and interactions between various environmental, social and behavioral factors with the human host in relationship to infection control and treatment will also be emphasized.

**PA 516 Physician Assistant Issues I 2 cr**

Physician Assistant (PA) Issues I is the introductory course in a three part Social Science and Public Health Course Series to integrate the social sciences with the clinical and basic sciences. Health and health problems result from a complex interplay of factors: 1) individual health-related behaviors, 2) physical environment, 3) health care; access and quality, and 4) social and economic environments. This course will also cover commonly encountered clinical practice issues and their impact on physician assistant practice. Patient education across the lifespan and health education in health care are explored in this course series with community outreach and service learning projects utilizing resources from USA Center for Academic Service-Learning and Civic Engagement. This course requires active student participation in all lectures, discussions, readings, group projects, field exercises, presentations, writing assignments, and other methods of instruction.

**PA 517 Clinical Preceptorship X 4 cr**

The student is assigned to a clinical settings to obtain knowledge, skills and attitudinal/behavioral professional components. These competencies are to be obtained while engaging in all aspects of patient care though: the medical interview, history and physical exam, critical thinking, knowledge based, diagnosis, treatment plan, and patient education. As well as appropriate health maintenance and disease prevention on measures.

**PA 518 Clinical Preceptorship XI 4-8 cr**

The student will choose from a variety of available elective rotations in order to engage in all aspects of patient care including: the medical review, history and physical exam, critical thinking, knowledge base, diagnosis and treatment plan, patient education, appropriate health maintenance and disease prevention measures. The goal of elective rotations is to provide the student the opportunity to explore areas of interest for further employment or increase knowledge in areas of weakness.

**PA 520 Clinical Medicine II 6 cr**

Clinical Medicine II (PA 520) is the second course in a four part series covering primary care clinical medicine and surgery topics. It is designed to incorporate and integrate topics and content both horizontally and vertically throughout the didactic and clinical curricula. The course is divided into lecture and lab sections that will be graded separately and will provide opportunities for the student to develop critical thinking skills essential to patient evaluation and management. The use of standardized patients, patient simulations and clinical experiences are included. Topics will include a continuation of physical examination skills, patient history taking, patient counseling, patient education, epidemiology, history of the PA Profession, professionalism, interpersonal and communication skills, interprofessional education, medical research methods, and researching medical literature, the primary care medical home, rural and medically underserved populations, social determinants of health, healthy people 2020, public health issues, and community health care. Specific topics covered in PA 520 include dermatology, ophthalmology, ENT, cardiovascular medicine, EKG, pulmonary medicine, nephrology, and GU medicine. Imbedded in this course will be topics in infectious disease and diagnostic data that will align with the subject matter covered during this semester.

**PA 520L CM II Lab 1 cr**

Clinical medicine II lab (PAS20L) presents a system-oriented and hands-on approach to the physical examination and clinical reasoning skills. This class provides support to the clinical medicine II course. Clinical medicine II lab focuses on the systems of dermatology, EENT (eye, ears, nose and throat), cardiology, pulmonology, nephrology, and genitourinary for clinical reasoning and documentation. Students will learn clinical reasoning skills for differential diagnosis, diagnostic utilization, and treatment plans via faculty-led cases. They will practice writing a full note with problem-focused documentation cases. Students will build upon their knowledge from clinical medicine I lab and continue to practice physical exam skills to perform both a complete and focused physical examination. Students will be utilizing simulation instructors for procedural skills for the systems learned in clinical medicine II. Students will apply insight and judgement with reflection on their interview from the 510 Lab. Clinical judgement and physical exam competency will be evaluated with the culminating problem focused exam and complete physical exam.

**PA 521 Pathophysiology I 4 cr**

Pathophysiology I (PA 521) is the first course in a three-part series that covers the alterations in normal physiology that occur in human disease states. This course will provide the PA student with sufficient in-depth knowledge of pathophysiology necessary for understanding of abnormal human body function and for advancement to subsequent courses in pathophysiology, pharmacology, and clinical medicine. Topics will include an overview of cellular pathophysiology, followed by specific topics that align with the organization of the clinical medicine series: cardiovascular pathophysiology, EKG, pulmonary pathophysiology, and renal/GU pathophysiology.

**PA 522 Pharmacology I 4 cr**

Pharmacology I (PA 522) is the first course in a three-part series that covers the basic scientific concepts of drug classification, mechanism of action, toxicity, and clinical use of drugs. Introductory topics will include the laws and regulations governing the use of pharmaceuticals, prescriptive practices, basic science and properties of drug molecules, drug interactions, and clinical pharmacology of the autonomic nervous system. Specific topics will align with the organization of the clinical medicine series: cardiovascular drugs, pulmonary drugs, drug therapy of renal and genitourinary disease.

**PA 523 Diag Data and Interp I 2 cr**

(Previously PA 524) Interpretation of Diagnostic Data and Studies I, will introduce students to basic concepts of laboratory medicine including different methods of sample gathering and transport, basic phlebotomy, interpretation of blood counts and analysis of the differential blood counts, coagulation studies and anticoagulant monitoring, interpretation of metabolic panels, evaluating electrolyte abnormalities, and ordering and interpreting bacterial culture and susceptibilities. The course will focus on and correlate with laboratory assays and procedures taught during Clinical Medicine II. Syllabi and tentative schedules of lectures for the course are attached.

**PA 524 Interp Diag Data & Studies I 1 cr**

Interpretation of Diagnostic Data and Studies I, will introduce students to basic concepts of laboratory medicine including different methods of sample gathering and transport, basic phlebotomy, interpretation of blood counts, and analysis of the differential blood counts, coagulation studies and anticoagulant monitoring, interpretation of metabolic panels, evaluating electrolyte abnormalities, and ordering and interpreting bacterial culture and susceptibilities. The course will focus on and correlate with laboratory assays and procedures taught during Clinical Medicine II.

**PA 526 Physician Assistant Issues II 2 cr**

This course is the second in a three part series covering commonly encountered issues and their impact on physician assistant practice. Introductory subject matter covered during this second course will include social determinants of health affecting diversity and inclusion; cultural competence; workforce shortage; health disparities; health literacy; public health, primary care medicine with a focus on rural and medically underserved medicine, evidence-based medicine, patient belief systems, health care delivery systems, professionalism, interprofessional education and collaboration, social determinants of healthcare, medical ethics, and population/public health. Equally important is the challenge and significance of patient education across the lifespan and health education in health care. This course requires active student participation in all lectures, discussions, readings, group projects, field exercises, presentations writing assignments, and other methods of instruction.

**PA 530 Clinical Medicine III 6 cr**

Clinical Medicine III (PA 530) is the third course in a four part series covering primary care clinical medicine and surgery topics. It is designed to incorporate and integrate topics and content both horizontally and vertically throughout the didactic and clinical curricula. The course is divided into lecture and lab sections that will be graded separately and will provide opportunities for the student to develop critical thinking skills essential to patient evaluation and management. The use of standardized patients, patient simulations and clinical experiences are included. Topics will include a continuation of complete and focused physical examination skills, patient history taking, patient counseling, patient education, epidemiology, normal and abnormal development, history of the PA Profession, professionalism, interpersonal and communication skills, interprofessional education, medical research methods, and researching medical literature, the primary care medical home, rural and medically underserved populations, social determinants of health, healthy people 2020, public health issues, and community health care. Specific topics covered in PA 530 include neurology, rheumatology, hematology/oncology, orthopedic medicine, gastrointestinal medicine, and psychiatric/behavioral medicine. Included in this course will be topics in infectious disease and diagnostic data that will align with the subject matter covered during this semester.

**PA 530L CM III Lab 1 cr**

Clinical medicine 111 lab (PA 530L) presents a system-oriented and hands-on approach to the physical examination and clinical reasoning skills. This class provides support to the clinical medicine III course. Clinical medicine III lab focuses on the systems of behavioral medicine, gastroenterology, neurology, musculoskeletal (Rheumatology and Orthopedics), endocrinology, and hematology/oncology. Students will learn aspects of clinical diagnosis and problem-solving skills with student-led and documentation cases. Students will build upon their knowledge from clinical medicine I and II lab to continue to master physical exam skills to perform both a complete and focused physical examination. Students will be utilizing simulation instructors for procedural skills for the systems learned in this course. They will apply insight and judgement with reflection on their problem focused standardized patient from the 520 Problem Focused Lab exam. Clinical judgement and physical exam competency will be evaluated with the culminating problem focused exam on the systems taught this semester.

**PA 531 Pathophysiology II 4 cr**

Pathophysiology II (PA 531) is the second course in a three-part series that covers the alterations in normal physiology that occur in human disease states. This course will provide the PA student with sufficient in-depth knowledge of pathophysiology necessary for the understanding of abnormal human body function and for advancement to subsequent courses in pathophysiology, pharmacology, and clinical medicine. Topics will align with the subject matter in Clinical Medicine II (PA 530): neurology, rheumatology, endocrinology, hematology, oncology, gastrointestinal, and psychiatric disorders.

**PA 532 Pharmacology II 4 cr**

This course is the second of a proposed three part pharmacology series that used to be taught in two sections during the spring and summer semesters as PA 532 and PA 542. The course will continue to cover the basic scientific concepts of drug classification, mechanism of action, toxicity, and clinical use of drugs. Other topics will include drug interaction and the properties of drug molecules. Specific topics will align with the organization of the clinical medicine series.

**PA 533 Diag Data & Interp II 2 cr**

Interpretation of Diagnostic Data and Studies II, will focus on ordering and interpretation of laboratory tests and imaging studies associated with diseases of the urinary tract system including basic and advanced urinalysis and their interpretation, laboratory tests and imaging studies associated with diseases of the gastrointestinal tract to include liver, pancreas, small intestine and colorectal regions, basic and advanced immunohematology and imaging to investigate autoimmune disorders, and advanced genetic testing and procedures. This course will advance the students knowledge of laboratory medicine and will focus on those laboratory assays relevant to the topic covered in Clinical Medicine III.

**PA 536 Physician Assistant Issues III 2 cr**

Issues in Healthcare and Population Health is a class that intends to instruct students on the many faces of health care. Healthcare involves different people who have different roles in the patient's healthcare experience. The goal is for the student to gain a deeper understanding of the many aspects of practicing medicine. Issues in Healthcare and Population Health IV (PA 536) is the last in a three part series covering commonly encountered issues and their impact on physician assistant practice. This series is designed to incorporate and integrate topics and content both horizontally and vertically throughout the didactic and clinical curricula. The course will utilize a variety of teaching strategies getting the student involved in the learning process.

**PA 540 Clinical Medicine IV 7 cr**

Clinical Medicine IV (PA 540) is the final course in a four part series covering primary care clinical medicine and surgery topics. It is designed to incorporate and integrate topics and content both horizontally and vertically throughout the didactic and clinical curricula. The course is divided into lecture and lab sections that will be graded separately and will provide opportunities for the student to develop critical thinking skills essential to patient evaluation and management. The use of standardized patients, patient simulations and clinical experiences are included. Topics will include a continuation of complete and focused physical examination skills, patient history taking, patient counseling, patient education, interpersonal and communication skills, epidemiology, normal and abnormal development, history of the PA Profession, professionalism, interprofessional education, medical research methods, and researching medical literature, the primary care medical home, rural and medically underserved populations, social determinants of health, healthy people 2020, public health issues, and community health care. Specific topics covered in PA 540 include geriatric medicine, pediatric medicine, surgery, OB/GYN medicine, emergency medicine, ACLS, and clinical year transition. Included in this course will be topics in infectious disease and diagnostic data that will align with the subject matter covered during this semester.

**PA 540L CM IV Lab 1 cr**

Clinical medicine IV lab (PA 540L) presents a system-oriented and hands-on approach to the physical examination and clinical reasoning skills while preparing them for clinical rotations. This class provides support to the clinical medicine IV course. Clinical medicine IV lab reviews the systems/topics of OB/GYN, emergency medicine, surgery, and extremities of age. Students will apply clinical reasoning, diagnosis and problem-solving skills via case scenarios using standardized patients where they will document the encounter. Students will build upon their knowledge from clinical medicine I, II, and III lab to continue to master and practice physical exam skills to perform both a complete and focused physical examination using standardized patients. Students will be utilizing simulation instructors for procedural skills for the systems learned in this course. Clinical judgement and physical exam competency will be evaluated with the culminating problem focused exam on the systems/topics covered and an evaluation of the complete physical exam.

**PA 541 Pathophysiology III 3 cr**

This course is the third of three sections of pathophysiology that used to be taught during the fall semester as a single course PA 523. The course will provide students with an understanding of abnormal body functions including an overview of cellular pathophysiology followed by specific topics that align with the organization of the clinical medicine series.

**PA 542 Pharmacology III 3 cr**

This course is the third of a proposed three part pharmacology series that used to be taught in two sections during the spring and summer semesters as PA 532 and PA 542. The course will continue to cover the basic scientific concepts of drug classification, mechanism of action, toxicity, clinical use of drugs, drug interaction and the properties of drug molecules. Specific topics will align with the organization of the clinical medicine series.

**PA 544 Diagn Data and Interp III 2 cr**

(Previously PA 541) Interpretation of Diagnostic Data and Studies III, will introduce students to basic radiology concepts by teaching fundamentals of radiology, basic imaging techniques (ultrasound, vascular imaging, advanced imaging techniques (CT Scan and MRI with and without contrast), and PET scan. The course will hone student knowledge of all diagnostic modalities through intensive case-based approach to the interpretation of laboratory assays.

**PA 595 Summative Evaluation 4 cr**

PA 595 is designed to evaluate student learning at the end of the 27 month PA training program. The assessments used in this course will help determine the level at which students achieved the expectations for their learning as prescribed and to identify instructional areas that may need additional attention. The summative assessments include: 1) comprehensive examination, 2) OSCE with standardized patient, 3) on-line board review and 4) Capstone Project. A comprehensive written examination will be administered as a final evaluation of the student's progress. This test is also designed to prepare the graduate for the NCCPA exam.

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## Amended Course Descriptions

**PA 510L CM I Lab**

Clinical Medicine I Lab provides introductory foundational skills in conducting a thorough history and a head-to-toe physical examination in a systematic manner. Students will learn through standardized patient encounters employing interviewing skills, medical history taking, and clinical note-writing. Students will learn and practice physical exam skills with assigned partners from their class cohort. Clinical Medicine I lab sets the groundwork so the student will have a successful progression through the entire clinical medicine series.

**PA 520L CM II Lab**

Clinical Medicine II Lab (PAS20L) presents a system-oriented and hands-on approach to the physical examination and clinical reasoning skills. This class provides support to the Clinical Medicine II course. Clinical Medicine II lab focuses on the systems of dermatology, EENT (eye, ears, nose, and throat), cardiology, pulmonology, nephrology, and genitourinary for clinical reasoning and documentation. Students will learn clinical reasoning skills for differential diagnosis, diagnostic utilization, and treatment plans via faculty-led cases. They will practice writing a full note with problem-focused documentation cases. Students will build upon their knowledge from Clinical Medicine I Lab and continue to practice physical exam skills to perform both a complete and focused physical examination. Students will be utilizing simulation instructors for procedural skills for the systems learned in Clinical Medicine II. Students will apply insight and judgment with reflection on their interview from the 510 Lab. Clinical judgment and physical exam

competency will be evaluated with the culminating problem-focused exam and complete physical exam.

**PA 530L CM III Lab**

Clinical Medicine III Lab (PA 530L) presents a system-oriented and hands-on approach to the physical examination and clinical reasoning skills. This class provides support to the clinical medicine III course. Clinical medicine III lab focuses on the systems of behavioral medicine, gastroenterology, neurology, musculoskeletal (Rheumatology and Orthopedics), endocrinology, and hematology/oncology. Students will learn aspects of clinical diagnosis and problem-solving skills with student-led and documentation cases. Students will build upon their knowledge from clinical medicine I and II lab to continue to master physical exam skills to perform both a complete and focused physical examination. Students will be utilizing simulation instructors for procedural skills for the systems learned in this course. They will apply insight and judgment with reflection on their problem-focused standardized patient from the 520 Problem-Focused Lab exam. Clinical judgment and physical exam competency will be evaluated with the culminating problem-focused exam on the systems taught this semester.

**PA 540L CM IV Lab**

Clinical Medicine IV Lab (PA 540L) presents a system-oriented and hands-on approach to the physical examination and clinical reasoning skills while preparing them for clinical rotations. This class provides support to the clinical medicine IV course. Clinical medicine IV lab reviews the systems/topics of OB/GYN, emergency medicine, surgery, and extremities of age. Students will apply clinical reasoning, diagnosis, and problem-solving skills via case scenarios using standardized patients where they will document the encounter. Students will build upon their knowledge from Clinical Medicine I, II, and III lab to continue to master and practice physical exam skills to perform both a complete and focused physical examination using standardized patients. Students will be utilizing simulation instructors for procedural skills for the systems learned in this course. Clinical judgment and physical exam competency will be evaluated with the culminating problem-focused exam on the systems/topics covered and an evaluation of the complete physical exam.

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
KERSEY, JEREMY RICHARD (jrkersey@southalabama.edu)	Physician Assistant	Assistant Professor	BS, U of Nebraska Medical Center MPAS, U of Nebraska Medical Center
LARGUE, JASON B. (blargue@southalabama.edu)	Physician Assistant	Assistant Professor	BS, University of Alabama MBA, University of South Alabama MHS, University of South Alabama
MCADAMS, ERIN NICOLE (emcadams@southalabama.edu)	Physician Assistant	Assistant Professor	BS, University of South Alabama MHS, University of South Alabama
MCGILVRAY, STEPHANIE LEE (smcgilvray@southalabama.edu)	Physician Assistant	Assistant Professor	BS, Troy University-Main MED, University of South Alabama MMSC, Emory University
MINTON, BONNIE HOBODY (bminton@southalabama.edu)	Physician Assistant	Assistant Professor	BS, Auburn University MHS, University of South Alabama
MINTON, MARK DANIEL (mminton@southalabama.edu)	Physician Assistant	Assistant Professor	BS, Univ of Alabama-Birmingham AH, Georgia Highlands College DMS, University of Lynchburg

NEWBEGIN-FRACTION, Physician Assistant  
SAMANTHA LYNN  
(sfraction@southalabama.edu)  
STRINGFELLOW, SARA KATE Physician Assistant  
(skstringfellow@southalabama.edu)

Assistant Professor BS, Virginia Intermont College  
MS, Shenandoah University  
Assistant Professor BS, Presbyterian College  
MHS, University of South Alabama

Newbegin-Fraction, Samantha / Physician Assistant / Assistant Professor / BS, Virginia Intermont College / MS, Shenandoah University

## Physician Assistant Studies (MHS)

### Degree Requirements

#### The Program

- Degree Earned: Master of Health Science
- Length of Program: 27 months
- Matriculation Date: Annually in mid-May
- Class Type: On-site, no online classes
- Curriculum: 121 Credit Hours

#### Advanced Placement

The program does not offer advanced placement. Transfer credits or credit for experiential learning cannot be substituted for any course in the program, and no transfer credit is accepted from other PA programs.

#### Academic Dismissal/Withdrawal

Students who receive more than 8 credit hours of "C" grade(s) in courses will be dismissed from the program. In addition, any final grade below a C will result in academic dismissal from the program. If for any reason a student must withdraw from courses in the program, the student should first discuss this withdrawal with the program director/department chair. Re-admission following withdrawal from any course(s) in the program will require the approval of the Department Chair and the Dean of the Pat Capps Covey College of Allied Health Professions.

Dismissal from the program may occur with noncompliance or violation of additional policies detailed in the PA Student Handbook.

The USA PA Program policy is more stringent than the Graduate School dismissal policy.

#### Employment

Program policies strictly prohibit the program, its academic and clinical affiliates, and preceptors from employing any PA students, or utilizing them as instructional faculty, administrative staff, or clinical staff while attending the program. PA students are also strongly discouraged from accepting any other employment while attending the program. Employment while in the program has the potential to negatively impact the student's rigorous PA training curriculum. The USA PA program strongly discourages any type of outside employment during our consecutive 27-month course of studies. Employment during the program may result in academic difficulties and may prevent the student from acquiring the level of knowledge needed to perform adequately as a physician assistant student during the didactic and clinical phases of the program. The program course of studies will not be altered due to student work obligations.

#### Accreditation

The Accreditation Review Commission on Education for the Physician Assistant, Inc. (ARC-PA) has granted **Accreditation-Continued** status to the **University of South Alabama Physician Assistant Program** sponsored

by the **University of South Alabama**. Accreditation-Continued is an accreditation status granted when a currently accredited program is in compliance with the ARC-PA *Standards*.

Accreditation remains in effect until the program closes or withdraws from the accreditation process or until accreditation is withdrawn for failure to comply with the Standards. The approximate date for the next validation review of the program by the ARC-PA will be **September 2024**. The review date is contingent upon continued compliance with the Accreditation Standards and ARC-PA policy.

#### Physician Assistant National Certifying Examination (PANCE) Pass Rates

Please visit our website at <https://www.southalabama.edu/colleges/alliedhealth/pa/accreditation.html>.

#### Goals of the Program

1. Emphasize in rural and medically underserved communities.
2. Promote excellence in healthcare by preparing competent physician assistants to practice evidence-based medicine in all clinical settings.
3. To recruit, select, and educate a highly qualified student body.
4. Prepare physician assistant students to provide patient-centered healthcare services as part of an inter-professional, collaborative team in a variety of clinical settings.
5. Charge physician assistant students to become graduates who reflect high standards of professionalism.
6. Foster the growth and development of PA education by preparing physician assistant graduates who possess depth of knowledge and clinical skills for excellence in practice.
7. Promote in our physician assistant students the importance of ongoing professional development to meet and/or exceed contemporary performance standards within their area(s) of clinical practice.

#### Measures of Success

Please visit our website for information about the program's success at <http://www.southalabama.edu/colleges/alliedhealth/pa/mission.html>.

#### Competencies (Learning Outcomes) for the University of South Alabama Physician Assistant Studies Program

1. **Medical Knowledge:** Demonstrate knowledge and application of evidence-based practices related to biologic and clinical sciences.
  - a. Apply principles of biologic and clinical sciences to patient care.
  - b. Identify etiology, risk factors, and epidemiology to create differential diagnoses.
  - c. Select diagnostic studies to guide therapeutic decision-making.
  - d. Differentiate therapeutic and non-therapeutic interventions to include patient education and preventative guidance in caring for patients with acute, chronic, and emergent disease states.
2. **Clinical and Technical Skills:** Demonstrate proficiency in clinical techniques and procedural skills.

- a. Obtain and document essential information regarding patient history, physical examination, and diagnostic data.
  - b. Interpret laboratory and radiological data and apply to patients with acute, chronic, and emergent disease states.
  - c. Perform medical and diagnostic procedures expected of an entry-level PA in primary care practice.
  - d. Infer patient preferences, evidence-based practice, and clinical expertise to create treatment plans including counseling, education, referral to other disciplines, follow-up, and preventative maintenance.
3. **Interpersonal and Communication Skills:** Collaborate as a member of an interprofessional team to coordinate patient care.
- a. Communicate effectively and respectfully to the healthcare team, patient, and families.
  - b. Demonstrate effective ability in establishing alliance with patients that reflects the social circumstances, finances, and culture.
  - c. Document legible clinical encounter.
  - d. Demonstrate ability to collaborate with other specialties within the healthcare team.
4. **Professionalism:** Demonstrate professional behavior and respect for the dignity and privacy of patients.
- a. Exhibit compassionate care and maintain honesty, respect, integrity, and maturity.
  - b. Maintain confidentiality and ethical provider practices which meet the regulatory standards for physician assistants in clinical practice.
  - c. Demonstrates the practice of culturally responsive care to diverse populations.
  - d. Instill responsible management to avoid burnout and mitigate stress recognizing personal limitations and accepting constructive feedback.
5. **Community Consciousness and Societal Health:** Demonstrate cultural and social awareness to effectively engage resources within the system to improve patient outcomes.
- a. Develop individualized care plans by integrating knowledge of cultural, societal, environmental, economic, and population health impacts into medical decision-making.
  - b. Demonstrate an understanding of the collaborative nature of the profession.
6. **Clinical Reasoning and Problem-Solving:** Utilize self-evaluation skills to proactively improve medical practice and knowledge.
- a. Incorporate evidence-based medical practice by analyzing and synthesizing peer-reviewed information to investigate clinical queries.
  - b. Develop clinical decisions utilizing evidence-based research and self-reflection to address gaps in medical knowledge and adjust behaviors that can negatively impact patient care.

## Minimum Requirements for Admission

Applicants who wish to apply to the USA PA program must meet the following minimum requirements. Please note that admission to the USA PA program is very competitive and accepted students typically exceed the minimum requirements.

1. **Completion of a Baccalaureate degree in any field** from a U.S. regionally accredited institution prior to the starting date of the program is required.
2. **A Minimum overall GPA, science GPA and last 60 hours GPA of 3.0** on a 4.0 scale as calculated by CASPA (includes post-baccalaureate undergraduate work and graduate work from U.S. regionally accredited institutions). Higher GPAs improve the application.
3. **Completion of prerequisite course work completed with a grade of "C" or higher** from a U.S. regionally accredited institution. These courses must be completed successfully one semester prior to matriculation, failure to do so will result in the student losing their seat in the program. Unless specified, prerequisite courses should be one semester of at least 3 credit hours. Higher course grades improve the application. Prerequisite required courses are: General Biology plus lab (4 credits). General Chemistry I and II plus lab (8 credits). Human Anatomy and Human Physiology OR Anatomy and Physiology I and II. Microbiology. Organic Chemistry. Mathematics (College Algebra minimum). Statistics. General Psychology. Medical Terminology (1 credit). For guidelines on courses accepted, please visit <http://www.southalabama.edu/colleges/alliedhealth/pa/admissions.html>
4. **Completion of the General Graduate Record Examination (GRE)** within the past five (5) years. We require a minimum score of 145 in both the Verbal and Quantitative sections and completion of the Analytical Writing section in one test date. Higher GRE scores improve the application.
5. **Completion of at least 100 hours direct patient care experience is required.** Applicants will document these hours on their CASPA application. Please see the website (<http://southalabama.edu/alliedhealth/pa/>) for definitions, details, and examples. Higher numbers of direct patient care hours improve the application.
6. **Submission of at least three (3) reference letters, one of which must be from a Physician Assistant (PA), Medical Doctor (MD), or Doctor of Osteopathic Medicine (DO)** submitted to CASPA by the **October 1st** deadline. Reference letters sent directly to our office will not be accepted.
7. Submission of completed and verified application materials by **October 1st**. The program will not review applications that are incomplete, received after the deadline, or do not meet the minimum standards. Please see the website for details <http://www.southalabama.edu/colleges/alliedhealth/pa/applications.html>.

## Application and Admission Information

Applicants are selected based on a holistic evaluation. Many factors are taken into consideration but preference is given to applicants with the following:

- Higher GPAs (overall GPA, science GPA, last 60-hour GPA, both undergraduate and graduate level work).
- Higher GRE scores (quantitative and verbal sections)
- Possessing an additional degree (Master's or Doctorate) or a **2nd bachelor degree**

- Completion of upper-level science coursework (Biochemistry, Genetics, Immunology, Pathophysiology, and Pharmacology) with higher grades
- Alabama residents and service area residents
- Military Service: includes all branches of service.
- Leadership activities
- Disadvantaged Background: Economically and/or environmentally disadvantaged, as defined by HRSA and detailed on the CASPA application.
- Community Service/Volunteerism
- Being from a Rural/Underserved area (Childhood residence in rural county as defined by HRSA rural grant Qualifier)
- Higher hours of Direct Patient Care
- Higher hours of PA Shadowing Experience
- Current Health Training Certifications or Registration

Please see our website: <https://www.southalabama.edu/colleges/alliedhealth/pa/admissions.html>

## Matriculation Requirements

1. Acknowledgment of acceptance by deadline on notification by submission of a signed Statement of Intent Form and a nonrefundable \$500 matriculation deposit which will be applied toward the first semester's tuition to guarantee a seat in the class, to be received no later than the deadline stated in acceptance letter.
2. Completion of outstanding required prerequisite coursework with a grade of "C" or higher one semester prior to matriculation into the program. Failure to make a grade of "C" or higher in any required prerequisite course, or failure to complete all prerequisite courses one semester prior to matriculation into the program, will result in nullification of acceptance into the PA program. Updated transcripts will be required.
3. Submission to criminal background checks and urine drug screens before matriculation and prior to beginning clinical rotations. The fees are the student's responsibility. Failure to submit to and satisfactorily pass both screenings can result in dismissal from the program.
4. Completion of immunizations, titers, and a physical exam upon acceptance and prior to entering clinical rotations. The fees are the student's responsibility.
5. Maintenance of the American Heart Association Healthcare Providers BLS Certification throughout the program. The fees are the student's responsibility.
6. Maintenance of approved health insurance throughout the program. The fees are the student's responsibility.
7. Understanding of and the ability to adhere to the Technical Standards for Physician Assistants as stated. (See below.)

## Technical Standards

Students in the USA Physician Assistant program must be able to fulfill the program's Technical Standards, which include General, Observational, Communication, Motor, Critical Thinking, and Interpersonal abilities as well as possessing certain Behavioral and Social Attributes. To evaluate whether you meet the criteria, please visit our website at <http://www.southalabama.edu/colleges/alliedhealth/pa/technical.html> for details.

## Graduation Requirements

The following requirements must be satisfied to earn the degree of Master of Health Science in Physician Assistant Studies.

1. The candidate must complete all required courses of the professional curriculum with a minimum grade point average of 3.0 and successfully complete the senior summative evaluation.
2. The candidate must demonstrate professionalism expected of a student in the PA profession which is acceptable to the faculty according to the Program's professional policy.

## Graduation Plan

(121 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Summer</b>		
PA 510	Clinical Medicine I	4
PA 510L	CM I Lab	1
PA 511	Human Gross Anatomy	5
PA 512	Physiology	6
PA 514	Intro to Infectious Disease	1
<b>Hours</b>		<b>17</b>
<b>Fall</b>		
PA 516	Physician Assistant Issues I	2
PA 520	Clinical Medicine II	6
PA 520L	CM II Lab	1
PA 521	Pathophysiology I	4
PA 522	Pharmacology I	4
PA 523	Diag Data and Interp I	2
<b>Hours</b>		<b>19</b>
<b>Spring</b>		
PA 526	Physician Assistant Issues II	2
PA 530	Clinical Medicine III	6
PA 530L	CM III Lab	1
PA 531	Pathophysiology II	4
PA 532	Pharmacology II	4
PA 533	Diag Data & Interp II	2
<b>Hours</b>		<b>19</b>
<b>Second Year</b>		
<b>Summer</b>		
PA 536	Physician Assistant Issues III	2
PA 540	Clinical Medicine IV	7
PA 540L	CM IV Lab	1
PA 541	Pathophysiology III	3
PA 542	Pharmacology III	3
PA 544	Diagn Data and Interp III	2
<b>Hours</b>		<b>18</b>
<b>Fall</b>		
PA 501	Clinical Preceptorship I	4
PA 502	Clinical Preceptorship II	4
PA 503	Clinical Preceptorship III	4
PA 504	Clinical Preceptorship IV	4
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
PA 505	Clinical Preceptorship V	4
PA 506	Clinical Preceptorship VI	4
PA 507	Clinical Preceptorship VII	4
PA 508	Clinical Preceptorship VIII	4
<b>Hours</b>		<b>16</b>

Third Year		
Summer		
PA 509	Clinical Preceptorship IX	4
PA 517	Clinical Preceptorship X	4
PA 518	Clinical Preceptorship XI	4
PA 595	Summative Evaluation	4
<b>Hours</b>		<b>16</b>
<b>Total Hours</b>		<b>121</b>

## Radiologic Sciences

### Department Information

(251) 445-9346

Department of Radiologic Sciences website  
<http://www.southalabama.edu/alliedhealth/radiologicsciences> (<http://www.southalabama.edu/alliedhealth/radiologicsciences/>)

### Department of Radiologic Sciences Faculty

Title	Name
Department Chair	Catherine Cooper
Medical Advisor	Maria S. Figarola M.D.
Instructors	Cleveland, Cooper, Curtis, Long, Manning, Neely
Teaching Technologists	Davis, Steadham

## Programs Offered

### Bachelor of Science in Radiologic Sciences

Since its inception in 1976, the Department of Radiologic Sciences has provided a quality educational program with a sustained emphasis upon graduating competent and compassionate healthcare professionals. In so doing, our graduates are prepared to practice their profession in the often complex and global society of the 21st century.

The baccalaureate program (<https://www.southalabama.edu/colleges/alliedhealth/radiologicsciences/bsradsci.html>) is designed to provide graduates with enhanced career opportunities in radiology as administrators, educators, and advanced imaging specialists. The curriculum provides a broad education in liberal arts and basic sciences and an in-depth study in radiologic sciences.

Educational opportunities in diagnostic imaging and advanced imaging modalities such as mammography, magnetic resonance imaging, vascular radiography, computed tomography, radiology administration, ultrasound, and radiation therapy are offered. Following completion of the pre-professional component and admission to the professional component of the program, students will study general radiography for three semesters. At the end of this first year in the professional component, students will select one of the following tracks to complete: general radiography to include one advanced imaging modality or radiology administration; ultrasound; or radiation therapy.

The general radiography track curriculum includes diagnostic radiology and either mammography, computed tomography, magnetic resonance imaging, vascular radiography, and/or radiology administration. Students completing didactic and clinical requirements in these tracks will be eligible to seek certification through the American Registry of Radiologic Technologists (ARRT) in radiography and the advanced modality studied (excluding radiology administration).

The other two baccalaureate tracks allow students completing the first year of general radiography curriculum to select either ultrasound or radiation therapy during their second year. Those who choose one of these tracks will not be eligible to seek ARRT certification in radiography, but will be eligible for ARRT certification in radiation therapy or ARRT and American Registry of Diagnostic Medical Sonographers (ARDMS) certification as an ultrasonographer upon completion of didactic and clinical requirements.

For those who hold ARRT-approved associates or bachelor's degrees, the dept. offers several programs including 1) a Bachelor of Science in Radiologic Sciences degree program (Bridge program) (<https://www.southalabama.edu/colleges/alliedhealth/radiologicsciences/bridgebsradsci.html>), 2) an online Bachelor of Science in Radiologic Sciences degree program (<https://www.southalabama.edu/colleges/alliedhealth/radiologicsciences/onlinebsradsci.html>), and 3) certification or continuing education opportunities in advanced imaging modalities.

### Certificates (<https://www.southalabama.edu/colleges/alliedhealth/radiologicsciences/certprogram.html>)

The Dept. of Radiologic Sciences offers **non-degree seeking** Registered Radiographers the option of receiving an additional modality (specialty) of their choice independent of a bachelor's degree. The advanced modalities offered in this certificate program include mammography, magnetic resonance imaging (MRI), vascular radiography, computed tomography (CT), radiology administration, ultrasound, and radiation therapy.

This certificate program is designed for:

- Registered Radiographers who wish to study an advanced modality as a means of continuing education.
- Registered Radiographers who already hold a baccalaureate degree in a major other than Radiologic Sciences and choose to study an advanced modality, without earning a second baccalaureate degree.

**Note:** Federal financial aid is not available at this time for these certificate programs for non-degree seeking students.

### Radiology Administration

The certificate program in Radiology Administration would allow a student who is registered as a radiologic technologist with the American Registry of Radiologic Technologist (ARRT) to receive didactic instruction and practical experience in radiology administration. This will prepare the student to sit for the certified radiology administrator (CRA) examination given by the Association for Medical Imaging Management (AHRA). This certificate program will be offered as a pre-baccalaureate or a post-baccalaureate option for a student. The program will be three semesters in length and consist of thirteen semester hours.

The courses offered will include instruction in human resource management, asset resource management, fiscal management, operations management and communication and information management.

### Radiation Therapy

The certificate program in radiation therapy would allow a student who is registered as a radiologic technologist with the American Registry of Radiologic Technologist (ARRT) and who has a baccalaureate degree or is seeking a baccalaureate degree to receive didactic instruction and clinical experience in radiation therapy. This will prepare the student to sit for the certification examination given by the ARRT. This certificate program will be offered as a pre-baccalaureate or a post-baccalaureate option for a student. The program will be three semesters in length and

consist of 44 semester hours. The courses offered will include instruction in patient care, treatment, dosimetry, simulations, and procedures performed by the radiation therapist.

### Ultrasound

The certificate program in ultrasonography (US) would allow a student who is registered as a radiologic technologist with the American Registry of Radiologic Technologist (ARRT) to receive didactic instruction and clinical experience in US. This will prepare the student to sit for the certification examination given by the American Registry for Diagnostic Medical Sonography (ARDMS). This certificate program will be offered as a pre-baccalaureate or a post-baccalaureate option for a student. The program will be three semesters in length and consist of 34 semester hours. The courses offered will include instruction in patient care, image production, and procedures performed by the ultrasound technologist.

### Magnetic Resonance Imaging

The certificate program in magnetic resonance imaging (MRI) would allow a student who is registered as a radiologic technologist with the American Registry of Radiologic Technologist (ARRT) to receive didactic instruction and clinical experience in MRI. This will prepare the student to sit for the certification examination given by the ARRT. This certificate program will be offered as a pre-baccalaureate or a post-baccalaureate option for a student. The program will be three semesters in length and consist of twelve semester hours. The courses offered will include instruction in patient care, image production, and procedures performed by the MRI technologist.

### Computed Tomography

The certificate program in computed tomography (CT) would allow a student who is registered as a radiologic technologist with the American Registry of Radiologic Technologist (ARRT) to receive didactic instruction and clinical experience in CT. This will prepare the student to sit for the certification examination given by the ARRT. This certificate program will be offered as a pre-baccalaureate or a post-baccalaureate option for a student. The program will be three semesters in length and consist of twelve semester hours. The courses offered will include instruction in patient care, safety, image production, and procedures performed by the CT technologist.

### Interventional Radiography

The certificate program in Interventional Radiography (IR) would allow a student who is registered as a radiologic technologist with the American Registry of Radiologic Technologist (ARRT) to receive didactic instruction and clinical experience in cardiac and vascular interventional radiography. This will prepare the student to sit for the certification examination given by the ARRT. This certificate program will be offered as a pre-baccalaureate or a post-baccalaureate option for a student. The program will be three semesters in length and consist of twelve semester hours. The courses offered will include instruction in patient care, image production, and procedures performed by the interventional and cardiac radiography technologist.

### Mammography

The certificate program in mammography would allow a student who is registered as a radiologic technologist with the American Registry of Radiologic Technologist (ARRT) to receive didactic instruction and clinical experience in mammography. This will prepare the student to sit for the certification examination given by the ARRT. This certificate program will be offered as a pre-baccalaureate or a post-baccalaureate option for a student. The program will be three semesters in length and consist of twelve semester hours. The courses offered will include

instruction in patient care, image production, and procedures performed by the mammography technologist.

### Pre-professional Component

Degree seeking students must complete the 56-63 semester hour pre-professional component prior to enrolling in professional component courses. Applicants to the professional component of the Radiologic Sciences program are permitted to complete courses from the pre-professional component in the summer term immediately prior to their intended entry into the professional component of the program.

### Professional Component

The professional component (typically, students' junior and senior years) consists of two years of academic and clinical study in Radiologic Sciences. The program is six semesters in length, including two summer terms. All candidates must have satisfied the pre-professional component to qualify for the degree-seeking professional component; neither admission into the University of South Alabama nor completion of the pre-professional component guarantees admission into the professional component of Radiologic Sciences. Enrollment in the professional component is limited by the number of clinical positions available, which is equally true for the advanced modalities. During the professional component, students must be prepared to travel up to 90 miles from campus in order to participate in the clinical education component of the curriculum.

### Program Accreditation

The radiography and radiation therapy programs are accredited by:

The Joint Review Committee on Education in Radiologic Technology  
20 North Wacker Drive, Suite 2850  
Chicago, Illinois, 60706-3182

For more information go to [www.jrcert.org](http://www.jrcert.org) (<http://www.jrcert.org>).

### Admission Requirements for the Bachelor of Science in Radiologic Sciences Program

1. Completion of all required pre-professional courses by the end of the summer semester prior to desired admission for Fall semester. The professional component of Radiologic Sciences is Fall entry only.
2. Completion of a Department of Radiologic Sciences application, available at <https://www.southalabama.edu/colleges/alliedhealth/radiologicsscience/bsradsci.html>, to include payment of application fee.
3. Acceptance to the University of South Alabama. Current students are not required to submit an additional application for admission to the University of South Alabama.
4. Submit official college transcripts for all coursework not completed at the University of South Alabama. Current students are not required to submit additional transcripts for coursework that has already been accepted by the University of South Alabama.
5. Current students are may be eligible for Early Decision; Early Decision applications and supplemental items are due by April 1. The absolute final application deadline is May 1.
6. Submission of three (3) completed personal reference forms by the application deadline. Reference forms are available at <https://www.southalabama.edu/departments/eforms/colleges/alliedhealth/radreferenceform.pdf>.
7. Have a minimum cumulative overall (USA and transfer) GPA of 2.0 ("C" average) on previously completed college-level courses, as well

as at least a "C" in all math and Sciences courses. Transcripts must be submitted by the application deadline.

8. Students applying for admission to the professional component must review additional information assigned at the time of application.
9. Meet program technical/core performance standards. Core performance standards are fundamental tasks and skills that are required for successful completion of the program. They have been outlined and are available upon request and on the department website under Frequently Asked Questions (FAQ).
10. Complete a brief writing assignment conducted on the day of interview.
11. Complete a personal interview with members of the Radiologic Sciences Admissions Committee.
12. Applicants will be screened on the basis of past educational performance and the potential for the number of openings available. Therefore, acceptance into the University does not guarantee admission into the program. Likewise, admission into the program does not guarantee a position in a particular track/modality for one's senior year.
13. Student acceptance into the program is provisional pending completion of any remaining general education and prerequisite coursework, a drug screen, and background check requirements as specified in the acceptance letter. Refusal to submit will result in nullification of acceptance into the program.
14. Proof of medical insurance must be provided and maintained throughout the program following official notification of acceptance into the program. Due date will be specified in the acceptance letter.
15. ARRT certified radiographers who have completed the pre-professional component and are seeking the baccalaureate degree may apply for admission into the second year (senior year) of the professional component.
16. International students must score a minimum of 76 on the TOEFL exam to include the following minimum sub-scores on the IBT:
  - Listening 20
  - Speaking 20
  - Reading 18
  - Writing 18

The IELTS exam will not be used as an admission requirement to the Radiologic Sciences Program

## Special Fees

- Books: Approximately \$700-800
- Uniforms: Approximately \$250
- Clinical Data System: One-time payment of \$150
- Drug Screen: Approximately \$25
- Background Check: Varies based on number of prior residences, but approximately \$50
- Personal Medical Insurance: Must possess throughout program

## Degrees, Programs, or Concentrations

### Degree Programs

- Radiologic Sciences (BS) (p. 892)
- Radiologic Sciences (BS) - Computed Tomography (CT) (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/radiologic-sciences-bs-ct/>)

- Radiologic Sciences (BS) - Magnetic Resonance Imaging (MRI) (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/radiologic-sciences-bs-mri/>)
- Radiologic Sciences (BS) - Mammography (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/radiologic-sciences-bs-mammogr/>)
- Radiologic Sciences (BS) - Radiation Therapy (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/radiologic-sciences-bs-rad-therapy/>)
- Radiologic Sciences (BS) - Radiology Administration (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/radiologic-sciences-bs-rad-admin/>)
- Radiologic Sciences (BS) - Ultrasound (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/radiologic-sciences-bs-ultrasound/>)
- Radiologic Sciences (BS) - Vascular Radiography (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/radiologic-sciences-bs-vr/>)

## Certificate Programs

- Computed Tomography Certificate (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-ct-cert/>)
- Magnetic Resonance Imaging Certificate (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-mri-cert/>)
- Mammography Certificate (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-mammography-cert/>)
- Radiation Therapy Certificate (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-therapy-cert/>)
- Radiology Administration (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-admin-cert/>)
- Ultrasound Certificate (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-ultrasound-cert/>)
- Vascular Radiography Certificate (<http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/rad-vr-cert/>)

## Courses

### RAD 101 Prin of Radiographic Exposure 4 cr

A study of the principles involved in image formation including radiographic films, film processing, and exposure factors affecting film quality.

### RAD 104 Patient Care-Ethics in Radiogr 3 cr

This course is designed to give the student basic knowledge concerning patient care and ethical situations with which the radiographer must be familiar. Class time is allotted for the student to practice certain techniques pertinent to obtaining vital signs, handling of patients, sterile technique, tray set-up, first-aid measures, and general operating room and bedside radiography procedures.

### RAD 107 Clinical Education I 1 cr

Hospital-based laboratory allowing the student additional clinical experience in RAD 101 and RAD 104.

### RAD 108 Clinical Education II 1 cr

Hospital-based laboratory allowing the student to apply those positioning techniques within a clinical setting as presented in RAD 131.

**RAD 109 Clinical Education III 4 cr**

Hospital-based laboratory experience allowing the student increased responsibility in those areas covered in RAD 131 as well as bedside radiography.

**RAD 131 Radiography-Osseous System I 4 cr**

This course includes the demonstration and practice in positioning and phantom radiography of the chest, general abdomino-pelvic viscera, and the upper and lower extremities to include shoulder and pelvic girdles. Special fee.

**RAD 201 Radiography-Osseous System II 6 cr**

A continuation of RAD 131 to include the axial skeleton, sternum, sternoclavicular joints, etc., and other topics relating to diagnostic imaging. Special fee.

**RAD 204 Clinical Education IV 4 cr**

Hospital-based laboratory allowing the student to obtain clinical experience in those areas presented in RAD 201 and RAD 215.

**RAD 215 Radiographic Contrast Media 4 cr**

A detailed study of contrast media, preparation and administration, radiographic positions, technique, and anatomy and physiology of the organs are studied.

**RAD 218 Radiologic Physics 4 cr**

A study of fundamentals of magnetism, basic electricity, x-ray machine circuitry, x-ray protection, and radiation physics, to give the student a basic understanding of the principles underlying the production of x-rays and their interaction with matter.

**RAD 265 Radiation Biology 2 cr**

A study of health physics and methods used to reduce exposure to personnel and patients in diagnostic and therapeutic radiology. The biological effects of ionizing radiation are stressed along with applied mathematical principles.

**RAD 300 Clinical Education I 2 cr**

Hospital-based laboratory allowing the student additional clinical experience in RAD 312 and RAD 304.

**RAD 301 Clinical Education II 4 cr**

Hospital-based laboratory allowing the student to obtain clinical experience in those areas presented in RAD 307.

**Prerequisite:** RAD 300 Minimum Grade of C and RAD 304 Minimum Grade of C and RAD 307 Minimum Grade of C and RAD 310 Minimum Grade of C and RAD 312 Minimum Grade of C

**RAD 302 Clinical Ed III 4 cr**

Hospital-based laboratory allowing the student additional clinical experience.

**RAD 304 Patient Care & Ethics 3 cr**

Basic knowledge concerning patient care and ethical situations with which the radiologic technologist must be familiar. Class time is allotted for the student to practice certain techniques pertinent to obtaining vital signs, handling of patients, sterile technique, tray setup, first-aid measures, and general operating room and bedside radiography procedures.

**RAD 305 Clinical Education V 4 cr**

Hospital-based laboratory allowing the student to gain additional clinical experience in RAD 201 and 215.

**RAD 307 Osseous I 4 cr**

This course includes the demonstration and practice in positioning and phantom radiography of the chest, general abdomino-pelvic viscera, and the upper and lower extremities to include shoulder and pelvic girdles.

**RAD 308 Osseous II 4 cr**

Continuation of RAD 307 to include the axial skeleton, sternum, sternoclavicular joints and introductory topics relating to special radiographic procedures.

**RAD 309 Osseous III 3 cr**

Continuation of RAD 308 to include demonstration and practice in positioning and phantom radiography of the cranium, facial bones, optic foramina, TMJs, orbits, overview of mastoids, stereoscopy, tomography, long bone measurements, foreign body localization and fetal imaging.

**RAD 310 Radiation Biology 2 cr**

A study of health physics and methods used to reduce exposure to personnel and patients in diagnostic and therapeutic radiology. The biological effects of ionizing radiation are stressed along with applied mathematical principles.

**RAD 311 Survey of Pathology 4 cr**

A general survey of diseases designed to acquaint the student with certain changes that occur in disease and their application to radiologic technology.

**RAD 312 Princ of Radiographic Exposure 4 cr**

A beginning study of the principles involved in image formation including exposure factors affecting image quality.

**RAD 315 Contrast Media 3 cr**

A detailed study of contrast media, preparation and administration, radiographic positions, technique, and anatomy and physiology of the organs studied.

**Prerequisite:** RAD 300 Minimum Grade of C and RAD 304 Minimum Grade of C and RAD 307 Minimum Grade of C and RAD 310 Minimum Grade of C and RAD 312 Minimum Grade of C

**RAD 318 Radiologic Physics 4 cr**

A study of the fundamentals of magnetism, basic electricity, x-ray machine circuitry, x-ray protection, and radiation physics, to give the student a basic understanding of the principles underlying the production of x-rays and their interaction with matter.

**Prerequisite:** RAD 304 Minimum Grade of C and RAD 307 Minimum Grade of C and RAD 310 Minimum Grade of C and RAD 312 Minimum Grade of C and RAD 300 Minimum Grade of C

**RAD 320 Cross-Sectional Anatomy 2 cr**

A study of cross-sectional anatomy as imaged in MRI and CT.

**RAD 335 Pediatric-Geriatric Rad 1 cr**

A detailed study of specialized equipment, accessories and positioning techniques used in pediatric and geriatric radiography.

**RAD 337 Image Analysis 5 cr**

Critique sessions of radiographic images including quality control procedures.

**RAD 394 Dir Independent St in Rad-W 2 cr**

Directed study in approved areas of medical imaging. Includes a comprehensive Registry Review and requires written assignments and a presentation.

**RAD 401 Vascular Radiography I 5 cr**

Advanced practice in, and in-depth study of, the principles of vascular radiography.

**RAD 402 Vascular Radiography II - W 5 cr**

A continuation of RAD 401.

**RAD 403 Clinical Education IV 4 cr**

Hospital-based laboratory allowing the student to obtain clinical experience in those areas presented in RAD 308 and RAD 310.

**Prerequisite:** RAD 300 Minimum Grade of C and RAD 304 Minimum Grade of C and RAD 307 Minimum Grade of C and RAD 310 Minimum Grade of C and RAD 312 Minimum Grade of C

**RAD 404 Clinical Education V 4 cr**

Hospital-based laboratory allowing the student to obtain clinical experience.

**Prerequisite:** RAD 403 Minimum Grade of C and RAD 411 Minimum Grade of C and RAD 415 Minimum Grade of C

**RAD 405 Clinical Education VI 4 cr**

Hospital-based laboratory allowing the student to obtain clinical experience.

**Prerequisite:** RAD 404 Minimum Grade of C

**RAD 406 Computerized Tomography II - W 5 cr**

A continuation of RAD 405.

**RAD 407 Clinical Education I - PPC 6 cr**

This is a hospital based laboratory allowing the student to gain additional clinical experience in general radiographic procedures. This course is designed for students who have previously completed the Radiologic Sciences program in Ultrasound or Radiation Therapy.

**RAD 408 Clinical Education II - PPC 6 cr**

This is a hospital based laboratory allowing the student to gain additional clinical experience in general radiographic procedures. This course is designed for students who have previously completed the Radiologic Sciences program in Ultrasound or Radiation Therapy. This course is a continuation of RAD 407.

**Prerequisite:** RAD 407 Minimum Grade of C

**RAD 409 Magnetic Resonance Imaging I 5 cr**

An in-depth study of the principles and clinical applications of MRI.

**RAD 410 Magnetic Res Imaging II - W 5 cr**

A continuation of RAD 409.

**RAD 411 Survey of Pathology 4 cr**

A general survey of diseases designed to acquaint the student with certain changes that occur in disease and their application to radiologic sciences.

**Prerequisite:** RAD 300 Minimum Grade of C and RAD 304 Minimum Grade of C and RAD 307 Minimum Grade of C and RAD 310 Minimum Grade of C and RAD 312 Minimum Grade of C

**RAD 413 Mammography I 5 cr**

Advanced practice and in-depth study of breast imaging techniques.

**RAD 414 Mammography II - W 5 cr**

A continuation of RAD 413.

**RAD 415 Diagnostic Imaging 2 cr**

This course includes principles and clinical applications of image intensification, computer applications in radiology, CR, DR, IDDR, PACS, AEC function, magnification radiography, thermography, diaphanography and bone densitometry.

**Prerequisite:** RAD 300 Minimum Grade of C and RAD 304 Minimum Grade of C and RAD 307 Minimum Grade of C and RAD 310 Minimum Grade of C and RAD 312 Minimum Grade of C

**RAD 417 Ultrasound Anatomy & Scanning-W 4 cr**

This course will include lecture/clinical/laboratory demonstration and guidelines for the ultrasound evaluation of the abdomen, retro-peritoneum and superficial structures and also include a writing component.

**Prerequisite:** EH 102 Minimum Grade of C

**RAD 418 Ultras Anat-Scan Tech-OB-GYN 3 cr**

This course is a continuation of RAD 417 and includes clinical/laboratory demonstration and guidelines for obstetric and gynecological ultrasound.

**Prerequisite:** RAD 417 Minimum Grade of C

**RAD 419 Ultras Tech-Superf Struct-Peds 3 cr**

This course is a continuation of RAD 418 and is designed to provide the student with anatomy, pathology and scanning techniques of superficial structures and pediatrics. It includes clinical and laboratory demonstrations. Special fee.

**Prerequisite:** RAD 418 Minimum Grade of C

**RAD 421 Ultras Physics-Instrumentation 3 cr**

A study of the basic physical principles and instrumentation of diagnostic ultrasound.

**RAD 423 Ultrasound Clinical Educ I 6 cr**

Hospital-based laboratory allowing the student to gain clinical experience in ultrasound procedures, with emphasis on abdominal exams.

**RAD 424 Ultrasound Clinical Educ II 6 cr**

Continuation of RAD 423 allowing the student to gain clinical experience in ultrasound procedures, with emphasis on OB/GYN exams.

**RAD 425 Ultrasound Clinical Educ III 6 cr**

A continuation of RAD 424 allowing the student to gain clinical experience in ultrasound procedures, with emphasis on superficial structures, pediatric scans, and ultrasound guided procedures.

**RAD 426 CT Phys Princ and Qual Cont 3 cr**

A study in advanced practice in, and in depth study, of computerized tomography. Topics will include a history of CT, physical principles of CT, quality control and data acquisition, image reconstruction, and image manipulation, display and storage.

**RAD 427 Procedural Guidelines in Ultra 3 cr**

This course will include a review of guidelines for ultrasound exams, ethics in ultrasound and preparation for the ultrasound registry. Assigned student papers and oral presentations addressing ultrasound topics are required.

**RAD 428 Computed Tomography Procedures 3 cr**

Provides a detail student of procedures performed in CT. Topics include advanced patient care, patient education, preparation, contrast administration, radiation dosimetry and imaging protocols of the head, neck, chest, abdomen, pelvis, spine and musculoskeletal systems.

**RAD 429 Adv Sect Imag - CT and MRI Pth 3 cr**

This course will distinguish various types of pathologies imaged in CT and MRI. In addition to imaging characteristics, emphasis will be placed on a general understanding of the description, etiology, epidemiology, signs and symptoms, treatment and prognosis.

**RAD 430 Healthcare Communication 3 cr**

This course will provide knowledge of information technology and applications of IT in the healthcare setting. Topics of discussion will include how to foster interdisciplinary communication, development of action plans for areas that are compliant/non-compliant with organizational objectives, and utilization of electronic or manual systems.

**RAD 432 Healthcare Human Resource Mgmt 3 cr**

This course will enable students to develop an effective recruitment and staffing program, implement a retention program, conduct staff performance evaluations, establish and develop processes to expand employee competence, implement a leadership development program, develop a succession plan and create an employee recognition program.

**RAD 433 Health Care Financial Mgmt 3 cr**

Course provides students with knowledge of both fiscal and asset management health care organization with tools and techniques to include health care accounting and financial statement, making major capital investments, determining cost and using cost information in decision making, and budgeting performance management.

**RAD 435 Health Care Operations Mgt - W 3 cr**

Provide knowledge to use surveys, focus groups, and interviews, use quality improvement methods, develop industry partnerships and develop new opportunities, develop marketing and public relations plans, develop policies and procedures to follow federal, state, and other regulatory guidelines, enforce policies and procedures with monitoring techniques, and develop a quality management program.

**RAD 437 Image Analysis 3 cr**

Student radiographs taken during the clinical periods will be viewed and critiqued within the classroom.

**Prerequisite:** RAD 403 Minimum Grade of C and RAD 411 Minimum Grade of C and RAD 415 Minimum Grade of C

**RAD 440 Radiology Management Preceptor 1 cr**

To achieve the aims of the Radiology Management program, students require experience in a variety of settings, in addition to learning theory content in their management courses. This course will provide a valuable component of student development by providing an opportunity to work with professional radiology managers/supervisors/administrators in the field of Radiology.

**Prerequisite:** RAD 430 Minimum Grade of C and RAD 432 Minimum Grade of C and RAD 433 Minimum Grade of C and RAD 435 Minimum Grade of C

**RAD 441 Clinical Education I 5 cr**

Through structured sequential assignments in clinical education settings, concepts of team practice, patient-centered clinical practice, and professional development are presented. Course designed to provide development, application, analysis, integration, synthesis, and evaluation of concepts and theories in radiation therapy.

**RAD 442 Clinical Education II 6 cr**

A continuation of RAD 441. Through structured sequential assignments in clinical education settings, concepts of team practice, patient-centered clinical practice, and professional development are presented. Course designed to provide development, application, analysis, integration, synthesis, and evaluation of concepts and theories in radiation therapy.

**RAD 443 Clinical Education III 7 cr**

A continuation of RAD 442. Through structured sequential assignments in clinical education settings, concepts of team practice, patient-centered clinical practice, and professional development are presented. Course designed to provide development, application, analysis, integration, synthesis and evaluation of concepts and theories in radiation therapy.

**RAD 444 Clinical Education IV 6 cr**

A continuation of RAD 443.

**RAD 446 Orientation to Oncology - W 3 cr**

Examines Oncology terminology, concepts of diagnosis and treatment, orientation to equipment and procedures and the role of the radiation therapist. Ethical, legal and quality assurance concerns will also be discussed.

**RAD 447 Cardiovascular Interventional for Radiologic Technologists 3 cr**

This course will explore the principles and practices of cardiovascular intervention. It will cover radiography equipment, anatomy interpretation through imaging, and the crucial role of radiographers in heart catheterization departments. This course delivers the foundational knowledge and practical skills essential for a successful career in cardiovascular intervention.

**RAD 448 Radiation Therapy Physics 3 cr**

Processes in radiation production, interactions, detection, and measurement, units, calibration, are presented. Routine and emergency protection procedures for radiation-producing devices and radioactive sources are emphasized. Includes discussions on quality assurance methods, treatment unit calibration, dose monitoring, beam verification, and radiation protection for the patient, health-care worker, and the public.

**RAD 450 Patient Care in Oncology 1 cr**

Fundamentals of oncology patient care with emphasis on physical and psycho-social needs assessment, treatment and disease side-effect management, nutritional care and pain management.

**RAD 452 Prin Pract of Rad Oncology I 3 cr**

A study of techniques used for simulation and treatment delivery. Includes general and site-specific instruction, with attention given to technical details aimed at optimizing the dose delivery planned during simulation and accomplished during treatment. Time will be dedicated to demonstration of techniques.

**RAD 453 Prin Prac of Rad Oncology II 3 cr**

A study of techniques used for simulation and treatment delivery. Includes general and site-specific instruction, with attention given to technical details aimed at optimizing the dose delivery planned during simulation and accomplished during treatment. Time will be dedicated to demonstration of techniques.

**RAD 454 Quality Mgt In Rad Oncology 1 cr**

Components of quality management in Radiation Oncology will be studied, to include quality control and assurance checks for the clinical aspects of patient care, medical records, treatment delivery and localization equipment and treatment planning equipment. The role of various team members in continuous quality improvement will be discussed as well as legal and regulatory implications.

**Prerequisite:** RAD 441 Minimum Grade of C and RAD 448 Minimum Grade of C and RAD 446 Minimum Grade of C and RAD 450 Minimum Grade of C and RAD 452 Minimum Grade of C

**RAD 455 Dosimetry and Tx Planning I 3 cr**

Content designed to examine factors that influence and govern clinical planning treatment. Encompasses isodose characteristics, contouring of relevant structures, dosimetric calculations, compensation, and clinical application of treatment beams. Optimal treatment planning is emphasized.

**RAD 456 Dosimetry and Tx Planning II 2 cr**

A continuation of RAD 455. Content designed to examine factors that influence and govern clinical planning of patient treatment. Encompasses isodose characteristics, contouring of relevant structures, dosimetric calculations, compensation, and clinical application of treatment beams. Optimal treatment planning is emphasized.

**RAD 458 Cancer Mgt in Oncology - W 3 cr**

This course examines special topics in Radiation Oncology and places emphasis on current literature related to various aspects of practice.

**RAD 459 Superficial Structures & Neonatal Scanning 3 cr**

This course is a continuation of RAD 417. It includes clinical laboratory demonstration and guidelines for Superficial Structures & Neonatal Scanning.

**RAD 475 Advanced Modality Clinical A 2 cr**

Advance practice in hospital based laboratory/clinical settings. Clinical rotations will serve as the foundation for acquiring the appropriate clinical skills. The completion of assigned clinical rotations and clinical competencies are essential to filling objectives.

**RAD 476 Advanced Modality Clinical B 2 cr**

Advance practice in an additional hospital based laboratory clinical setting. Clinical rotations will serve as the foundation for acquiring the appropriate clinical skills. The completion of assigned clinical rotations and clinical competencies are essentials to filling objectives.

**RAD 477 Computed Tomography I 2 cr**

Advance practice in, and in-depth study of, computerized tomography

**RAD 478 Computed Tomography II-W 2 cr**

Continuation of RAD 477, with increased emphasis on 3-D imaging, biopsies and advanced CT techniques.

**Prerequisite:** RAD 477 Minimum Grade of C and EH 102 Minimum Grade of C

**Corequisite:** RAD 475

**RAD 479 Computed Tomography III 2 cr**

Advance practice in, and in-depth study of, computerized tomography

**RAD 480 Mammography I - W 2 cr**

Lecture and discussion of breast imaging and includes the history, scope of practice, introduction to MQSA, breast cancer and early detection, epidemiology, patient care, patient education and assessment.

**Prerequisite:** EH 102 Minimum Grade of C

**Corequisite:** RAD 475

**RAD 481 Mammography II 2 cr**

This course is continuation of RAD 480 with increased emphasis on quality assurance, mammographic digital imaging, diagnostic procedures, and 3D breast tomosynthesis.

**RAD 482 Mammography III 2 cr**

This course will include web enhanced lectures, demonstrations and review of RAD 480 and RAD 481 with increased emphasis on quality assurance and advanced mammographic digital imaging.

**RAD 483 Magnetic Resonance Imaging I 2 cr**

An in-depth study of the principles and clinical applications of MRI.

**RAD 484 Magnetic Reson Imaging II - W 2 cr**

This course introduces the basic principles of MR safety and covers the basic concepts of patient management. Educating patients and ancillary staff on magnet safety also is presented. Patient and magnet-related emergencies represent a unique situation to an MR tech.

**Prerequisite:** EH 102 Minimum Grade of C

**Corequisite:** RAD 475

**RAD 485 Magnetic Resonance Imaging III 2 cr**

A continuation of RAD 484 with additional emphasis on instrumentation, abdominal, extremity and joint procedures.

**RAD 486 Vascular Radiography - W 2 cr**

Advanced practice and in-depth study of the principles of vascular radiography with writing component.

**Corequisite:** RAD 475

**RAD 487 Vascular Radiography II 2 cr**

Advanced practice and in-depth study of the principles of vascular radiography, with increased emphasis on digital radiography as applied to vascular procedures.

**RAD 488 Vascular Radiography III 2 cr**

Advanced practice and in-depth study of the principles of vascular radiography, with increased emphasis on vascular procedures.

**RAD 490 Special Topics 1-3 cr**

Selected topics in Radiological Sciences. Students can increase knowledge in specific areas of radiological sciences, and also use this course to gain extra credit hours to complete their baccalaureate degree.

**RAD 491 Prof. Radiological Practice 6 cr**

A bridge course for certified radiographers to transition from Radiographer to BS program.

**RAD 494 Directed Independent Study 2 cr**

A comprehensive registry review to include written assignments and a presentation.

**RAD 496 Radiologic Sci Research I-W 1 cr**

Writing intensive course that prepares students to perform a research project in one of the imaging modalities.

**Prerequisite:** EH 102 Minimum Grade of C

**RAD 497 Rad Science Research II 1 cr**

Continuation of RAD 496. Students will design and perform a research project.

**Prerequisite:** RAD 496 Minimum Grade of C

**RAD 499 Senior Honors Project - H - W 1-3 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project relevant to the field of Radiologic Sciences study that will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty members chaired by the honors mentor. This course is required for Honors recognition and may be repeated for up to 6 credit hours. Prerequisite: Permission of the department chair and completion of an approved project prospectus.

**Prerequisite:** RAD 403 Minimum Grade of C or RAD 423 Minimum Grade of C or RAD 441 Minimum Grade of C or RAD 460 Minimum Grade of C or RAD 464 Minimum Grade of C or RAD 468 Minimum Grade of C or RAD 472 Minimum Grade of C

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
COOPER, CATHERINE MARIE NAYLOR (ccooper@southalabama.edu)	Radiologic Sciences	Senior Instructor	BSRS, University of South Alabama MS, University of South Alabama
CURTIS, MARY ANN (macurtis@southalabama.edu)	Radiologic Sciences	Instructor	BSRS, University of South Alabama MS, University of South Alabama
MANNING, JACOB ALLEN (jamanning@southalabama.edu)	Radiologic Sciences	Instructor	BA, Auburn University CERT, University of South Alabama BS, University of South Alabama MS, Northwestern State University
NEELY, KAYLA MARIE (kperkins@southalabama.edu)	Radiologic Sciences	Instructor	CERT, University of South Alabama BS, University of South Alabama MBA, University of West Florida

## Radiologic Sciences (BS)

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 893)		59-60
<b>Major Requirements (67-81 Hours)</b>		
<i>Radiologic Science -First Year Professional Component (13 Courses,37 Hours)</i>		
A. Fall - Complete the following:		
RAD 300	Clinical Education I	2
RAD 304	Patient Care & Ethics	3
RAD 307	Osseous I	4
RAD 310	Radiation Biology	2
RAD 312	Princ of Radiographic Exposure	4
B. Spring - Complete the following:		
RAD 301	Clinical Education II	4
RAD 308	Osseous II	4
RAD 315	Contrast Media	2
RAD 318	Radiologic Physics	4
RAD 335	Pediatric-Geriatric Rad	1
C. Summer - Complete the following:		
RAD 302	Clinical Ed III	4
RAD 320	Cross-Sectional Anatomy	2
RAD 415	Diagnostic Imaging	2
<i>Radiologic Sciences -Second Year Professional Component (35-36 Hours)</i>		
Select one of the following Tracks:		34-44
Track 1: General Radiography to Include One Advanced Modality. (Study of Ultrasound or Radiation Therapy is not an option in the General Radiography Track) ( <a href="http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/footnote1/">http://bulletin.southalabama.edu/programs-az/allied-health/radiologic-sciences/footnote1/</a> ) <sup>1</sup>		
A. Fall - 11 hours Complete the following:		
RAD 309	Osseous III	3
RAD 403	Clinical Education IV	
RAD 411	Survey of Pathology	
Select one of the following modalities:		
a. Mammography		
RAD 480 & RAD 475	Mammography I - W and Advanced Modality Clinical A	

or RAD 476 Advanced Modality Clinical B	
b. Computed Tomography	
RAD 477 & RAD 475	Computed Tomography I and Advanced Modality Clinical A
or RAD 476 Advanced Modality Clinical B	
c. Magnetic Resonance Imaging	
RAD 483 & RAD 475	Magnetic Resonance Imaging I and Advanced Modality Clinical A
or RAD 476 Advanced Modality Clinical B	
d. Vascular Radiography	
RAD 486 & RAD 475	Vascular Radiography - W and Advanced Modality Clinical A
or RAD 476 Advanced Modality Clinical B	
e. Radiology Administration	
RAD 430 & RAD 432	Healthcare Communication and Healthcare Human Resource Mgmt
B. Spring - Complete the following:	
RAD 404	Clinical Education V
RAD 437	Image Analysis
RAD 496	Radiologic Sci Research I-W
Select one of the following modalities:	
a. Mammography	
RAD 481 & RAD 475	Mammography II and Advanced Modality Clinical A
or RAD 476 Advanced Modality Clinical B	
b. Computer Tomography	
RAD 478 & RAD 475	Computed Tomography II-W and Advanced Modality Clinical A
or RAD 476 Advanced Modality Clinical B	
c. Magnetic Resonance Imaging	
RAD 484 & RAD 475	Magnetic Resonance Imaging II - W and Advanced Modality Clinical A
or RAD 476 Advanced Modality Clinical B	
d. Vascular Radiography	
RAD 487 & RAD 475	Vascular Radiography II and Advanced Modality Clinical A
or RAD 476 Advanced Modality Clinical B	
e. Radiology Administration	
RAD 433 & RAD 435	Health Care Financial Mgmt and Health Care Operations Mgt - W

C. Summer - Complete the following:	
RAD 405	Clinical Education VI
RAD 494	Directed Independent Study
RAD 497	Rad Science Research II
Select one of the following modalities:	
a. Mammography	
RAD 482	Mammography III
& RAD 475	and Advanced Modality Clinical A
or RAD 476	Advanced Modality Clinical B
b. Computer Tomography	
RAD 479	Computed Tomography III
& RAD 475	and Advanced Modality Clinical A
or RAD 476	Advanced Modality Clinical B
c. Magnetic Resonance Imaging	
RAD 485	Magnetic Resonance Imaging III
& RAD 475	and Advanced Modality Clinical A
or RAD 476	Advanced Modality Clinical B
d. Vascular Radiography	
RAD 481	Mammography II
& RAD 475	and Advanced Modality Clinical A
or RAD 476	Advanced Modality Clinical B
e. Radiology Administration	
RAD 440	Radiology Management Preceptor

**Track 2: Ultrasound Only**

A. Fall - 12-16 hours; Complete the following:	
RAD 417	Ultrasound Anatomy & Scanning-W
RAD 421	Ultras Physics-Instrumentation
RAD 423	Ultrasound Clinical Educ I
RAD 411	Survey of Pathology (see footnote table below (p. 893)) <sup>2</sup>
B. Spring - Complete the following:	
RAD 418	Ultras Anat-Scan Tech-OB-GYN
RAD 424	Ultrasound Clinical Educ II
RAD 496	Radiologic Sci Research I-W
C. Summer - Complete the following:	
RAD 320	Cross-Sectional Anatomy (see footnote table below (p. 893)) <sup>2</sup>
RAD 425	Ultrasound Clinical Educ III
RAD 427	Procedural Guidelines in Ultra
RAD 497	Rad Science Research II

**Track 3: Radiation Therapy Only**

A. Fall - Complete the following:	
RAD 441	Clinical Education I
RAD 448	Radiation Therapy Physics
RAD 446	Orientation to Oncology - W
RAD 450	Patient Care in Oncology
RAD 452	Prin Pract of Rad Oncology I
B. Spring - Complete the following:	
RAD 442	Clinical Education II
RAD 455	Dosimetry and Tx Planning I
RAD 453	Prin Prac of Rad Oncology II
RAD 458	Cancer Mgt in Oncology - W
RAD 496	Radiologic Sci Research I-W

C. Summer - Complete the following:	
RAD 443	Clinical Education III
RAD 456	Dosimetry and Tx Planning II
RAD 454	Quality Mgt In Rad Oncology
RAD 497	Rad Science Research II
RAD 320	Cross-Sectional Anatomy (see footnote table below (p. 893)) <sup>2</sup>

**Minor Requirements**

A minor is not required for this degree program	0
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<b>Total Hours</b>	<b>134-145</b>
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**Footnote**

<sup>1</sup> Students who choose to complete Radiography to include one advanced modality will be eligible to apply for continuation in the program to study any additional modality to include ultrasound and radiation therapy in a non-degree seeking student status. Please note that non-degree seeking students are not eligible for federal financial aid.

<sup>2</sup> RAD 320 and RAD 411 required if not previously completed.

**General Education Requirements**

Code	Title	Hours
<b>Area I - Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II - Humanities &amp; Fine Arts</b>		
A. Complete the following:		
CA 110	Public Speaking	
B. Complete one of the following: <sup>1</sup>		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
C. Complete one of the following: 3		
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	
D. Complete one of the following: 3		
AFR 101	Intro to African Amer Studies	
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARH 203	Survey of Non-Western Art	
ARS 101	Art Appreciation	
CLA 110	Intro Anc Greek Roman Culture	
DRA 110	Introduction to Theatre	

EH 215	Brit Lit before 1785	LGS 211	Intermediate ASL II
EH 216	Brit Lit after 1785	MUL 101	Introduction to Music
EH 225	Am Lit before 1865	PHL 110	Introduction to Philosophy
EH 226	Am Lit after 1865	PHL 120	Critical Thinking
EH 235	World Lit before 1650	PHL 121	Introduction to Logic
EH 236	World Lit after 1650	PHL 131	Introduction to Ethics
LG 101	Introductory Latin I	PHL 231	Social Ethics
LG 102	Introductory Latin II	PHL 240	Western Philosophy: Classical
LG 111	Introductory French I	REL 100	Intro to the Study of Religion
LG 112	Introductory French II	REL 200	Old Testament/Hebrew Bible
LG 121	Introductory Chinese I	REL 201	Survey of the New Testament
LG 122	Introductory Chinese II	<b>Area III – Natural Sciences &amp; Mathematics</b>	
LG 131	Introductory Spanish I	A. Complete one of the following: 3-4	
LG 132	Introductory Spanish II	MA 112	Precalculus Algebra
LG 141	Intro Classical Greek I	MA 113	Precalculus Trigonometry
LG 142	Intro Classical Greek II	MA 115	Precal Algebra-Trigonometry
LG 151	Introductory German I	MA 120	Calculus and Its Applications
LG 152	Introductory German II	MA 125	Calculus I
LG 153	Accelerated Intro German	MA 126	Calculus II
LG 171	Introductory Russian I	MA 227	Calculus III
LG 172	Introductory Russian II	MA 237	Linear Algebra I
LG 173	Accelerated Intro Russian	MA 238	Differential Equations I
LG 201	Intermediate Latin I	B. Complete one of the following combinations: 4	
LG 202	Intermediate Latin II	BLY 101	Life Science I
LG 211	Intermediate French I	& 101L	and Life Science I Laboratory
LG 212	Intermediate French II	or BLY 121	General Biology I
LG 213	Accelerated Inter French - H	& 121L	and General Biology I Lab
LG 221	Intermediate Chinese I	C. Complete one of the following combinations: 4	
LG 222	Intermediate Chinese II	BLY 102	Life Science II
LG 231	Intermediate Spanish I	& 102L	and Life Science II Lab
LG 232	Intermediate Spanish II	or BLY 122	General Biology II
LG 234	Inter Spanish Accel -H	& 122L	and General Biology II Laboratory
LG 241	Interm Classical Greek I	BLY 213	Microbiology
LG 242	Interm Classical Greek II	& BLY 214	and Lab Studies Microbiology
LG 251	Intermediate German I	BMD 210	Microbiology in Healthcare
LG 252	Intermediate German II	& 210L	and Microbiology in Healthcare Lab
LG 271	Intermediate Russian I	CH 101	Survey of Inorg and Org Chem
LG 272	Intermediate Russian II	& 101L	and Survey Inorg-Org Chem Lab
LG 273	Intensive Second Year Russian	CH 131	General Chemistry I
LGS 101	Introductory Japanese I	& 131L	and General Chemistry I Lab
LGS 102	Introductory Japanese II	CH 132	General Chemistry II
LGS 106	Introductory Arabic I	& 132L	and General Chemistry II Lab
LGS 107	Introductory Arabic II	<b>Area IV – History, Social &amp; Behavioral Sciences</b>	
LGS 110	Intro American Sign Language I	A. Complete the following:	
LGS 111	Intro American Sign Lang II	PSY 120	Introduction to Psychology
LGS 171	Introductory Korean I	or PSY 121	Honors Gen Psychology - H
LGS 172	Introductory Korean II	B. Complete one of the following: <sup>1</sup> 3	
LGS 201	Intermediate Japanese I	HY 101	HY of Western Civilization I
LGS 202	Intermediate Japanese II	HY 102	HY of Western Civilization II
LGS 206	Intermediate Arabic I	HY 121	World Civilization I
LGS 207	Intermediate Arabic II	HY 122	World Civilization II
LGS 210	Intermediate ASL I	HY 135	US History to 1877
		HY 136	US History since 1877
		C. Complete two of the following: 6	

AN 100	Intro to Cultural Anthropology
AN 101	Intro Archaeology-Bio Anthro
CA 100	Intro to Communication
CA 211	Interpersonal Comm
ECO 215	Prin of Microeconomics
ECO 216	Prin of Macroeconomics
GEO 114	People, Places, Environment
GEO 115	World Regional Geography
GS 101	Intro to Gender Studies
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 121	World Civilization I
HY 122	World Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
IS 100	Global Issues
IST 201	Seasons of Life
NAS 101	Intro Native American Studies
PSC 130	Intro to US Government
PSY 250	Life Span Development
SY 109	Introductory Sociology
SY 112	Social Problems

#### Area V - Pre-Professional Required Courses

A. Complete the following:

BMD 251	Human Anatomy & Physiology I	4
BMD 252	Human Anatomy & Physiology II	4

B. Complete one of the following combinations: 4-5

PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory	
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab	
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	

C. Complete one of the following: 3

BUS 245	Data Analytics I	
ST 210	Stat Reason and Application	
ST 305	Applied Stat Health Sciences	

**Total Hours 47-49**

#### Footnote

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102, HY 121 & HY 122, or HY 135 & HY 136).

All undergraduates must complete two designated writing credit (W) courses, at least one of which must be in the student's major or minor.

## Graduation Plan

Multiple Degree Plans Available. Select To View Option:

### Radiologic Sciences (BS)

(126-153 Total Hours)

The total number of hours for the RAD degree depends on which Track is chosen by the student.

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
<b>Pre-Professional Year</b>		
EH 101	English Composition I	3
Biology	Area III, B <sup>1</sup>	4
PSY 120	Introduction to Psychology	3
Social Science	Area IV, C <sup>1</sup>	3
<b>Hours</b>		<b>13</b>
<b>Spring</b>		
<b>Pre-Professional Year</b>		
EH 102	English Composition II	3
Biology	Area III, C <sup>1</sup>	4
MA 112	Precalculus Algebra	3
CA 110	Public Speaking	3
History	Area IV, B <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
<b>Pre-Professional Year</b>		
BMD 251	Human Anatomy & Physiology I	4
Statistics	Area V, D <sup>1</sup>	3
History Sequence/Social Science	Area IV, C <sup>1</sup>	3
Literature	Area II, B <sup>1</sup>	3
Fine Arts	Area II, C <sup>1</sup>	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
<b>Pre-Professional Year</b>		
BMD 252	Human Anatomy & Physiology II	4
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory	4
Literature Sequence/Humanities	Area II, D <sup>1</sup>	3
<b>Hours</b>		<b>11</b>
<b>Total Hours</b>		<b>56</b>

<sup>1</sup> See General Education Requirements

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
<b>Professional Year</b>		
RAD 300	Clinical Education I	2
RAD 304	Patient Care & Ethics	3
RAD 307	Osseous I	4
RAD 310	Radiation Biology	2
RAD 312	Princ of Radiographic Exposure	4
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
<b>Professional Year</b>		
RAD 301	Clinical Education II	4
RAD 308	Osseous II	4
RAD 315	Contrast Media	2
RAD 318	Radiologic Physics	4
RAD 335	Pediatric-Geriatric Rad	1
<b>Hours</b>		<b>15</b>

Summer		
Professional Year		
RAD 302	Clinical Ed III	4
RAD 320	Cross-Sectional Anatomy	2
RAD 415	Diagnostic Imaging	2
<b>Hours</b>		<b>8</b>
<b>Total Hours</b>		<b>38</b>

At the end of the first professional year, students will be asked to make a choice on how they wish to complete the degree.

There are three tracks from which to choose to complete the second professional year.

- Track 1 – General Radiography plus one advanced imaging modality (Vascular Imaging, CT, MRI, Mammography)
- Track 2 – Ultrasound only
- Track 3 – Radiation Therapy only

In addition to one of the modalities in Track 1, students may choose to add studies in Radiology Administration.

Students may also choose to complete the second professional year as described for Track 1, and then later apply for admission to any advanced modality including Ultrasound or Radiation Therapy. Please note that students with bachelor's degrees in Radiologic Sciences do not currently qualify for federal financial aid benefits when pursuing additional certifications such as Radiation Therapy.

## Bridge Program Students

Registered Radiographers wishing to complete a bachelor's degree in Radiologic Sciences are responsible for completing all requirements from the first and second year of the pre-professional component of the program prior to enrolling in the professional component of the Radiologic Sciences program. Upon successful completion of the bridge course, the Radiologic Sciences advisor will request for 38 hours of alternative credit (i.e. credit from the first professional year of the Radiologic Sciences program) to be added to the students' Degree Audit. Bridge student will choose either TWO advanced imaging specialties from the Second Professional Year Track I, ONE advanced imaging specialty and Radiologic Administration from the Second Professional Year Track I, the Second Professional Year for Ultrasound—Track II only, or the Second Professional Year for Radiation Therapy—Track III only. Bridge program students complete the program in 4 semesters (includes 2 summer terms). Students participating in the bridge program may have RAD 411 waived after successfully completing RAD 491 if the student will otherwise meet the upper-division residency requirement.

### Bridge Students Only

Track 1		
Course	Title	Hours
<b>First Year</b>		
<b>Summer</b>		
RAD 491	Prof. Radiological Practice	6
<b>Hours</b>		<b>6</b>
<b>Second Year</b>		
<b>Fall</b>		
<b>Professional Year</b>		
Track 1	General Radiography, A and one modality, a-e <sup>1</sup>	17
Track 1 + Rad Admin	General Radiography, A, and one modality, a-d, and e <sup>1,2</sup>	23
Bridge Students	Two modalities from a-e, or Ultrasound Only, or Radiation Therapy Only <sup>1</sup>	8-15
<b>Hours</b>		<b>48-55</b>

Spring		
Professional Year		
Track 1	General Radiography, A and one modality, a-e <sup>1</sup>	12
Track 1 + Rad Admin	General Radiography, A, and one modality a-d, and e <sup>1</sup>	18
Bridge Students	RAD 496 and <b>two</b> modalities from a-e, or Ultrasound Only, or Radiation Therapy Only <sup>1</sup>	8-16
<b>Hours</b>		<b>38-46</b>

Summer		
Professional Year		
Track 1	General Radiography, A and one modality, a-e <sup>1</sup>	8-11
Track 1 + Rad Admin	General Radiography, A, and one modality a-d, and e <sup>1</sup>	12
Bridge Students	RAD 497 and <b>two</b> modalities from a-e, or Ultrasound Only, or Radiation Therapy Only	6-13
<b>Hours</b>		<b>26-36</b>
<b>Total Hours</b>		<b>118-143</b>

<sup>1</sup> See General Education Requirements

<sup>2</sup> Will need Dean's approval for over-the-credit-hour limit override

### Track 2

Course	Title	Hours
<b>First Year</b>		
<b>Summer</b>		
RAD 491	Prof. Radiological Practice	6
<b>Hours</b>		<b>6</b>

<b>Second Year</b>		
<b>Fall</b>		
<b>Professional Year</b>		
Track 2	Ultrasound Only, A <sup>1</sup>	9-13
Bridge Students	Two modalities from a-e, or Ultrasound Only, or Radiation Therapy Only <sup>1</sup>	8-15
<b>Hours</b>		<b>17-28</b>

<b>Spring</b>		
<b>Professional Year</b>		
Track 2	Ultrasound Only, A <sup>1</sup>	12
Bridge Students	RAD 496 and <b>two</b> modalities from a-e, or Ultrasound Only, or Radiation Therapy Only <sup>1</sup>	8-16
<b>Hours</b>		<b>20-28</b>

<b>Summer</b>		
<b>Professional Year</b>		
Track 2	Ultrasound Only, A <sup>1</sup>	9-11
Bridge Students	RAD 497 and <b>two</b> modalities from a-e, or Ultrasound Only, or Radiation Therapy Only	6-13
<b>Hours</b>		<b>15-24</b>
<b>Total Hours</b>		<b>58-86</b>

<sup>1</sup> See General Education Requirements

### Track 3

Course	Title	Hours
<b>First Year</b>		
<b>Summer</b>		
RAD 491	Prof. Radiological Practice	6
<b>Hours</b>		<b>6</b>

<b>Second Year</b>		
<b>Fall</b>		
<b>Professional Year</b>		
Track 3	Radiation Therapy Only, A <sup>1</sup>	15
Bridge Students	Two modalities from a-e, or Ultrasound Only, or Radiation Therapy Only <sup>1</sup>	8-15
<b>Hours</b>		<b>23-30</b>

**Spring**

**Professional Year**

Track 3	Radiation Therapy Only, A <sup>1</sup>	16
Bridge Students	RAD 496 and <b>two</b> modalities from a-e, or Ultrasound Only, or Radiation Therapy Only <sup>1</sup>	8-16
<b>Hours</b>		<b>24-32</b>

**Summer**

**Professional Year**

Track 3	Radiation Therapy Only, A <sup>1</sup>	11-13
Bridge Students	RAD 497 and <b>two</b> modalities from a-e, or Ultrasound Only, or Radiation Therapy Only	6-13
<b>Hours</b>		<b>17-26</b>
<b>Total Hours</b>		<b>70-94</b>

<sup>1</sup> See General Education Requirements

**Notes:**

The total number of hours to complete the RAD degree is based on which Track is chosen by the student.

**RT to BS Students**

Only (32 Total Hours)

First Semester- Summer 1

Course	Title	Hours
<b>Summer</b>		
RAD 491	Prof. Radiological Practice	6
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>6</b>

Course	Title	Hours
<b>Fall</b>		
RAD 432	Healthcare Human Resource Mgmt	3
RAD 433	Health Care Financial Mgmt	3
RAD 428	Computed Tomography Procedures (Computed Tomography Procedures)	3
RAD 426	CT Phys Princ and Qual Cont (Computed Tomography Physical Principles and QC)	3
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>12</b>

Course	Title	Hours
<b>Spring</b>		
RAD 496	Radiologic Sci Research I-W	1
RAD 435	Health Care Operations Mgt - W	3
RAD 430	Healthcare Communication	3
RAD 429	Adv Sect Imag - CT and MRI Pth (Advanced Sectional Imaging of CT and MRI Pathologies)	3
<b>Hours</b>		<b>10</b>
<b>Total Hours</b>		<b>10</b>

Course	Title	Hours
<b>Summer</b>		
RAD 497	Rad Science Research II	1
PRH 340 or EMS 340	Disaster Mgt & Event Planning or Disaster Mgt & Event Planning	3
<b>Hours</b>		<b>4</b>
<b>Total Hours</b>		<b>4</b>

**Certificate Students**

Registered Radiographers wishing to complete a certificate program in Radiology Administration, Radiation Therapy, Ultrasound, Magnetic Resonance Imaging, Computed tomography, Interventional Radiology or Mammography are responsible for completing outlined requirements for the modality certificate they are obtaining.

**Certificate Students Only  
Mammography, MRI, IR, CT  
(12 Total Hours)**

Course	Title	Hours
<b>Fall</b>		
RAD 475	Advanced Modality Clinical A	2
Select one of the following:		2
RAD 480	Mammography I - W	
RAD 483	Magnetic Resonance Imaging I	
RAD 486	Vascular Radiography - W	
RAD 477	Computed Tomography I	
<b>Hours</b>		<b>4</b>

Course	Title	Hours
<b>Spring</b>		
RAD 475	Advanced Modality Clinical A	2
Select one of the following:		2
RAD 481	Mammography II	
RAD 484	Magnetic Resonance Imaging II - W	
RAD 487	Vascular Radiography II	
RAD 478	Computed Tomography II-W	
<b>Hours</b>		<b>4</b>

Course	Title	Hours
<b>Summer</b>		
RAD 475	Advanced Modality Clinical A	2
Select one of the following:		2
RAD 482	Mammography III	
RAD 485	Magnetic Resonance Imaging III	
RAD 488	Vascular Radiography III	
RAD 479	Computed Tomography III	
<b>Hours</b>		<b>4</b>
<b>Total Hours</b>		<b>12</b>

**Radiology Administration  
(7 Total Hours)**

Course	Title	Hours
<b>Fall</b>		
RAD 430	Healthcare Communication	3
RAD 432	Healthcare Human Resource Mgmt	3
<b>Hours</b>		<b>6</b>
<b>Spring</b>		
RAD 433	Health Care Financial Mgmt	3
RAD 435	Health Care Operations Mgt - W	3
<b>Hours</b>		<b>6</b>
<b>Summer</b>		
RAD 440	Radiology Management Preceptor	1
<b>Hours</b>		<b>1</b>
<b>Total Hours</b>		<b>13</b>

**Ultrasound  
(29-31 Total Hours)**

Course	Title	Hours
<b>Fall</b>		
RAD 423	Ultrasound Clinical Educ I	5
RAD 411	Survey of Pathology	4

RAD 417	Ultrasound Anatomy & Scanning-W	4
<b>Hours</b>		<b>13</b>
<b>Spring</b>		
RAD 424	Ultrasound Clinical Educ II	5
RAD 421	Ultras Physics-Instrumentation	3
RAD 418	Ultras Anat-Scan Tech-OB-GYN	3
RAD 496	Radiologic Sci Research I-W	1
<b>Hours</b>		<b>12</b>
<b>Summer</b>		
RAD 425	Ultrasound Clinical Educ III	5
RAD 427	Procedural Guidelines in Ultra	3
RAD 320	Cross-Sectional Anatomy	2
RAD 497	Rad Science Research II	1
<b>Hours</b>		<b>11</b>
<b>Total Hours</b>		<b>36</b>

### Radiation Therapy

The total number of hours for the RAD degree depends on which Track is chosen by the student.

Course	Title	Hours
<b>Spring</b>		
RAD 455	Dosimetry and Tx Planning I	3
RAD 442	Clinical Education II	6
RAD 453	Prin Prac of Rad Oncology II	3
RAD 458	Cancer Mgt in Oncology - W	3
<b>Hours</b>		<b>15</b>
<b>Summer</b>		
RAD 443	Clinical Education III	7
RAD 456	Dosimetry and Tx Planning II	2
RAD 454	Quality Mgt In Rad Oncology	1
<b>Hours</b>		<b>10</b>
<b>Fall</b>		
RAD 441	Clinical Education I	5
RAD 448	Radiation Therapy Physics	3
RAD 320	Cross-Sectional Anatomy	2
RAD 446	Orientation to Oncology - W	3
RAD 450	Patient Care in Oncology	1
RAD 452	Prin Pract of Rad Oncology I	3
<b>Hours</b>		<b>17</b>
<b>Total Hours</b>		<b>42</b>

## Speech Pathology and Audiology Department Information

(251) 445-9378

Department of Speech Pathology and Audiology website  
<https://www.southalabama.edu/colleges/alliedhealth/speechandhearing>  
 (https://www.southalabama.edu/colleges/alliedhealth/speechandhearing/)

### Speech Pathology and Audiology Faculty

Title	Name
Chair	Elizabeth M. Adams
Dean Emeritus	Talbott
Professor Emeritus	Dagenais, Evans, Sellers
Associate Professor Emeritus	Moore
Assistant Professor Emeritus	Holston
Professor	Beverly

Associate Professors	Adams, Choi, Davis, Gordon-Hickey, Smith
Assistant Professors	Flagge, Henbest, Nichols, Rishiq, Redding, Roberts, Stanley
Senior Instructor	Hill, Hudson
Instructors	Holzappel, Wiles

The mission of the Department of Speech Pathology and Audiology is to provide undergraduate, masters and doctoral programs that challenge the students to achieve the highest standards of academic learning, scientific inquiry and clinical excellence. The Department of Speech Pathology and Audiology delivers a comprehensive program of academic, research and clinical training in the areas of speech, language, and hearing development and disorders. The Department offers a minor in Speech and Hearing Sciences, Bachelor of Science in Speech and Hearing Sciences degree, Master of Science in Speech-Language Pathology degree, Doctor of Audiology degree, and Doctor of Philosophy in Communication Sciences and Disorders degree.

The undergraduate program in Speech and Hearing Sciences readies the graduate for a variety of career and educational options based on the knowledge gained from this degree and individual interests and skills. Students who complete the Master of Science in Speech-Language Pathology degree program will meet all the academic and practicum requirements to be eligible for the Clinical Fellowship (CF) that leads to national certification (CCC-SLP) by the American Speech-Language-Hearing Association (ASHA) and eligibility for the Alabama state licensure. Students who complete the Doctor of Audiology degree program will meet all the academic and practicum requirements for national certification (CCC-A) and will also be eligible for the Alabama state licensure. The MS SLP and AuD programs meet the requirements for licensure in Alabama; we have not made a determination regarding whether the programs meet licensure requirements in other states.

The Master of Science (MS) education program in speech-language pathology (residential) at the University of South Alabama is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association, 2200 Research Boulevard, #310, Rockville, MD 20850, (800) 498-2071 or (301) 296-5700.

The Doctor of Audiology (AuD) education program in audiology (residential) at the University of South Alabama is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association, 2200 Research Boulevard, #310, Rockville, MD 20850, (800) 498-2071 or (301) 296-5700.

### Degrees, Programs, or Concentrations

- Audiology (AuD) (p. 905)
- Communication Sciences and Disorders (PhD) (p. 906)
- Speech and Hearing Sciences (BS SHS) (p. 907)
- Speech and Hearing Sciences Minor (p. 911)
- Speech-Language Pathology (MSSLP) (p. 912)

## Courses

### Allied Health Profs (AHP)

#### AHP 101 Freshman Sem in Allied Health 2 cr

A course for first-time students that assists with maximizing the student's potential to achieve academic success and to adjust responsibly to the individual and interpersonal challenges presented by college life. Taught in small groups, the course provides an introduction to the nature of higher education with special emphasis on health-related disciplines. Appropriate reading and writing assignments will be required.

**Cross-Listed:** HSC 101

#### AHP 201 Service Learning in Allied Health Professions 1 cr

A course for students majoring in the College of Allied Health Professions that assists with maximizing students' potential to holistically embrace their majors and all that their future careers entail. The course introduces students to the concept of service learning and how to process experiences that may or may not immediately align with their own previous experiences. At the end of the course, the student will understand what it means to serve and how learning occurs in the most unlikely situations and environments.

#### AHP 390 Special Topics 1-9 cr

The purpose of this course for the undergraduate student is to develop an improved understanding of culture, to recognize any cultural practices that affect health care, and to incorporate this understanding into the provision of care. Culture will be examined through writing, cultural experiences, and through collaboration.

#### AHP 401 Seminar in HP 3 cr

This course is designed to provide students with an overview of different health professions and their scope of practice and also to provide information about health administration.

#### AHP 510 IPE Autism Spectrum Disorders 1 cr

This foundational course is designed to prepare graduate students in OT, PT, SLP, MD and ED to provide high-quality services to individuals with autism spectrum disorder and other developmental disabilities. The emphasis will be on interprofessional education using team-based instruction to support effective interprofessional practice in both educational and health care settings. **ADDITIONAL RESTRICTION:** Students can only be enrolled following successful application and admission. Contact the course instructor for information on application.

#### AHP 550 IPE for Inclusive Pract in AHP 1-3 cr

This course will focus on advancing the ideals of diversity, equity, and inclusion in future allied health providers to develop inclusive practices, and will support the development of interprofessional collaborative practice skills. The course will provide students with opportunities to engage with members of various healthcare-focused graduate programs through both interprofessional education modules and interprofessional clinical laboratory experiences.

**Cross-Listed:** AHP 650

#### AHP 590 Special Topics 1-9 cr

Selected topics in Health Sciences. Requires special permission.

#### AHP 650 IPE for Inclusive Pract in AHP 1-3 cr

This course will focus on advancing the ideals of diversity, equity, and inclusion in future allied health providers to develop inclusive practices, and will support the development of interprofessional collaborative practice skills. The course will provide students with opportunities to engage with members of various healthcare-focused graduate programs through both interprofessional education modules and interprofessional clinical laboratory experiences.

**Cross-Listed:** AHP 550

### Audiology (AUD)

#### AUD 590 Seminar in Audiology 1-6 cr

This course is designed to provide the opportunity for in-depth study of special interest in Audiology. Requires approval of Department Chair.

#### AUD 612 Anatomy-Physio Hearing Mech 4 cr

Study of the anatomy and physiology of the nervous system, the anatomy and physiology of the outer, middle, inner ear, including the vestibular system, and the central auditory nervous system.

#### AUD 613 Psychoacoustics 3 cr

Study of the principles, procedures and research involved in the field of psychoacoustics and of the relationships between the physical dimensions of auditory stimuli and the resultant perceptual experience as well as the relationships among psychoacoustic testing and both auditory physiology and the audiologic evaluation process. Participation in laboratory assignments will be required.

#### AUD 614 Instrumentation and Acoustics 3 cr

Study of basic electricity, acoustics and measurement of sound properties, wave analysis, transducers, measuring and calibration systems, speech processing systems, and system interaction and integration.

#### AUD 615 Speech and Language Science 3 cr

Study of the acoustical, perceptual, physiological aspects of speech, as well as the phenomena of communication and language development. These are discussed as they relate to the field of audiology.

#### AUD 616 Resrch Design Hearing Sci 3 cr

Research designs utilized in the hearing sciences; elements of research proposals and studies; how to critique a research study; how to conduct a literature review; APA format; students will be required to write precis of research articles and write a research proposal. Elements of modern statistics including sets and functions, probability theory, hypothesis testing, analysis of variance models, correlation, and regression.

#### AUD 621 Professional Issues 3 cr

This course will address a variety of professional issues such as organizations, societies, and their histories; codes of ethics; scopes of practice; credentialing and licensure; the development of the AUD; guidelines and position statements generated by ASHA and AAA; standards and best practices; methods and models of service delivery; and audiology practice management.

#### AUD 622 Medical Audiology 4 cr

This course will address acquired and congenital diseases and disorders of the outer, middle, and inner ear and the central auditory nervous system occurring across the lifespan; imaging techniques; non-audiologic medical and surgical interventions for these conditions; and cerumen management techniques; and appropriate methods for monitoring of patients prescribed potentially ototoxic medications.

**AUD 623 Pharma & Ototox Monitoring 3 cr**

This course will provide the basic science background necessary to understand the effects of medications on the auditory and balance systems. This course will also address drug treatment strategies for hearing loss and balance disorders. Topics will include mechanisms of drug actions, side effects, how age and disease affect these mechanisms, and specific effects of certain drugs on the hearing and balance system. This course will additionally address appropriate methods for identification and monitoring of patients prescribed potentially ototoxic medications.

**AUD 630 Acoustics & Amp Technol 3 cr**

This course covers basic acoustics, measurement of sound, sound transmission, amplification technologies, hearing aid styles, basic hearing aid components, advanced hearing aid components, ear molds and styles, compression, advanced signal processing, electroacoustic properties of hearing aids, assistive listening devices, and use of ANSI standards.

**AUD 631 Sel, Fit & Verif of Amp Sys 3 cr**

This course will address the principles of selection, fitting, and verification of amplification systems, including hearing aids and assistive listening devices; subjective and objective audiologic assessments used to determine need for, select, and fit appropriate amplification systems for patients of all ages; and techniques used to select and fit amplification systems. The course will also address subjective and objective verification procedures, specifically addressing the importance of including Real-Ear Measures and subjective self-assessment measures in the amplification process.

**AUD 632 Hearing Aid Lab 1 cr**

This course will address the principles of verification and validation; tools used to verify appropriate fitting of amplification systems (such as real-ear probe-mic equipment) and techniques used to validate fitting (such as software packages, and subjective and objective audiologic measures); cochlear implant remapping.

**AUD 633 Advanced Sensory Aids 3 cr**

This course will address advanced technologies for individuals with hearing-impairment such as cochlear and brainstem implants, vibrotactile aids, and implantable devices, as well as the selection and fitting of these technologies.

**AUD 640 Basic Audiologic Assessment 3 cr**

This course will address the principles of cross-check, the test battery approach, differential diagnosis, relevant test equipment, instruments, and transducers, administration and interpretation of the pure-tone testing, clinical masking, case history, otoscopy, and tuning-fork tests, speech audiometry; tests for pseudo-hypoacusis, ototoxicity, site-of-lesion testing and historical assessments; and informal assessment procedures.

**AUD 641 Immit & Otoacous Emission Meas 3 cr**

This course will address administration and interpretation of acoustic immittance and otoacoustic emission measures across the lifespan. Topics will address standard and multi-frequency tympanometry, acoustic reflex testing, and eustachian tube function testing; spontaneous, transient and distortion-product OAE measurement; and the influence of intrinsic and extrinsic variables, including cochlear and retro-cochlear pathology, on outcomes and differential diagnosis.

**AUD 642 Pediatric Audiology 4 cr**

This course addresses the issues associated with providing audiology diagnostic and rehabilitative services to pediatric and developmentally delayed populations. Topics will include gestational development, genetic transmission of hearing loss, risk factors for hearing loss, universal newborn hearing screening programs, early hearing loss detection and intervention programs, behavioral test administration and interpretation, communication development and needs of children with hearing loss and other special needs, communication approaches for children with hearing loss, pediatric aural (re)habilitation, and counseling to children and families.

**AUD 643 Audiology and Aging 3 cr**

This course will address the issues associated with providing audiologic services to older adults. Issues will include effects of aging on anatomy, physiology, and function, and test administration and interpretation issues specific to older adults.

**AUD 645 Evoked Potential Measures 3 cr**

This course will address instrumentation (transducers and electrode types); application and interpretation of evoked potential (EP) measures including ENOG, ECoG, ABR, middle and late potentials, across the lifespan; sedation protocols; assessment protocols associated with different EP measures and the populations to which they are applied; population norms; intrinsic and extrinsic variables affecting EP results; differential diagnosis of auditory neuropathy; troubleshooting.

**AUD 646 Pediatric Audio Habilitation 3 cr**

This course will address issues associated providing audiologic services to pediatric and developmentally delayed populations. Issues will include gestational development, test administration and interpretation; genetic transmission of hearing loss, risk factors for hearing loss; principles of screening and the development and construction of a screening program; universal newborn hearing screening and early hearing detection and intervention programs.

**AUD 647 Adult Audiologic Rehab & Aging 3 cr**

This course will address the implications of hearing loss in adulthood including the educational, vocational, social and legislative concerns of adults with hearing loss; assessment tools and intervention techniques used to maximize communication skills, including communication strategy training, speechreading, and group therapy approaches. Issues specific to older adults and aging will be particularly emphasized in this course.

**AUD 648 Counseling Hear Imp-Families 3 cr**

This course will address various theories, principles and techniques associated with the social and psychological aspects of disability as well as issues specific to and techniques used when counseling patients with hearing loss and their families.

**AUD 649 Educational Audiology 2 cr**

This course will address the role of educational audiology, as well as the development, management, and utilization of hearing screening programs, classroom acoustics, selection and fitting of classroom-based amplification, and federal law associated with children with special needs.

**AUD 650 Vestibular Assess-Treatment 3 cr**

This course will address assessment approaches utilized in the diagnosis of vestibular disorders (such as ENG) and procedures used in the management of these disorders (such as vestibular rehabilitation techniques).

**AUD 651 Assess-Treatmnt Cent Aud Proc 3 cr**

This course will address the development, assessment, and interpretation of an auditory processing test battery across the lifespan, as well as intervention approaches.

**AUD 652 Educational Audiology 2 cr**

This course will address the delivery of audiology services to a school-based population. Issues to be addressed will include the development, management and utilization of hearing and middle ear system screening programs, classroom acoustics, selection and fitting of classroom-based amplification, and federal law associated with children with special needs.

**AUD 653 Industrial-Forensic Audiology 3 cr**

This course will address federal noise standards, effects of noise exposure on the auditory system, sound measurement and instrumentation, development and implementation of a hearing conservation program, hearing protection devices and forensic audiology.

**AUD 654 Tinnitus and Hyperacusis 3 cr**

This course will address assessment and intervention approaches used in the management of tinnitus and hyperacusis.

**AUD 655 Spch-Lang Path for Audiologist 3 cr**

This interprofessional education (IPE) course will address the foundational knowledge and skills necessary for audiologists to work together with speech-language pathologists in interprofessional collaborative teams. Specifically, this course will address the scope of practice in audiology, speech-language screening, speech-language report literacy and special topics.

**AUD 656 Vestibular Assessment 4 cr**

This course will include a discussion of the peripheral and central anatomy and physiology of the balance system and the test measures used to assess the function of this complex system. Topics will include case history and screening measures, as well as test protocols and analysis of results on electronystagmography/videonystagmography, rotational testing, posturography, and vestibular evoked myogenic potentials. Taught Spring Semester.

**AUD 657 Management of Vestibular Disor 2 cr**

This course will focus on peripheral and central disorders of the vestibular system and the interpretation of results on diagnostic tests in disordered patients. Pharmacological and surgical treatments of dizziness will be discussed, as well as rehabilitative techniques to manage the vestibular pathology.

**AUD 658 Advanced Neurophys Measures 3 cr**

This course will address advanced electrophysiological techniques, including ENOG, ALR, ERPs (i.e. P300, etc), and neuroimaging techniques (fMRI and PET) with an emphasis on auditory and cognitive processing, across the lifespan; source localization techniques; instrumentation; stimulus and acquisition parameters; measurement procedures; analysis and interpretation.

**AUD 661 Developmnt-Managemnt Aud Prac 3 cr**

This course will address issues associated with audiology practice management including techniques involved in developing a mission statement and a business plan; working with an accountant; determining type, location, and name of practice; regulation, licensure, and hiring a legal advisor; equipment and service delivery decisions; establishing accounts with suppliers, paying bills and budgeting; third-party reimbursement, Medicaid, and Medicare; hiring and supervision; demographics and marketing; use of outcome data; and professional writing.

**AUD 674 Special Projects in Audiology 3 cr**

Student will be required to develop a variety of projects during their academic training, some of which will be further developed and completed during this course.

**AUD 675 Special Topics in Audiology 1 cr**

Student will identify cases or service delivery issues of clinical or professional interest and present these cases or issues to fellow students, clinical supervisors, and faculty via chat room in a grand rounds format.

**AUD 680 Clinical Methods in Audiology 1-3 cr**

Students will become familiar with and conduct basic audiologic procedures with non-clinical populations by completing various lab assignments. Students will also observe clinical activities in the USA Speech & Hearing Center.

**AUD 681 Clinical Practicum I 1-3 cr**

Discussion of instrumentation, procedures, and approaches to assessment and intervention in audiology.

**Corequisite:** AUD 681L

**AUD 681L Clinical Practicum I-Lab 1-3 cr**

Students will obtain experience administering audiologic assessments and intervention techniques with clinical populations in the USA Speech and Hearing Center or in off-campus clinical practicum sites under direct supervision.

**Corequisite:** AUD 681

**AUD 682 Clinical Practicum II 1-3 cr**

Discussion of instrumentation, procedures, and approaches to assessment and intervention in audiology.

**Corequisite:** AUD 682L

**AUD 682L Clinical Practicum II-Lab 1-3 cr**

Students will obtain experience administering audiologic assessments and intervention techniques with clinical populations in the USA Speech and Hearing Center or in off-campus clinical practicum sites under direct supervision.

**Corequisite:** AUD 682

**AUD 683 Clinical Practicum III 1-3 cr**

Discussion of instrumentation, procedures, and approaches to assessment and intervention in audiology.

**Corequisite:** AUD 683L

**AUD 683L Clinical Practicum III-Lab 1-3 cr**

Students will obtain experience administering audiologic assessments and intervention techniques with clinical populations in the USA Speech and Hearing Center or in off-campus clinical practicum sites under direct supervision.

**Corequisite:** AUD 683

**AUD 684 Clin Externship in Audiology 1-12 cr**

Off-campus opportunity to obtain clinical experience in a full-time setting. In addition, student may be required to identify cases or service delivery issues of clinical or professional interest and present these cases or issues to fellow students, clinical supervisors, and faculty via an online forum in a grand rounds format.

**AUD 699 Thesis 1-3 cr**

Under the advice and guidance of a faculty member, students will identify and complete a research project relevant to the field of Audiology. Requires approval of the Department Chair.

## Communication Scs Disord (CSD)

### CSD 600 Doctoral Colloquium 1 cr

This seminar is designed to provide a forum for presentation and discussion of faculty and doctoral student research projects. Topics may also include: teaching and learning styles and grant writing. Must be repeated until candidacy is achieved.

### CSD 650 Research Methods in CSD 3 cr

Current methods and strategies used in research of communication processes.

### CSD 651 Speech and Hearing Sci & Inst 3 cr

Advanced review of the process of speech production, acoustic phonetics, coarticulation, and speech perception with emphasis on laboratory research methods.

### CSD 662 Studies in Speech Science 3 cr

Basic and advanced principles of the acoustics and physiology of speech production.

### CSD 663 Studies in Hearing Science 3 cr

Advanced study of psychological and physiological acoustics.

### CSD 664 Studies in Language Science 3 cr

Intensive study of the theoretical foundations underlying syntax, semantics, pragmatics, phonology, psycholinguistics, neurolinguistics, sociolinguistics, and applied pragmatics.

### CSD 665 Studies in Commun Neuroscience 3 cr

Advanced study of neurosciences as they relate to processes and pathologies of human communication, including functional neuroanatomy and clinical neurology. Interdisciplinary research paradigms will also be discussed.

### CSD 672 Laboratory in Speech Science 1 cr

Laboratory experiences in speech science.

### CSD 673 Laboratory in Hearing Science 1 cr

Laboratory experiences in hearing science.

### CSD 674 Laboratory in Language Science 1 cr

Laboratory experiences in language science.

### CSD 675 Lab in Communic Neuroscience 1 cr

Laboratory experiences in communication neuroscience.

### CSD 682 Seminar in Speech Science 3 cr

Intensive review of current research in speech production. May include normal and disordered processes. Topics may include acoustic phonetics, physiological phonetics, prosody, production and perception, fluency and voice. May be repeated.

### CSD 683 Seminar in Hearing Science 3 cr

Intensive literature review of current knowledge and research in hearing and hearing disorders. Topics may include cochlear mechanics, complex signal processing, electrophysiological measures, development of hearing, hearing in the elderly, and hearing in other species. May be repeated.

### CSD 684 Seminar in Language Science 3 cr

Intensive literature review of current methods, problems, and strategies in language research. Topics may include normal language acquisition, language-learning disorders, clinical aphasiology, and neurolinguistics. May be repeated.

### CSD 694 Directed Study - 1-3 cr

Independent study under the direction of a graduate faculty member. May be repeated. Requires special permission.

### CSD 695 Directed Research 1-3 cr

Research under the direction of a graduate faculty member. May be repeated. Requires special permission.

### CSD 696 Profess Pract - Administration 2 cr

Supervised professional experiences in administration under the guidance of faculty mentors. May be repeated.

### CSD 697 Profess Pract-Clin Supervision 2 cr

Supervised professional experiences in clinical teaching under the guidance of faculty mentors. May be repeated.

### CSD 698 Profess Practicum - Teaching 1-5 cr

Supervised professional experiences in academic teaching under the guidance of faculty mentors. May be repeated.

### CSD 799 Dissertation Research 1-9 cr

Independent research under the direction of a graduate faculty member. May be repeated. Requires special permission.

## Speech and Hearing Sci (SHS)

### SHS 201 Intro to Comm Disorders 3 cr

Overview of major disorders of human communication and the role of the Audiologist and Speech-Pathologist in assessing and treating them.

### SHS 210 Culturally Responsive Practice 3 cr

This course presents a practical approach to systemic development of specific professional skills for providing effective, culturally sensitive clinical health services to ethnically and linguistically diverse patients. Building on standard models of multicultural competence that emphasize knowledge, awareness, and skills, students will be introduced to culturally humility, culturally specific approaches to practice, and frameworks for equity and empowerment.

### SHS 291 Intro Communication Disorders 3 cr

Overview of major disorders of human communication and the role of the audiologist and speech-language pathologist in assessing and treating them.

### SHS 302 Hearing & Speech Science 3 cr

This course addresses basic principles of hearing and speech science, including the physical properties of sound, sound generation, transmission, and measurement.

### SHS 314 Fundamentals Spch Hrng Science 3 cr

This course will address the anatomy and physiology of the speech and hearing mechanisms, the physical properties of sound, quantification of sound, sound generation, and sound transmission.

**Prerequisite:** SHS 341 Minimum Grade of C or SPA 341 Minimum Grade of C

### SHS 315 A&P Sp, Lang, Swallow, Hrng 3 cr

An introduction to the anatomy and physiology of speech, language, swallowing, and hearing mechanism.

### SHS 331 Normal Language Acquisition-W 3 cr

Acquisition of communicative behavior in normal children during the first decade of life; development of syntax, semantics, pragmatics, cognition; clinical laboratory experience with children.

**Prerequisite:** SHS 341 Minimum Grade of C

### SHS 341 Clinical Phonetics 4 cr

Transcription techniques for the analysis of speech. Includes a study of the dynamics of speech sound production.

**Prerequisite:** SHS 201 (may be taken concurrently) Minimum Grade of C

**SHS 373 Audiology I 4 cr**

This course is an introduction to the following topics- disorders of hearing, etiologies of auditory and vestibular disorders found in populations of all ages, and evaluation techniques used by audiologists.

**Prerequisite:** SHS 302 Minimum Grade of C

**Cross-Listed:** SHS 473

**SHS 374 Audiology II 3 cr**

This course is a study of the principles of the management of hearing loss in children and adults; relevant legislation; and treatment and education options.

**Prerequisite:** SHS 373 Minimum Grade of C

**SHS 414 Neurobiol Bases Human Comm 3 cr**

Introduction to neuroscience and clinical neurology as they apply to the processes of normal and disordered communication. Topics include neurophysiology, neuroanatomy, and neuropathologies.

**Prerequisite:** SHS 315 Minimum Grade of C and SHS 331 Minimum Grade of C and SHS 341 Minimum Grade of C

**SHS 431 Intro to Language Disorders 3 cr**

A survey of language disorders in preschool and school-age children; assessment and intervention.

**Prerequisite:** SHS 331 Minimum Grade of C

**SHS 441 Intro Articulat-Phonol Disord 3 cr**

Study of dynamics of disordered speech production. Techniques for the analysis and treatment of articulation and phonological disorders.

**Prerequisite:** (SHS 331 Minimum Grade of C or SPA 331 Minimum Grade of C) and (SHS 341 Minimum Grade of C or SPA 341 Minimum Grade of C)

**SHS 452 Intro to Voice and Fluency Dis 3 cr**

A beginning course in the study of normal voice production, a survey of typical voice disorders, and an overview of stuttering and its related disorders. Taught Fall Semester.

**Prerequisite:** SHS 314 Minimum Grade of C and (SHS 331 Minimum Grade of C or SPA 331 Minimum Grade of C)

**SHS 453 Intro to Speech Disorders 3 cr**

An introduction to disorders of articulation, voice, and fluency. Theoretical and etiological foundations will be surveyed as well as philosophical orientations to therapy.

**Prerequisite:** SHS 315 Minimum Grade of C and SHS 341 Minimum Grade of C

**SHS 480 Issues in Clinical Pract - W 3 cr**

Introduction to the clinical setting; organizations, and statutes that govern professional service. Instrumentation, procedures, and approaches to clinical service provision are introduced.

**Prerequisite:** SHS 331 Minimum Grade of C and SHS 341 Minimum Grade of C and SHS 373 Minimum Grade of C

**Cross-Listed:** SHS 481

**SHS 481 Intro to Clinical Practicum-W 4 cr**

Clinical practicum course designed as an introduction to the clinical setting; documentation procedures & guidelines; organizations and statutes that govern professional service; instrumentation, procedures, & approaches to clinical practice. Written documentation, observation of clinical activities (in-person and in-class video), and participation as a clinical aide are also significant course requirements.

**Prerequisite:** SHS 331 Minimum Grade of B and SHS 341 Minimum Grade of B and SHS 373 Minimum Grade of B and SHS 315 Minimum Grade of B and SHS 302 Minimum Grade of B

**Cross-Listed:** SHS 480

**SHS 490 Special Topics - 1-3 cr**

Topics to be determined by student need and interest. Content will vary. A subtitle identifying the topic will be entered on the student's record. May be repeated for a total of 6 hours. Requires permission of the department chair.

**SHS 494 Directed Independent Study 1-3 cr**

Independent study under the direction of a faculty member. Requires permission of the department chair.

**SHS 499 Senior Honors Project - H - W 1-6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project relevant to the field of Speech Pathology and Audiology. The senior project will be judged and graded by three faculty members chaired by the honors mentor. This course is required for Honors recognition. Permission of the department chair and completion of an approved project prospectus is required.

**Speech Lang Pathology (SLP)****SLP 510 Intro to Research Design 3 cr**

A general presentation of research procedures. The student will learn to read and evaluate professional literature and develop a research prospectus.

**SLP 521 Advanced Speech Science 3 cr**

The study of physical and acoustic concepts involved in speech production and perception including instrumental measurement and analysis.

**SLP 532 Clinical Linguistics 3 cr**

This course gives the student an overview of the linguistic theories and approaches that are relevant to the field of speech sciences. There will be a particular emphasis on those areas of linguistics that underpin the diagnostic and assessment procedures used in Speech Pathology. The course will focus on development and language use in normal populations and will show how knowledge of the pattern of typically developing language users can be applied to clinical contexts.

**SLP 533 Pediatric Language Disorders 3 cr**

Clinical assessment and management of language problems in infants, toddlers, and preschoolers, including language disorders associated with other developmental disorders and AAC.

**SLP 534 School-Aged Language Disorders 3 cr**

This course covers assessment and intervention approaches for school-age language disorders, children beyond age 5 years. Topics include speech-language services at the discourse level; the relationship between language and literacy; service delivery models including integration; educational laws and policies.

**SLP 541 Pediatric Speech Sound Disorders 3 cr**

Advanced study of disordered speech-sound production including these: development, assessment and intervention of articulation and phonological disorders in children.

**SLP 545 AAC for Indivs w Complex Comm 3 cr**

Introduction to the study and application of augmentative and alternative communication, including light-to-high tech augmentative and alternative communication devices to aid communication for persons with complex communication needs. The course includes device characteristics, program features, and intervention strategies as well as current trends in research for individuals with complex communication.

**SLP 551 Voice and Resonance Disorders 3 cr**

Advanced study of pathology, symptomatology, etiology, and treatment of voice and resonance disorders in children and adults.

**SLP 561 Fluency Disorders 3 cr**

Study of theories, research, and contemporary treatment procedures in the area of fluency disorders.

**SLP 565 Neuromotor Disorders of Commun 3 cr**

Review of neuroanatomy and physiology, nature of neuromuscular pathologies, methods of assessment and rehabilitation of neuromotor disorders of speech production.

**SLP 566 Aphasia & Neuro Lang Disorders 3 cr**

Study of the nature, characteristics, and clinical management of acquired neurogenic language disorders associated with focal lesions to the left or right hemisphere, including aphasia and right hemisphere syndrome.

**SLP 567 Acq Cognitive Comm Disorders 3 cr**

Study of the nature, characteristics, and clinical management of cognitive-communication disorders associated with diffuse brain lesion, including traumatic brain injury and dementia.

**SLP 568 Dysphagia 4 cr**

This course provides an in-depth study of healthy and disordered swallowing function across the lifespan. Specifically, students will learn normal anatomy and physiological processes of the upper aerodigestive tract, how to conduct clinical and instrumental evaluations of swallowing function, and develop individualized, targeted treatment plans for various swallowing impairments.

**SLP 588 Audiology for Speech-Lang Path 3 cr**

This course will address the SLP scope of practice, audiological tests, amplification, report literacy, and special topics. An interprofessional team approach with audiology will address co-management of services in individual with communication disorders.

**SLP 590 Dir Independent Research - 1-3 cr**

Independent research under the direction of a graduate faculty member. May be repeated. Requires permission of the instructor and the Graduate Advisor.

**SLP 592 Seminar in Comm Disorders - 1-10 cr**

This course is designed to provide the opportunity for in-depth study of special interests. Requires permission of the Graduate Advisor.

**SLP 594 Independent Study 1-3 cr**

Independent study under the direction of a graduate faculty member. May be repeated. Requires permission of instructor and Graduate Advisor.

**SLP 596 Clin Pract Speech-Lang Pathol 1-3 cr**

Discussion of instrumentation, procedures, and approaches to assessment and intervention in speech-language pathology.

**Corequisite:** SLP 596L

**SLP 596L Clin Pract Sp-Lang Path Lab 1-3 cr**

Supervised clinical experience in Speech-Language Pathology. May be repeated.

**Corequisite:** SLP 596

**SLP 597 Off-Campus Clinical Practicum in Speech Language Pathology 1-6 cr**

Students will complete a 14-week, part time clinical practicum at an off-campus site.

**Prerequisite:** SLP 596 Minimum Grade of B

**SLP 598 Clinical Externship 1-12 cr**

Supervised clinical experience in a professional service facility.

**SLP 599 Thesis 1-3 cr**

One to three credits per semester with a maximum of three hours credit. Regular standing required. Requires permission of the Graduate Advisor.

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
ADAMS, ELIZABETH MEZTISTA (eadams@southalabama.edu)	Speech Pathology and Audiology	Associate Professor	BS, Spring Hill College PHD, University of South Alabama
BEVERLY, BRENDA L. (bbeverly@southalabama.edu)	Speech Pathology and Audiology	Professor	BSED, Bloomsburg U of Pennsylvania MS, Bloomsburg U of Pennsylvania PHD, University of Tennessee-Knox
BROADFOOT, COURTNEY KUEHN (ckbroadfoot@southalabama.edu)	Speech Pathology and Audiology	Assistant Professor	BS, University of Wisconsin-Madison MS, University of South Alabama PHD, University of Wisconsin-Madison
CHOI, DAHYE (dchoi@southalabama.edu)	Speech Pathology and Audiology	Associate Professor	BA, Ewha Womans University MA, Ewha Womans University PHD, Vanderbilt University
DAVIS, TARA MICHELLE (taradavis@southalabama.edu)	Speech Pathology and Audiology	Associate Professor	BA, Louisiana State University MCD, Louisiana State U - Hlth Sci PHD, University of Texas-Dallas
FLAGGE, ASHLEY GAAL (aflagge@southalabama.edu)	Speech Pathology and Audiology	Assistant Professor	BS, University of South Alabama AUD, University of South Alabama PHD, University of South Alabama
GORDON-HICKEY, SUSAN (gordonhickey@southalabama.edu)	Speech Pathology and Audiology	Associate Professor	BA, University of Florida AUD, University of South Alabama PHD, University of South Alabama
HENBEST, VICTORIA SUZANNE (vhenbest@southalabama.edu)	Speech Pathology and Audiology	Assistant Professor	BSED, University of Arkansas- Fayette MS, Missouri State U-Springfield PHD, University of SC-Columbia

HILL, GRAYSON BRUNSON (graysonhill@southalabama.edu)	Speech Pathology and Audiology	Senior Instructor	BS, University of Montevallo MS, University of Montevallo
HOLZAPFEL, KAYLIE E. (kaylieholzapfel@southalabama.edu)	Speech Pathology and Audiology	Instructor	BS, University of Central Florida MS, Nova Southeastern University
HUDSON, KENDRA DICKSON (kHUDSON@southalabama.edu)	Speech Pathology and Audiology	Senior Instructor	BS, University of Montevallo MS, University of Montevallo
NICHOLS, AMY COMERFORD (acnichols@southalabama.edu)	Speech Pathology and Audiology	Assistant Professor	BA, University of Central Florida AUD, University of South Alabama PHD, University of South Alabama
REDDING, SARAH MARIE (sredding@southalabama.edu)	Speech Pathology and Audiology	Assistant Professor	BS, University of Montevallo AUD, University of South Alabama
ROBERTS, WILDER MAYHALL (wilderroberts@southalabama.edu)	Speech Pathology and Audiology	Assistant Professor	BS, University of Montevallo MS, University of Montevallo AUD, University of Florida
SMITH, KIMBERLY ANN GRAHAM (kimberlysmith@southalabama.edu)	Speech Pathology and Audiology	Associate Professor	BS, Old Dominion University MS, Old Dominion University PHD, University of SC-Columbia
STANLEY, NICHOLAS SLADE (nstanley@southalabama.edu)	Speech Pathology and Audiology	Assistant Professor	BA, Huntingdon College AUD, University of South Alabama PHD, University of South Alabama
WILES, BRENT L. (bwiles@southalabama.edu)	Speech Pathology and Audiology	Instructor	BA, University of South Alabama MS, University of South Alabama

## Audiology (AuD) Degree Requirements

The Doctor of Audiology (AuD) is a professional doctoral degree and is administered through the Pat Capps Covey College of Allied Health Professions. The AuD serves either as preparation for professional clinical audiologists or as preparation for further graduate study leading to the PhD degree. The AuD program provides a broad range of basic science courses and specialized offerings emphasizing assessment, intervention, and prevention techniques used with individuals of all ages who have hearing, auditory processing, or balance related disorders. Students are prepared for careers as clinicians in schools, hospitals, rehabilitation centers, private practice and community clinics.

Clinical practicum opportunities occur at the on-campus Speech and Hearing Center and many affiliated rehabilitation centers, schools, private practices, ENT clinics, and hospitals. Within this framework, students are prepared to meet the academic and clinical practicum requirements for national certification (the Certificate of Clinical Competence, CCC-A, awarded by the American Speech-Language-Hearing Association) and Alabama state licensure. The AuD Program is a full-time in-residence program, and typically extends for 9 academic semesters (3-year program) or 11 academic semesters (4-year program) including three semesters of full-time clinical externship.

Details regarding the admissions process and deadline are available on the Department of Speech Pathology and Audiology website.

### Regular Admission

To be considered for admission, applicants must:

1. Have earned or be in the process of completing a baccalaureate degree from an accredited college or university.
2. Demonstrate a preferred minimum 3.0 (A=4.0) overall undergraduate GPA.
3. International applicants must submit documentary evidence showing TOEFL test scores of at least 600 (written form), 250 (computer

version), or 100 (internet based version), or bachelor's or graduate degrees earned at accredited United States institutions of higher education. A minimal IELTS score of 7 is considered equivalent to the TOEFL scores required.

4. Provide three references from faculty at the undergraduate institution. Two of these references should be provided by Ph.D. faculty within the applicant's undergraduate department.
5. Include a Personal Essay stating the applicant's reasons for pursuing the degree, and addressing specific questions outlined in the application instructions.
6. Applicants may choose to submit Graduate Record Examination (GRE) scores, including analytical writing section, taken within the last five years to increase the competitiveness of their application to the program.

Because the number of applicants is greater than the number of vacancies in the program, admission is competitive, and applicants are evaluated based on the criteria stated above. Details regarding the Admissions process and deadline are available on the Department of Speech-Pathology and Audiology website.

Applicants for admission to the MS SLP or AuD program with record of academic misconduct violation(s) or who have been convicted of or plead guilty to misdemeanor or felony offense(s) will be evaluated on an individual basis. Admission may be denied to applicants with any academic misconduct violation(s) and conviction/guilty plea of misdemeanor and/or felony offense(s) as these violations may impact clinical placement opportunities and professional certification and state licensure upon graduation.

### Retention Policies

1. Any term in which a graduate student enrolled in the AuD program drops below a 3.0 GPA, the student will be placed on probationary status and has a period of one semester to attain a 3.0 GPA or be dismissed from the program.
2. Any student who receives a grade lower than a "C" in a graduate level course will be dismissed from the program.

- A "C" in any combination of two or more AuD courses will result in academic dismissal.
- A passing grade on comprehensive examinations administered during each academic year of the AuD program is required in order to progress to the next year of study. Students who successfully complete an optional research-based thesis and successfully defend this project are not required to complete the last comprehensive examination process of the AuD program. In the event that the thesis is not satisfactorily completed, the student will be required to successfully pass the last comprehensive examination prior to graduation.
- Students whose performance falls below standards in a course or clinical experience may be required to complete additional and/or augmentative coursework or clinical experiences as needed to meet ASHA's standards for clinical certification. As such, graduation could be delayed.
- If for any reason a student must withdraw from the AuD program, re-admission will require approval of the Department Chair and the Dean of the Pat Capps Covey College of Allied Health Professions.
- If a student is dismissed from a program prior to the end of the regular semester and that dismissal occurs after the University's refund deadline, the student will not receive any type of refund even if the next series of classes have not begun.

## Requirements for the Degree

The Doctor of Audiology (AuD) degree requires:

- A minimum of nine (3-year program) or eleven (4-year program) full-time semesters of academic study. Typically, the final three semesters are spent off campus completing a full-time externship.
- A minimum GPA of 3.0.
- A passing grade on comprehensive examinations administered during each academic year of the program. Students must also complete formative assessments throughout the program. Students who successfully complete an optional research-based thesis and successfully defend this project are not required to complete the comprehensive examination process in the last academic year of the AuD program. In the event that the thesis is not satisfactorily completed, the student will be required to successfully pass the comprehensive examination completed by other students in the cohort during the last academic year of the program prior to graduation.
- Demonstration of academic and clinical competencies as reflected in the ASHA Standards for Clinical Certification for Audiology.
- Completion of at least 1820 supervised clinical clock hours.
- The Praxis Examination in Audiology must be taken prior to graduation.

## Typical Course Sequence

Course	Title	Hours
<b>First Year</b>		
AUD 612	Anatomy-Physio Hearing Mech	4
AUD 640	Basic Audiologic Assessment	3
AUD 641	Immit & Otoacous Emission Meas	3
AUD 680	Clinical Methods in Audiology	2
AUD 613	Psychoacoustics	3
AUD 630	Acoustics & Amp Technol	3
AUD 642	Pediatric Audiology	4
AUD 681	Clinical Practicum I	1
AUD 681L	Clinical Practicum I-Lab	2

AUD 631	Sel, Fit & Verif of Amp Sys	3
AUD 645	Evoked Potential Measures	3
AUD 656	Vestibular Assessment	4
AUD 658	Advanced Neurophys Measures	3
AUD 657	Management of Vestibular Disor	2
AUD 682	Clinical Practicum II	1
AUD 682L	Clinical Practicum II-Lab	2
<b>Hours</b>		<b>43</b>
<b>Second Year</b>		
AUD 616	Resrch Design Hearing Sci	3
AUD 682	Clinical Practicum II	1
AUD 682L	Clinical Practicum II-Lab	2
AUD 647	Adult Audiologic Rehab & Aging	3
AUD 621	Professional Issues	3
AUD 683	Clinical Practicum III	1
AUD 683L	Clinical Practicum III-Lab	2
AUD 683	Clinical Practicum III	1
AUD 683L	Clinical Practicum III-Lab	2
AUD 649	Educational Audiology	2
AUD 655	Spch-Lang Path for Audiologist	3
AUD 622	Medical Audiology	4
AUD 633	Advanced Sensory Aids	3
AUD 651	Assess-Treatmnt Cent Aud Proc	3
AUD 653	Industrial-Forensic Audiology	3
AUD 654	Tinnitus and Hyperacusis	3
<b>Hours</b>		<b>39</b>
<b>Third Year</b>		
<b>Summer</b>		
AUD 684	Clin Externship in Audiology	6
<b>Hours</b>		<b>6</b>
<b>Fall</b>		
AUD 684	Clin Externship in Audiology	6
<b>Hours</b>		<b>6</b>
<b>Spring</b>		
AUD 684	Clin Externship in Audiology	6
<b>Hours</b>		<b>6</b>
<b>Total Hours</b>		<b>100</b>

## Communication Sciences and Disorders (PhD)

### Degree Requirements

The Doctor of Philosophy (PhD) Program in Communication Sciences and Disorders (CSD) offers students specialization in speech-language pathology, communication sciences, or audiology. This individualized, mentored, and interdisciplinary program is designed to provide a formal course of academic instruction and advanced research training in CSD aimed at developing leaders in research, teaching, and professional service. The mission of the PhD program is to prepare students for responsible and successful careers as scholars by enabling them to gain the necessary knowledge and skills in the CSD discipline. Graduates will be prepared for research, scientific writing, teaching and supervision/mentorship through pedagogy, mentorship, and internship activities. The student's ability to engage in original research and scholarship is enhanced by coursework in experimental research design and statistics, as well as various out-of-department opportunities.

Completion of the PhD degree in CSD requires the following:

1. Admission to PhD CSD program
2. Admission to doctoral candidacy
3. Successful completion of a dissertation project
4. Completion of additional program requirements (e.g., training in human subjects research)

## Regular Admission

To be considered for admission, applicants must:

1. Have earned or be in the process of completing a graduate degree from an accredited college or university.
2. Demonstrate a preferred minimum 3.0 (A=4.0) overall undergraduate GPA.
3. Complete the Graduate Record Examination (GRE), including analytical writing section, within the last five years and submit according to application instructions.
4. International applicants must submit documentary evidence of English proficiency through submission of English proficiency exam results, including TOEFL or IELTS, or have earned a bachelor's or graduate degree from an accredited United States institution of higher education.
5. Provide three references from faculty at the graduate institution. At least two of these references should be provided by Ph.D. faculty within the applicant's graduate department.
6. Include a Personal Essay stating the applicant's reasons for pursuing the degree, experience that has prepared the applicant for the PhD program, potential research areas of interest, professional goals following degree completion.

Because the number of applicants is greater than the number of vacancies in the program, admission is competitive, and applicants are evaluated based on the criteria stated above. Students are admitted at the start of Fall, Spring, or Summer term. Details regarding the admissions process and deadline are available on the Department of Speech-Pathology and Audiology website.

## Graduate Assistantships

Graduate assistantships are available annually on a competitive basis.

## Transfer Credit

Transfer of credits toward the PhD requires approval of the PhD Admissions Committee, Department Chair, Director of Graduate Studies for the Pat Capps Covey College of Allied Health Professions, and the Dean of the Graduate School.

## Comprehensive Examination

The student must pass a comprehensive examination following successful completion of academic coursework. The comprehensive examination is comprised of written and oral portions encompassing major and minor content areas, and research design and statistical procedures. Examination questions are designed by the faculty on the Comprehensive Exam Committee to assess overall knowledge, integration, and understanding acquired during the program of study.

## Candidacy

The student's admission to doctoral degree candidacy is based upon successful completion of academic coursework, predissertation research project, and written and oral components of the comprehensive examination. A GPA of 3.0 must be maintained throughout academic coursework.

Typically, students who enter the program with a Master's degree complete these requirements by the end of their 2nd year and no later than the end of their 3rd year of program enrollment.

## Dissertation/Dissertation Defense

After admission to candidacy, the student and his/her Major Advisor determine the dissertation topic and develop the Dissertation Committee. After determining the topic and Committee, the student prepares a Dissertation Prospectus, which is submitted in written form and orally defended. Once the Prospectus is approved by the Dissertation Committee, the student may move forward with completion of the Dissertation project.

The Dissertation is submitted in written form and orally defended. The committee's acceptance of the dissertation is the final component needed at the departmental level before granting the PhD degree. All students must abide by the deadlines for final oral examination and final dissertation submission set by the Graduate School. The deadlines for submission to the Dean of the Graduate School are provided in the latest edition of the Graduate School Bulletin.

While only 21 semester hours of dissertation research may count towards the degree, a student must continually enroll in CSD 799 (Dissertation Research) until the final dissertation document has been approved by the Dean of the Graduate School.

## Time Limit

Students are expected to complete all requirements for the PhD degree within seven calendar years from admission to the PhD program. After reaching candidacy, students must complete the dissertation requirement within three years. Extensions may be requested and granted under appropriate circumstances.

# Speech and Hearing Sciences (BS SHS)

## Degree Requirements

The Bachelor of Science in Speech & Hearing Sciences degree program readies the graduate for a variety of career and educational options based on the knowledge gained from this degree and individual interests and skills, including the three graduate degrees offered through the department. Students learn about normal human communication, the development of communication, and communication disorders. The undergraduate program prepares students to think critically and work in teams. The program exposes the student to interprofessional research and collaboration, and introduces the student to topics to prepare them to serve individuals with varied value systems, life experiences, and resources.

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 908)		56-60
<b>Major Requirements</b>		
<i>Major Electives</i>		
A. Select one of the following (Human Development):		
PSY 250	Life Span Development	
PSY 350	Child and Adolescent Dev	
B. Select one of the following (Aging):		3
PSY 250	Life Span Development	

BLY 207	Biology of Aging	
SY 372	Social Gerontology - W	
GRN 290	Special Topics -	
IST 201	Seasons of Life	
IST 401	Adults in Society	
SY 435	Health Disparities Life Span	
C. Select one of the following (Multicultural):		3
PSY 270	Psy of Black Experience	
PSY 485	Psychology of Gender	
IST 320	Cultural Competency	
IS 100	Global Issues	
IS 200	People-Nations -	
AN 100	Intro to Cultural Anthropology	
AN 101	Intro Archaeology-Bio Anthro	
AN 340	Native American Cultures-W	
AN 344		
AN 347	Latin Amer Cultures-Societies	
AN 496	Anthropology Internship	
AFR 101	Intro to African Amer Studies	
LG 110	World Languages	
LG 305	Studies in Gender and Writing	
GS 101	Intro to Gender Studies	
REL 352	World Religions	
REL 354	Philosophies of India	
REL 355	Chinese Philosophy	
SY 220	Marriage and the Family	
D. Select two of the following (Additional Psychology Courses):		6
PSY courses of your choice ( <a href="http://bulletin.southalabama.edu/programs-az/allied-health/speech-pathology-audiology/footnote1/">http://bulletin.southalabama.edu/programs-az/allied-health/speech-pathology-audiology/footnote1/</a> ) <sup>1</sup>		
E. Select three hours from the following (Additional Major Elective):		3
AN 100	Intro to Cultural Anthropology	
AN 101	Intro Archaeology-Bio Anthro	
AN 340	Native American Cultures-W	
AN 344		
AN 347	Latin Amer Cultures-Societies	
AN 496	Anthropology Internship	
AFR 101	Intro to African Amer Studies	
BLY 207	Biology of Aging	
GRN 290	Special Topics -	
GS 101	Intro to Gender Studies	
IST 200	Clinical Observation	
IST 201	Seasons of Life	
IST 320	Cultural Competency	
IST 401	Adults in Society	
LG 110	World Languages	
LG 305	Studies in Gender and Writing	
PSY 250	Life Span Development	
PSY 270	Psy of Black Experience	
PSY 485	Psychology of Gender	
REL 352	World Religions	
REL 354	Philosophies of India	

REL 355	Chinese Philosophy	
SHS 210	Culturally Responsive Practice (see footnote table below (p. 908)) <sup>2</sup>	
SY 220	Marriage and the Family	
PSY 250	Life Span Development	
PSY 350	Child and Adolescent Dev	
SY 372	Social Gerontology - W	
SY 435	Health Disparities Life Span	
F. General Electives <sup>3</sup>		9
<i>Required Speech And Hearing (SHS) Courses</i>		
A. Complete the following:		
SHS 201	Intro to Comm Disorders	3
SHS 302	Hearing & Speech Science	3
SHS 315	A&P Sp, Lang, Swallow, Hrng	3
SHS 331	Normal Language Acquisition-W <sup>3</sup>	3
SHS 341	Clinical Phonetics <sup>3</sup>	4
SHS 373	Audiology I <sup>3</sup>	4
SHS 374	Audiology II <sup>3</sup>	3
SHS 414	Neurobiol Bases Human Comm <sup>3</sup>	3
SHS 431	Intro to Language Disorders <sup>3</sup>	3
SHS 453	Intro to Speech Disorders <sup>3</sup>	3
B. Select one of the following:		
SHS 480	Issues in Clinical Pract - W <sup>3</sup>	3
or SHS 481	Intro to Clinical Practicum-W	
SHS 481	Intro to Clinical Practicum-W <sup>3</sup>	4
or SHS 480	Issues in Clinical Pract - W	
<b>Minor Requirements</b>		
A minor is not required for this degree program		0
<b>Total Hours</b>		<b>119-123</b>

## Footnote

<sup>1</sup> Any Psychology course besides PSY 120.

<sup>2</sup> Recommended for the program.

<sup>3</sup> Pre-requisites must be met to enroll

## General Education Requirements

Code	Title	Hours
<b>Area I - Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II - Humanities &amp; Fine Arts</b>		
A. Complete the following:		
CA 110	Public Speaking	3
B. Complete one of the following:		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	

## C. Complete one of the following: 3

ARH 100	Survey of Art
ARH 103	Art History I
ARH 123	Art History II
ARS 101	Art Appreciation
DRA 110	Introduction to Theatre
MUL 101	Introduction to Music

## D. Complete one of the following: 3

AFR 101	Intro to African Amer Studies
ARH 100	Survey of Art
ARH 103	Art History I
ARH 123	Art History II
ARH 203	Survey of Non-Western Art
ARS 101	Art Appreciation
CLA 110	Intro Anc Greek Roman Culture
DRA 110	Introduction to Theatre
EH 215	Brit Lit before 1785
EH 216	Brit Lit after 1785
EH 225	Am Lit before 1865
EH 226	Am Lit after 1865
EH 235	World Lit before 1650
EH 236	World Lit after 1650
LG 101	Introductory Latin I
LG 102	Introductory Latin II
LG 111	Introductory French I
LG 112	Introductory French II
LG 121	Introductory Chinese I
LG 122	Introductory Chinese II
LG 131	Introductory Spanish I
LG 132	Introductory Spanish II
LG 141	Intro Classical Greek I
LG 142	Intro Classical Greek II
LG 151	Introductory German I
LG 152	Introductory German II
LG 153	Accelerated Intro German
LG 171	Introductory Russian I
LG 172	Introductory Russian II
LG 173	Accelerated Intro Russian
LG 201	Intermediate Latin I
LG 202	Intermediate Latin II
LG 211	Intermediate French I
LG 212	Intermediate French II
LG 213	Accelerated Inter French - H
LG 221	Intermediate Chinese I
LG 222	Intermediate Chinese II
LG 231	Intermediate Spanish I
LG 232	Intermediate Spanish II
LG 234	Inter Spanish Accel -H
LG 241	Interm Classical Greek I
LG 242	Interm Classical Greek II
LG 251	Intermediate German I
LG 252	Intermediate German II

LG 271	Intermediate Russian I
LG 272	Intermediate Russian II
LG 273	Intensive Second Year Russian
LGS 101	Introductory Japanese I
LGS 102	Introductory Japanese II
LGS 106	Introductory Arabic I
LGS 107	Introductory Arabic II
LGS 110	Intro American Sign Language I
LGS 111	Intro American Sign Lang II
LGS 171	Introductory Korean I
LGS 172	Introductory Korean II
LGS 201	Intermediate Japanese I
LGS 202	Intermediate Japanese II
LGS 206	Intermediate Arabic I
LGS 207	Intermediate Arabic II
LGS 210	Intermediate ASL I
LGS 211	Intermediate ASL II
MUL 101	Introduction to Music
PHL 110	Introduction to Philosophy
PHL 120	Critical Thinking
PHL 121	Introduction to Logic
PHL 131	Introduction to Ethics
PHL 231	Social Ethics
PHL 240	Western Philosophy: Classical
REL 100	Intro to the Study of Religion
REL 200	Old Testament/Hebrew Bible
REL 201	Survey of the New Testament

**Area III – Natural Sciences & Mathematics**

## A. Complete one of the following: 3-4

MA 112	Precalculus Algebra
MA 113	Precalculus Trigonometry
MA 115	Precal Algebra-Trigonometry
MA 120	Calculus and Its Applications
MA 125	Calculus I
MA 126	Calculus II
MA 227	Calculus III
MA 237	Linear Algebra I
MA 238	Differential Equations I

## B. Complete the following:

BLY 121 & 121L	General Biology I and General Biology I Lab	4
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## C. Complete one of the following combinations: 4

BLY 102 & 102L	Life Science II and Life Science II Lab	
BLY 122 & 122L	General Biology II and General Biology II Laboratory	
BLY 213 & BLY 214	Microbiology and Lab Studies Microbiology	
BMD 210 & 210L	Microbiology in Healthcare and Microbiology in Healthcare Lab	
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab	

CH 131 & 131L	General Chemistry I and General Chemistry I Lab
CH 132 & 132L	General Chemistry II and General Chemistry II Lab
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab

**Area IV – History, Social & Behavioral Sciences**

A. Complete one of the following: <sup>1</sup> 3

HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 121	World Civilization I
HY 122	World Civilization II
HY 135	US History to 1877
HY 136	US History since 1877

B. Complete the following:

PSY 120 or PSY 121	Introduction to Psychology or Honors Gen Psychology - H	3
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C. Complete TWO of the following: 6

AN 100	Intro to Cultural Anthropology (see footnote table below (p. 910)) <sup>2</sup>
AN 101	Intro Archaeology-Bio Anthro
CA 100	Intro to Communication
CA 211	Interpersonal Comm
CJ 105	Introduction to Criminal Justice
ECO 215	Prin of Microeconomics
ECO 216	Prin of Macroeconomics
GEO 114	People, Places, Environment
GEO 115	World Regional Geography
GS 101	Intro to Gender Studies
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 121	World Civilization I
HY 122	World Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
IS 100	Global Issues
IST 201	Seasons of Life
NAS 101	Intro Native American Studies
PSC 130	Intro to US Government
PSY 250	Life Span Development
SHS 210	Culturally Responsive Practice (see footnote table below (p. 910)) <sup>2</sup>
SY 109	Introductory Sociology (see footnote table below (p. 910)) <sup>2</sup>
SY 112	Social Problems

**Area V - Pre-Professional Major & Electives**

A. Complete one of the following: 0-3

CIS 010	Computer Proficiency Exam
CIS 150	Intro to Computer Applications (or pass computer proficiency exam)

CIS 250	Advanced Comp Applications
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B. Complete the following:

BMD 251	Human Anatomy & Physiology I	4
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C. Complete the following:

BMD 252	Human Anatomy & Physiology II	4
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D. Complete one of the following:

ST 210	Stat Reason and Application	3
ST 305 or ST 315	Applied Stat Health Sciences or Applied Probability-Statistics	3

E. Complete one of the following combinations:

PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory	4
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab	5
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	4

**Total Hours 65-69**

**Footnote**

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102, HY 121 & HY 122, or HY 135 & HY 136).

<sup>2</sup> Recommended for the program.

**Notes:**

- All undergraduates must complete two designated writing credit (W) courses, at least one of which must be in the student’s major or minor.
- Students complete BMD 251, BMD 252, CIS 150 or CIS 010 or CIS 250, and PH 104 & PH 104L during the first two years. An overall GPA of 2.75 is recommended prior to enrolling in SHS 315 and SHS 341. Students must maintain a grade of C or better in all upper-level (300-400) SHS courses. Select students will take SHS 481 in place of SHS 480. Students will be selected to take SHS 481 on a competitive basis and must submit an application and its supplemental items to the Department of Speech Pathology and Audiology by the advertised deadline. Students selected to take SHS 481 will be required to maintain an overall GPA of 3.0 or higher and must earn a B or better in all SHS courses. A minimum of 120 credit hours is required. Students will need to take general electives to fill out any remaining credit hours needed.

**Graduation Plan**

(121-122 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
BLY 121 & 121L	General Biology I and General Biology I Lab	4
CA 110	Public Speaking	3
EH 101	English Composition I	3
MA 112	Precalculus Algebra	3
PSY 120 or PSY 121	Introduction to Psychology or Honors Gen Psychology - H	3
<b>Hours</b>		<b>16</b>

<b>Spring</b>		
EH 102	English Composition II	3
Additional Lab Science: Area III, C		4
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory	4
Social Science: Area IV, C		3
<b>Hours</b>		<b>14</b>
<b>Second Year</b>		
<b>Fall</b>		
SHS 201	Intro to Comm Disorders	3
BMD 251	Human Anatomy & Physiology I	4
Literature: Area II, B		3
History: Area IV, A		3
Fine Art: Area II, C		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
BMD 252	Human Anatomy & Physiology II	4
ST 210 or ST 305	Stat Reason and Application or Applied Stat Health Sciences	3
CIS 150	Intro to Computer Applications	3
Sequence: Area II, D OR Area IV, C <sup>3</sup>		3
General Elective: Major Electives, F		3
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
SHS 315	A&P Sp, Lang, Swallow, Hrng	3
SHS 341	Clinical Phonetics <sup>4</sup>	4
Social Science OR Humanities: Area IV, C OR Area II, D		3
Aging Elective: Major Electives, B		3
Human Development: Major Electives, A		3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
SHS 302	Hearing & Speech Science	3
SHS 331	Normal Language Acquisition-W <sup>4</sup>	3
General Elective: Major Electives, F		3
Multicultural: Major Electives, C		3
Psychology #3: Major Electives, D		3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
SHS 373	Audiology I <sup>4</sup>	4
SHS 414	Neurobiol Bases Human Comm	3
SHS 453	Intro to Speech Disorders <sup>4</sup>	3
General Elective: Major Electives, F		3
Psychology #4: Major Electives, D		
<b>Hours</b>		<b>13</b>
<b>Spring</b>		
SHS 431	Intro to Language Disorders <sup>4</sup>	3
SHS 374	Audiology II <sup>4</sup>	3
SHS 480 or SHS 481	Issues in Clinical Pract - W <sup>4</sup> or Intro to Clinical Practicum-W	3-4
Additional Major Elective: Major Electives, E		3
General Elective		3
<b>Hours</b>		<b>15-16</b>
<b>Total Hours</b>		<b>121-122</b>

<sup>1</sup> See General Education Requirements

<sup>2</sup> Student has the option of passing the Computer Proficiency Exam (CIS 010) or taking CIS 150 or CIS 250.

<sup>3</sup> A two-course sequence must be completed in either Literature or History.

<sup>4</sup> Pre-requisites must be met to enroll

## Requirements for the Speech and Hearing Sciences Departmental Honors Program

Students in the Bachelor of Science in Speech and Hearing Sciences degree program may complete requirements to earn the Departmental Honors designation. Students will work with a faculty mentor from the Speech and Hearing Sciences program and two other faculty members to complete a Senior Honors Thesis project. See the SHS program webpage on the Department of Speech and Pathology and Audiology website for specific criteria.

## Speech and Hearing Sciences Minor Degree Requirements

The Department of Speech Pathology and Audiology offers a minor degree in Speech and Hearing Sciences for students across the University community with an interest in learning about communication sciences and disorders. Students in the minor degree program in Speech and Hearing Sciences will learn about communication across the lifespan, gain knowledge of communication disorders, and have a basic understanding of how to interact with individuals with communication disorders in educational, social, and employment settings. The undergraduate minor in Speech and Hearing Sciences requires a minimum of 20 credit hours. A final grade of "C" or better must be earned in all minor courses.

Code	Title	Hours
SHS 201	Intro to Comm Disorders	3
SHS 302	Hearing & Speech Science	3
SHS 331	Normal Language Acquisition-W (see footnote table below (p. 911)) <sup>1</sup>	3
SHS 341	Clinical Phonetics (see footnote table below (p. 911)) <sup>1</sup>	4
SHS 373	Audiology I (see footnote table below (p. 911)) <sup>1</sup>	4
SHS 480	Issues in Clinical Pract - W (see footnote table below (p. 911)) <sup>1</sup>	3
or SHS 481	Intro to Clinical Practicum-W	or 4

Students can select additional coursework from the following:

SHS 315	A&P Sp, Lang, Swallow, Hrng
SHS 374	Audiology II (see footnote table below (p. 911)) <sup>1</sup>
SHS 414	Neurobiol Bases Human Comm (see footnote table below (p. 911)) <sup>1</sup>
SHS 431	Intro to Language Disorders (see footnote table below (p. 911)) <sup>1</sup>
SHS 453	Intro to Speech Disorders (see footnote table below (p. 911)) <sup>1</sup>

**Total Hours 20-21**

### Footnote

<sup>1</sup> Pre-requisites must be met to enroll.

## Requirements for the Speech and Hearing Sciences Departmental Honors Program

Students in the Bachelor of Science in Speech and Hearing Sciences degree program may complete requirements to earn the Departmental Honors designation. Students will work with a faculty mentor from the Speech and Hearing Sciences program and two other faculty members to complete a Senior Honors Thesis project. See the SHS webpage for specific criteria.

## Speech-Language Pathology (MSSLP)

### Degree Requirements

The Master of Science in Speech-Language Pathology (MSSLP) serves either as professional preparation for clinical certification by the American Speech-Language-Hearing Association (ASHA) or as preparation for graduate study leading to the Ph.D. degree. The MSSLP program provides a broad range of basic science courses and specialized offerings emphasizing evaluation and treatment of language, articulation, fluency, voice, swallowing, and neurologically-based communication disorders. Students are prepared for careers as clinicians in schools, hospitals, rehabilitation centers, and community clinics.

Clinical practicum experiences occur at the on-campus Speech and Hearing Center and many affiliated clinics, rehabilitation centers, schools, and hospitals. Within this framework, students must meet the academic and practicum requirements leading to the Clinical Fellowship (CF) that occurs post-graduation. Completion of the CF results in eligibility for national certification, the Certificate of Clinical Competence (CCC-SLP) awarded by ASHA, and eligibility for State of Alabama Licensure. The MSSLP program is a full-time, in-residence program. For students with a background in communication sciences and disorders, the MSSLP program typically extends for six academic semesters, including one semester of clinical externship. For those students who do not have a background in communication sciences and disorders, the program of study may be extended one semester.

### Typical Requirements for the Degree

The Master of Science in Speech-Language Pathology degree requires:

1. A minimum of five semesters of full-time study. The final semester is spent off campus completing the externship. Students who enter the program without a background in communication sciences and disorders will require additional coursework and six semesters of full-time study.
2. A minimum GPA of 3.0.
3. A passing grade on comprehensive examinations before leaving for the externship, or satisfactory completion of a thesis.
4. Demonstration of academic and clinical competencies as reflected in the 2020 Standards for Clinical Certification in Speech-Language Pathology, verified by the program director. This includes verification of completed coursework in biological science, physical science, social/behavioral science, and statistics. Typically, this coursework is completed at the undergraduate level.
5. Completion of 375 supervised clinical clock hours in the required areas as stipulated by ASHA. Students without an undergraduate degree in Communication Sciences and Disorders or related field must complete 25 hours of clinical observation before beginning the

supervised clinical experience to meet the 375 clinical clock hour requirement.

### Regular Admission

To be considered for admission, applicants must:

1. Have earned or be in the process of completing a baccalaureate degree from an accredited college or university.
2. Demonstrate a preferred minimum 3.0 (A=4.0) overall undergraduate GPA.
3. Complete the Graduate Record Examination (GRE), including analytical writing section, within the last five years and submit according to application instructions.
4. International applicants must submit documentary evidence showing TOEFL test scores of at least 600 (written form), 250 (computer version), or 100 (internet-based version), or bachelor's or graduate degrees earned at accredited United States institutions of higher education. A minimal IELTS score of 7 is considered equivalent to the TOEFL scores required.
5. Provide three references from faculty at the undergraduate institution. Two of these references should be provided by Ph.D. faculty within the applicant's undergraduate department.
6. Include a Personal Essay stating the applicant's reasons for pursuing the degree, and addressing specific questions outlined in the application instructions.

Because the number of applicants is greater than the number of vacancies in the program, admission is competitive, and applicants are evaluated based on the criteria stated above. Details regarding the Admissions process and deadline are available on the Department of Speech-Pathology and Audiology website.

### Retention Policies

1. Any term in which a graduate student enrolled in the MSSLP program drops below a 3.0 GPA, the student will be placed on probationary status and has a period of one semester to attain a 3.0 GPA or be dismissed from the program.
2. Any student who receives a grade lower than a "C" in a graduate level course will be dismissed from the program.
3. A "C" in any combination of two or more MSSLP courses will result in academic dismissal.
4. Students whose performance falls below standards in a course or clinical experience may be required to complete additional and/or augmentative coursework or clinical experiences as needed to meet ASHA's standards for clinical certification. As such, graduation could be delayed.
5. If for any reason a student must withdraw from the MSSLP program, re-admission will require approval of the Department Chair and the Dean of the Pat Capps Covey College of Allied Health Professions.
6. If a student is dismissed from a program prior to the end of the regular semester and that dismissal occurs after the University's refund deadline, the student will not receive any type of refund even if the next series of classes have not begun.

### Typical Course Sequence

Course	Title	Hours
<b>First Year</b>		
SLP 541	Pediatric Speech Sound Disorders	3
SLP 532	Clinical Linguistics	3
SLP 521	Advanced Speech Science	3

SLP 510	Intro to Research Design	3
SLP 596	Clin Pract Speech-Lang Pathol	1
SLP 596L	Clin Pract Sp-Lang Path Lab	2
SLP 568	Dysphagia	4
SLP 561	Fluency Disorders	3
SLP 566	Aphasia & Neuro Lang Disorders	3
SLP 596	Clin Pract Speech-Lang Pathol	1
SLP 596L	Clin Pract Sp-Lang Path Lab	2
SLP 588	Audiology for Speech-Lang Path	3
SLP 596	Clin Pract Speech-Lang Pathol	1
SLP 596L	Clin Pract Sp-Lang Path Lab	2
<b>Hours</b>		<b>34</b>
<b>Second Year</b>		
SLP 565	Neuromotor Disorders of Commun	3
SLP 551	Voice and Resonance Disorders	3
SLP 534	School-Aged Language Disorders	3
SLP 597	Off-Campus Clinical Practicum in Speech Language Pathology	6
SLP 533	Pediatric Language Disorders	3
SLP 545	AAC for Indivis w Complex Comm	3
SLP 567	Acq Cognitive Comm Disorders	3
SLP 598	Clinical Externship	3
SLP 598	Clinical Externship	9
<b>Hours</b>		<b>36</b>
<b>Total Hours</b>		<b>70</b>

## School of Computing

### General Information

(251) 460-6390

School of Computing website

<https://www.southalabama.edu/colleges/soc/>

Title	Name
Dean	Dr. Todd R. Andel

### Mission Statement

The mission of the School of Computing is to prepare graduates who are professionally competent, motivated to lifelong learning, and demonstrate ethical behavior in the computing sciences; to provide an atmosphere for faculty to demonstrate research and teaching excellence; and to provide service in the computing sciences to our community and discipline.

### Accreditation

The Bachelor of Science in Computer Science, Information Systems, and Information Technology programs are accredited by the Computing Accreditation Commission of ABET, <http://www.abet.org>. For a quick understanding of what accreditation is and why an accredited program should be chosen, go to <http://www.abet.org/why-accreditation-matters/>.

### National Center of Academic Excellence in Cyber Defense (CAE-CD)

The University of South Alabama was first awarded a National Center of Academic Excellence in Information Assurance Education (CAE/IAE) designation in June 2011 and was re-designated as a National Center of Academic Excellence in Cyber Defense (CAE-CD) by the National Security Agency and the U.S. Department of Homeland Security in 2014 and 2022, which is valid through 2027. CAE-CD designated institutions focus on preparing graduates to help reduce threats to our national

infrastructure through higher education and research in cyber defense.

The NCAE designation allows institutions to be able to compete for grants including the National Science Foundation's (NSF) Scholarship for Service program.

Students wishing to comply with USA's CAE-CD curriculum in conjunction with their specialization must complete all required courses and must choose courses designated as cybersecurity in the specialization wherever an optional choice is presented.

### National Center of Academic Excellence in Cyber Research (CAE-R)

In 2024, the School of Computing was awarded the prestigious designation of being identified as a Center of Academic Excellence in Cyber Research (CAE-R) by the National Security Agency (NSA) and the Department of Homeland Security (DHS). The purpose of this program is to expand and cultivate a pool of cybersecurity experts who are capable of addressing the challenges associated with the rapidly evolving cyberattack landscape. This designation also serves as a means for the U.S. government to engage research experts in tackling some of the most complex cybersecurity issues that our nation faces. This designation is only awarded to institutions that commit to producing cybersecurity professionals that will reduce vulnerabilities in our national infrastructure.

### Departments of Instruction

- Computer Science (p. 916)
  - Artificial Intelligence Certificate Non-Degree Program (p. 925)
  - Computer Science (BS) (p. 925)
  - Computer Science (MS) (p. 929)
  - Computer Science Minor (p. 930)
  - Graduate Computer Science Cybersecurity Certificate (p. 930)
- Computing (p. 931)
  - Computing (PhD) (p. 944)
- Information Systems And Technology (p. 949)
  - Cybersecurity (MS) (p. 960)
  - Graduate Information Systems Cybersecurity Certificate (p. 961)
  - Health Informatics (BS) (p. 961)
  - Health Informatics Certificate (p. 964)
  - Information Systems (BS) (p. 964)
  - Information Systems (MS) (p. 968)
  - Information Systems Minor (p. 968)
  - Information Technology (BS) (p. 968)
  - Information Technology Minor (p. 971)
  - Process Technology Certificate Non-Degree Program (p. 972)

### Undergraduate

#### Admission to the Degree Programs and Courses

In order to be admitted as an undergraduate major in the School of Computing, a student must be "calculus ready". For a major in Computer Science, "calculus ready" means that the student is eligible to enroll in MA 125 (Calculus I). For a major in either Information Systems or Information Technology, "calculus ready" means that the student is eligible to enroll in MA 120, (Calculus and Its Applications).

## Graduate Requirements for Admission

Students are admitted each semester. In addition to the general admissions requirements of the USA Graduate School, admission requirements for the Master's Degree programs in Computer Science, Information Sciences, or Cybersecurity are:

1. Undergraduate or graduate degree from a regionally accredited institution of higher education.
2. An official academic transcript from each college or university attended.
3. Three letters of recommendation from persons able to speak directly to the applicant's academic abilities.
4. A written statement of purpose indicating the student's personal and academic goals.
5. A minimum grade-point average of 3.0 (4.0 scale) for either all completed post-secondary coursework or for a completed graduate program to be accepted for regular admission.
6. Official scores for the Graduate Records Examination (GRE) including the AW portion.
  - Any applicant with an undergraduate or graduate degree from a regionally accredited U.S. institution of higher education are not required to provide GRE scores.
7. For international students, an official TOEFL, IELTS, DuoLingo, iTEP, or PET score. See the policy of the Graduate School: <https://www.southalabama.edu/bulletin/current/index.html> (<https://www.southalabama.edu/bulletin/current/>).
8. A completed application for admission to the Graduate School.

Final admission decisions are made based upon an evaluation of the applicant's complete file which consists of all official academic transcripts; undergraduate grade-point average; GRE scores (when required); three (3) letters of reference regarding the applicant's ability to succeed in the Master of Science program in Computer Science, Information Sciences, or Cybersecurity; the applicant's statement of purpose; TOEFL, IELTS, DuoLingo, iTEP, or Pearsons (PTE Academic) scores (for international applicants); and program enrollment and availability.

### Full Load of Coursework Per Semester

Permission of the School of Computing Director of Graduate Studies is required to take more than 10 semester hours.

### International Students' Special Requirements

International students must submit documentary evidence showing IELTS test scores of at least 6.0, TOEFL test scores of at least 525 on the paper version, 197 on the computer version, or 71 on the internet version, DuoLingo score of at least 100, iTEP score of at least 3.7, a minimum score of 48 on the Pearsons (PTE Academic), or an equivalent level of competence as exhibited by a bachelor's degree from an accredited university in the United States. The School of Computing reserves the right to exclude students with more than five course failures.

## Ph.D. in Computing Program Requirements for Admission

Students are normally admitted in the fall semester and are encouraged to complete the admissions application prior to February 1st. In addition

to the general admission requirements of the USA Graduate School, admission requirements for the Computing Ph.D. program are:

1. A baccalaureate or graduate degree in Computer Science, Information Systems, Information Technology, Cybersecurity or a closely related field. A graduate degree is not required for admission.
2. An undergraduate minimum GPA of 3.3 (4.0 scale) for all completed post-secondary coursework or a 3.5 overall (4.0 scale) for a completed graduate program.
3. Official scores for the Graduate Records Examination (GRE) including the AW portion.
  - Any applicant with an undergraduate or graduate degree from a regionally accredited U.S. institution are not required to provide GRE scores.
4. A statement of purpose indicating the student's personal goals and research interests. Because prospective students are matched with a faculty mentor, competitive applications align with the research areas of School of Computing graduate faculty.
5. Three letters of recommendation from persons able to speak directly to the applicant's ability to engage in advanced discovery and contribute new knowledge to the discipline.
6. Curriculum vita.
7. An official transcript from each college or university attended.
8. A completed application for admission to the Graduate School.
9. For international students, an official TOEFL, IELTS, DuoLingo, iTEP, or Pearsons (PTE Academic) score, or an equivalent level of competence as exhibited by a bachelor or graduate degree from an accredited university in the United States is required. See the policy of the Graduate School: <https://www.southalabama.edu/bulletin/current/index.html> (<https://www.southalabama.edu/bulletin/current/>)

Admission is competitive and the decision is based on a review of all submitted admission materials. A personal interview may be requested. Applicants are encouraged to submitted samples of prior work. All admissions materials should be submitted online at: <https://southalabama.liaisoncas.com/applicant-ux/#/login>.

Admission may be granted by the Director of Graduate Studies when supported by a vote of the Graduate Faculty in special cases where a holistic evaluation of the applicant's credentials is appropriate.

## Undergraduate General Requirements for the Bachelor of Science Degrees in the School of Computing

Majors in the School of Computing must complete requirements for one of the four Bachelor of Science Programs offered:

- Computer Science,
- Health Informatics,
- Information Systems, or
- Information Technology.

All undergraduate students in the School of Computing must comply with the University's general education requirements, (See Academic Policies and Procedures). Although these requirements are not specifically organized according to the four general education areas, each of the bachelor of science programs in the School of Computing, incorporates general education requirements within the published programs.

In addition to an overall grade-point average of 2.0, all courses in the major, prerequisites for courses in the major and required supporting courses for the major, must be passed with a minimum grade of "C." Any course taken at the University of South Alabama with a grade of "D" or "F" may be retaken only at the University of South Alabama.

Any courses taken at another institution to meet degree requirements must have prior approval of the School of Computing Dean. Failure to obtain prior approval may result in loss of transfer credit for the course work.

## Laptop Ownership Policy

All students enrolling in any undergraduate or graduate courses offered by the School of Computing except for CIS 101, CIS 110, CIS 150, CIS 210, CIS 211, CIS 227 and CIS 250 are required to own a personal laptop computer system that conforms to the current School's minimum published standards. This is a one-student one-machine requirement. For more information consult the Laptop Policy at <https://www.southalabama.edu/colleges/soc> (<https://www.southalabama.edu/colleges/soc/>).

## Transfer Students

Transfer students must complete at least eighteen (18) credit hours of courses at the 300-level or above of courses in their chosen program of study in the School of Computing. All undergraduate transfer students are required to satisfactorily complete CIS 300, Information Technology in Society at the University of South Alabama.

## Accelerated Bachelor's to Master's Degree Program

The School of Computing offers an accelerated Bachelor's to Master's (ABM) Program in Computer Science (CS), Information Systems (IS), and Information Technology (ITE) that provides qualified undergraduate students the opportunity to earn their master's degree within one academic year after completing their bachelor's degree. Undergraduate students with a 3.0 GPA, who meet all of the requirements for admission to the Master's degree program and have completed at least 101 credit hours towards their CS Bachelor's degree or 96 credit hours towards their IS or ITE Bachelor's degree, may apply for this program. Financial aid is available to qualified students admitted to this program.

## Choice of Bulletin Under Which a Student Graduates

Majors in the School of Computing may choose any bulletin from their entry date to their time of graduation. This applies for entering freshmen and transfer students. Students at the University of South Alabama changing their choice of major in the School of Computing, changing their major in another college to a major in one of the programs in the School of Computing or who interrupt their program of study for more than one calendar year are considered new students with respect to bulletin selection.

## Graduate

### Master's Degree Programs

#### General Information About the MS Programs

The School of Computing offers three Master of Science degree options each designed for students and professionals wishing to further their knowledge and expertise in computing:

1. **Computer Science (CSC)** for students interested in the theoretical aspects of the discipline with an emphasis on the construction of system software or the development of scientific applications using software engineering principles. For more information

about the Master of Science in Computer Science, go to <https://www.southalabama.edu/colleges/soc/computerscience> (<https://www.southalabama.edu/colleges/soc/computerscience/>).

2. **Cybersecurity (CYB)** for students interested in learning how to manage, administer, and protect critical information infrastructures; defend organizations from emerging cybersecurity threats; and respond effectively to the dynamic cybersecurity landscape. For more information about the Master of Science in Cybersecurity, go to <https://www.southalabama.edu/colleges/soc/cist/>
3. **Information Systems (ISC)** for students interested in a professional software development focused program that prepares students to enter the job market with highly marketable and in-demand skills. For more information about the Master of Science in Information Systems, go to <https://www.southalabama.edu/colleges/soc/cist/>.

### Choice of Bulletin Under Which a Student Graduates

Students entering the SoC masters program may choose any bulletin from their entry date to their time of graduation. This applies for new students and transfer students. Students at the University of South Alabama changing their graduate specialization in School of Computing, changing their major to School of Computing, or who interrupt their program for more than one calendar year are considered new students with respect to bulletin selection.

### Courses Taken Outside the School of Computing

No more than four graduate courses, maximum of twelve (12) semester hours taken outside of the School of Computing, at a regionally accredited, or approved, university may be applied toward the degree. Only grades of "A" or "B" may be accepted. Transfer credit is approved only after completion of a minimum of nine (9) semester hours of graduate credit towards the degree. A formal request for transfer credits must be made to the coordinator of the student's department (CSC or ISC). Any such transfer courses must be approved by the SoC Director of Graduate Studies and may not have been used to fulfill the requirements of another graduate degree.

### Scheduling of Courses

The graduate program courses are scheduled to accommodate full-time students (normally two or three courses per semester) and part-time students (one course per semester). Special topics, directed study, and thesis courses are available as needed.

### Time Limitation

All requirements for the Master of Science degrees in Computer Science, Cybersecurity, and Information Systems must be completed within seven (7) calendar years from the date of matriculation as a School of Computing graduate student. The seven calendar year constraint also applies to all accepted transfer courses.

### Comprehensive Examination

All School of Computing masters students must complete a comprehensive examination for the CORE courses in their Degree Program (Computer Science, Cybersecurity, or Information Systems). The comprehensive examination may be repeated no more than once. A written examination is required of students in Information Systems and those students in Computer Science and Cybersecurity who choose the Course Only Concentration. An oral examination is required of students in Computer Science or Cybersecurity who complete the Thesis or Project Concentration.

The School of Computing Comprehensive Examination Policies and Procedures document and the Comprehensive Examination Application

form are available at <https://www.southalabama.edu/colleges/soc/essentialstudentlinks.html>

## Ph.D. in Computing Program

### General Information About the Ph.D. in Computing Program

The interdisciplinary Ph.D. in Computing degree program integrates coursework and research projects from three related disciplines: computer science, information systems, and information technology. The program emphasizes advanced discovery and the development of solutions to research-focused problems in the areas of cyber assurance, risk assessment, forensics, and data analytics. Ph.D. graduates are eligible for research positions in academia, industry, and government. For more information about the Ph.D. in Computing program, go to <https://www.southalabama.edu/colleges/soc/phdprogram.html>

### Full Load of Coursework Per Semester

Permission of the School of Computing Director of Graduate Studies is required to take more than 10 semester hours.

### Academic Standards

Student must maintain a cumulative 3.0 GPA in order to be considered in good standing. Failure to maintain a cumulative 3.0 GPA will result in the student being placed on academic probation. The School of Computing Director of Graduate Programs may recommend dismissal of a student who does not maintain good academic standing or is not making sufficient progress.

### Courses Taken Outside the School of Computing

A maximum of 24 semester hours of graduate credit earned at a regionally accredited or approved graduate school may be counted toward the Ph.D. program. Transfer credit may be approved after the completion of twelve (12) semester hours of credit at the University of South Alabama. Transfer credit must be approved by the School of Computing Director of Graduate programs with the recommendation of the student's advisor.

### Scheduling of Courses

The PhD program courses are scheduled to accommodate full-time students (normally two or three courses per semester) and part-time students (one course per semester).

### Comprehensive Exams

Doctoral students must pass a comprehensive examination. The written content of the examination will be determined by the comprehensive examination committee. Normally the written component is based on the student's coursework in the Core PhD courses. The oral component consists of an oral defense of the student's proposed research project. Failure to pass the comprehensive examination within two attempts will result in dismissal from the program.

### Time Limitation

All requirements for the Ph.D. in Computing degree must be completed within ten (10) calendar years from the date of matriculation as a School of Computing Ph.D. student. This ten calendar year constraint also applies to all accepted transfer courses. After reaching candidacy, a student has a maximum of 3 years to complete the dissertation. A student may apply to the Director of Graduate programs for an extension to complete the degree.

## General Graduate Program Policies

### Professional Participation

Students are expected to take an active part in at least one (1) professional computing organization. They are expected to be aware of the social impact of computing and adhere to the ACM/AITP code of ethics. For more information consult <https://www.southalabama.edu/colleges/soc> (<https://www.southalabama.edu/colleges/soc/>).

### Graduate Assistantships and Fellowships

A limited number of graduate assistantships are available on a competitive basis and are awarded on the recommendation of the School of Computing. Applications are available on-line at: <https://www.southalabama.edu/departments/eforms/graduateschool/graduateassistantapptform.pdf>. Applications must be received by April 1st for fall applicants or November 1st for spring applicants.

### Graduate School Standards

For all other graduate policies and procedures not specifically stated for the Master of Science in Computer Science, Cybersecurity, or Information Systems degree programs, or the Ph.D. in Computing degree program, see the School of Computing, [www.southalabama.edu/colleges/soc](http://www.southalabama.edu/colleges/soc) (<http://www.southalabama.edu/colleges/soc/>).

## Computer Science

### Department Information

Department of Computer Science website  
<https://www.southalabama.edu/colleges/soc/computerscience>  
(<https://www.southalabama.edu/colleges/soc/computerscience/>)

Title	Name
Associate Professor & Computer Science Chair	Dr. Ryan Benton

Computer Science is a discipline that involves the understanding and design of computers and computational processes. In its most general form, it is concerned with the understanding of information transfer and transformation, with particular placed on making processes efficient. The discipline includes both advancing the fundamental understanding of algorithms and information processes in general, as well as the practical design of efficient, reliable software to meet given specifications. Courses offer students the opportunity to explore current trends in computing such as: cyber security, artificial intelligence, machine learning, big data, video game development, computer graphics and robotics.

## Degrees, Programs, or Concentrations

- Artificial Intelligence Certificate Non-Degree Program (p. 925)
- Computer Science (BS) (p. 925)
- Computer Science (MS) (p. 929)
- Computer Science Minor (p. 930)
- Graduate Computer Science Cybersecurity Certificate (p. 930)

## Courses

### Computer Info Sciences (CIS)

#### CIS 010 Computer Proficiency Exam 0 cr

The purpose of this course is to administer the Computer Proficiency Exam (CPE) for enrolled students. The CPE consists of multiple choice and performance-based questions for general computer, internet, WWW, e-mail, and office application concepts. Performance-based questions require a series of actions in a simulated environment to demonstrate specific skills being assessed. No outside materials or assistance from the applications' Help files are allowed.

#### CIS 100 Information Tech in Society 1 cr

A discussion of the impact of information technology on personal, local, national, and global issues. Not to be taken with CIS 110.

#### CIS 101 Freshman Seminar CIS 2 cr

A course for first-time students that assists with maximizing the student's potential to achieve academic success and to adjust responsibly to the individual and interpersonal challenges presented by college life for a major in the School of CIS. Taught in small groups, the course provides an introduction to the nature of higher education and a general orientation to the functions and resources of the University and the School of CIS. Extensive reading and writing assignments relevant to the student's first year experience are required.

#### CIS 110 Intro to Comp-Info Sciences 3 cr

An introduction to information technology using a programming language to study applications in text searching, in real-time 3-D animation, and in sound production. A discussion of the social, ethical, economic, and philosophical implications of computing.

#### CIS 115 Beginning Programming 3 cr

A first course in programming uses an interpreted, interactive, object-oriented programming language. Coverage includes algorithmic problem solving, logical thinking, fundamentals of programming, variables and static values, sequential coding, decisions, and repetition.

**Prerequisite:** MMT 080 or A02 23 or (MA 112 Minimum Grade of C or MA 171 Minimum Grade of C) or MA 267 Minimum Grade of C or (MA 125 Minimum Grade of C or MA 132 Minimum Grade of C)

#### CIS 121 Prob Solv-Prog Concepts II 4 cr

Continuation of CIS 120. Topics include: design concepts, abstract data types, use of object libraries, dynamic storage allocation, stacks, queues, link lists, random access files, testing and software engineering practices.

**Prerequisite:** (CIS 120 Minimum Grade of C or CIS 141 Minimum Grade of C)

#### CIS 140 Intro to Tech for Healthcare 3 cr

This course is designed to provide a broad-based introduction to the use of computers and productivity software technologies for healthcare providers. Topics to be covered include use of a current Operating System and basic file management; the fundamentals of word processing, spreadsheet and graphics-based presentation software; basic image management related to documents and reports; as well as electronic health records systems. Other topics covered include information assurance, protecting patient privacy, social networks, computing safety, and professional coping skills.

#### CIS 150 Intro to Computer Applications 3 cr

This course is designed to provide a broad based introduction to the use of computers and productivity software technologies. Topics to be covered include: use of a current Operating System and basic file management; the fundamentals of word processing, spreadsheet and graphics-based presentation software; and basic image management related to documents and reports. Other topics covered include information assurance and computing safety as related to PC/Internet usage.

#### CIS 150L Intro to Comp Applications Lab 0 cr

Laboratory course for CIS 150, Introduction to Computer Applications.

#### CIS 190 Special Topics- 1-3 cr

Selected topics in computer and information sciences. Requires permission of Specialization Coordinator.

#### CIS 210 Intro to C++ Programming 3 cr

Introduction and fundamentals of C++ programming, input-output operations, variables, data types, arithmetic expressions, control statements, looping, functions, arrays, pointers, strings, structures, and abstract data types.

**Prerequisite:** MA 125 (may be taken concurrently) Minimum Grade of C  
**Cross-Listed:** CPE 260

#### CIS 211 Advanced C++ Programming 1 cr

Advanced concepts in C++ programming, constructors, destructors, classes and operation overloading.

**Prerequisite:** (CIS 121 Minimum Grade of C or CIS 210 Minimum Grade of C)

#### CIS 227 Numerical Computation I 3 cr

Floating point numbers, representation, and errors; software tools for scientific computing; elementary problems in scientific computing.

**Prerequisite:** MA 126 Minimum Grade of C or MA 233 Minimum Grade of C

#### CIS 230 Adv Data-File Structures 3 cr

Extension of elementary data structures as covered in CIS 121, techniques to organize and access collections of data. Definition, implementation, and use of Classes and Abstract Data Types (ADT). The use of ADTs and objects for solving CIS problems. Network, hierarchical, and relational data models leading to Database Management Systems. Topics include: recursion, search trees, algorithmic complexity, advanced searching and sorting algorithms, and graphs.

**Prerequisite:** (CIS 121 Minimum Grade of C or CIS 142 Minimum Grade of C or CIS 211 Minimum Grade of C) and MA 267 Minimum Grade of C

#### CIS 235 Programming Language Seminar 3 cr

Fundamentals of syntax and style for a relevant, or current programming language. Includes application development in that language. Recommended: Knowledge of a programming language.

#### CIS 250 Advanced Comp Applications 3 cr

This course is designed to provide continuing, advanced coverage of productivity software technologies. Topics to be covered in depth include: fundamental and advanced features of spreadsheet and database management software. Other topics covered include information assurance and computing safety as related to PC/Internet usage.

#### CIS 250L Adv Comp Applications Lab 0 cr

Laboratory course for CIS 250, Advanced Computer Applications.

**Prerequisite:** CIS P or CIS 150 Minimum Grade of C

#### CIS 300 Information Tech in Society 1 cr

A discussion of personal, local, national, and global impact of information technology on ethical, legal, and social issues. Requires Junior standing in the School of Computing.

**CIS 321 Data Comm and Networking 3 cr**

An introduction to data communications, computer networking and network operating systems. Topics include: basic concepts of data transmission, network architectures, communications devices, and communication protocols.

**Prerequisite:** ISC 245 Minimum Grade of C or ITE 271 Minimum Grade of C or CIS 120 Minimum Grade of C or CSC 120 Minimum Grade of C

**CIS 322 Operating Systems 3 cr**

This course covers the development of operating systems that control computing systems. Topics include: file systems, process management, scheduling, memory management (real and virtual), security, and concurrency. Case studies of operating systems are examined.

**Prerequisite:** (CIS 230 Minimum Grade of C or CIS 263 Minimum Grade of C)

**CIS 324 Database Design-Dev-Mgt 3 cr**

Analysis, design, and development of desktop database systems. Coverage of normalization concepts, DBMS models, E-R/Semantic modeling, and query processing.

**Prerequisite:** ((MA 112 Minimum Grade of C or MA 171 Minimum Grade of C) or (MA 120 Minimum Grade of C or MA 287 Minimum Grade of C) or MA 267 Minimum Grade of C or (MA 125 Minimum Grade of C or MA 132 Minimum Grade of C) or A02 23) or MMT 080 and (ISC 245 Minimum Grade of C or ITE 271 Minimum Grade of C) or (CSC 121 Minimum Grade of N or CIS 121 Minimum Grade of C)

**CIS 401 Accelerated Programming 3 cr**

This course presents programming concepts in an accelerated manner. Coverage includes ADT's, Classes and Class Libraries, and simple data structures such as linked lists, stacks, queues. Laboratory assignments will be done in a high level, object-oriented language. This course does not count towards a graduate degree in CIS. Requires prior programming experience and permission of Coordinator.

**Cross-Listed:** CIS 121, CIS 123, CIS 501

**CIS 402 Accelerated OS-Comp Arch 3 cr**

This course presents computer architecture and operating systems concepts in an accelerated manner. Coverage includes machine and assembly languages, functioning of a simple processor, machine level data flow, microprogramming, I/O, interrupts and processing drivers, memory management, dynamic process scheduling, and multi-tasking. This course does not count toward a graduate degree in CIS. Requires prior programming experience desired and permission of Coordinator.

**Cross-Listed:** CIS 322, CIS 502

**CIS 403 Accelerated Data-File Structs 3 cr**

This course applies advanced programming concepts and techniques to data structures such as linear and linked list trees, records, files, and database. Sequential and random access file processing methods; searching and sorting methods. Laboratory assignments will be done in a high-level, object-oriented language. This course does not count toward a graduate degree in CIS.

**Prerequisite:** CIS 121 Minimum Grade of B or CIS 123 Minimum Grade of B or CIS 142 Minimum Grade of B or CIS 401 Minimum Grade of B or CIS 501 Minimum Grade of B

**Cross-Listed:** CIS 230

**CIS 404 Accelerated Networks-Comm 3 cr**

This course presents network and communications concepts in an accelerated manner. Coverage includes signaling concepts, communication devices, switching, network architectures and protocols, OSI reference model, network management and planning. This course does not count toward a graduate degree in CIS.

**Prerequisite:** CIS 222 Minimum Grade of B or CIS 322 Minimum Grade of B or CIS 402 Minimum Grade of B or CIS 502 Minimum Grade of B

**Cross-Listed:** CIS 321, CIS 504

**CIS 405 Programming Languages 3 cr**

This course examines formal language concepts of programming languages including syntax and basic grammars. Language features such as data types and structures, control structures, and data flow will be studied. Laboratory assignments include the use of high level languages as well as the use of windows API.

**Prerequisite:** CIS 230 Minimum Grade of B or CIS 263 Minimum Grade of B or CIS 403 Minimum Grade of B

**Cross-Listed:** CIS 333

**CIS 406 IS in Organizations 3 cr**

An examination of the relationship of information systems in organizations and the impact on people in the organization with respect to planning and decision making. Other topics covered include general systems theory, data security and integrity, application access control, project management, and large group behaviors.

**Prerequisite:** (CIS 230 Minimum Grade of B or CIS 263 Minimum Grade of B or CIS 403 Minimum Grade of B or CIS 503 Minimum Grade of B or (ITE 285 Minimum Grade of B or ISC 508 Minimum Grade of B) or ITE 451 Minimum Grade of B)

**CIS 407 Database Programming 3 cr**

This course examines implementation and access of databases via event-driven applications developed with visual programming tools. Other topics covered are elementary E-R modeling, data integrity, referential integrity, report development, interface design. This course does not count towards a graduate degree in CIS.

**Prerequisite:** (CIS 230 Minimum Grade of B or CIS 263 Minimum Grade of B or CIS 403 Minimum Grade of B)

**Cross-Listed:** CIS 324

**CIS 439 Windows Programming 3 cr**

This course continues and expands the study of programming begun in either ITE 285 or CIS 121. Concepts previously learned are extended to application programming in the windows (GUI) environments. Students will make use of the OLE, DDE, API features of windows in programming projects. Students will write and use their own DLL's in producing user interfaces and applications projects.

**Prerequisite:** CIS 230 Minimum Grade of C or CIS 263 Minimum Grade of C or ITE 285 Minimum Grade of C or ITE 451 Minimum Grade of C or CSGD 030

**CIS 490 CIS Sp Top - 3 cr**

Advanced selected topics in computer and information sciences. Requires permission of the specialization coordinator.

**Prerequisite:** CSPC 30

**CIS 494 Directed Studies 1-3 cr**

May be taken for a maximum of six credits, only three of which may be applied to the CIS major or minor. Requires permission of the specialization coordinator.

**CIS 496 CIS Internship 3 cr**

CIS internship program is designed to give advanced students practical experience in the computer industry. Students will work on sponsored projects with faculty advisors. Credit may apply to degree with approval of the dean. Requires GPA 2.75 or higher and permission of the Dean.

**CIS 497 Senior Capstone Experience-W 3 cr**

A comprehensive team project will be completed and documented. Writing assignments will reinforce the importance of life-long learning, leadership skills, and the ethical issues of computing as well as appropriate resume and job application cover letter creation. Oral and written reports will be required. This course is to be taken the final semester of the student's degree program. Requires application for graduation filed the semester before registering for the course. Completion of the following courses according to major: Computer Science-CSC 322 and CSC 333; Information Systems-ISC 360; Information Technology-ITE 370.

**Prerequisite:** (EH 372 Minimum Grade of C or EH 373 Minimum Grade of C) and (CSC 322 Minimum Grade of C and CSC 333 Minimum Grade of C) or ISC 360 Minimum Grade of C or ITE 370 Minimum Grade of C

**Corequisite:** CIS 498

**CIS 498 CIS Senior Seminar 0 cr**

A series of mini-seminars designed to prepare graduating seniors for transition to professional careers in computing or graduate study and to assess student learning outcomes in the curriculum. Mini-seminars would include, but would not be limited to: resume development, interviewing tips and techniques, career planning, professionalism and ethics in the workplace, and advanced graduate study and professional development. Each student will be required to complete one or more senior exit exams and a senior exit survey. **Prerequisite:** Computer Science: CSC 331; Information Systems: ISC 360; Information Technology: ITE 370.

**Prerequisite:** CIS 497 (may be taken concurrently) Minimum Grade of C and (CSC 331 Minimum Grade of C or ISC 360 Minimum Grade of C or ITE 370 Minimum Grade of C)

**Corequisite:** CIS 497

**CIS 499 CIS Senior Honors Project - H 3-6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project, relevant to the field of computing, that will lead to a formal presentation at the annual Honors Student Colloquium. The senior honors project will be judged and graded by three faculty chaired by the honors mentor. This course is required for Honors recognition and may be repeated for up to 6 credit hours. Requires completion of an approved project prospectus and permission of the appropriate Coordinator.

**Prerequisite:** CSPC 30

**CIS 500 Basic Computing Prin and Appl 3 cr**

Introduction to computers and computer applications. Components of a computer system will be presented. Word processing, systems design and implementation, and programming concepts will be introduced. Not to be taken for CIS graduate credit.

**CIS 501 Accelerated Programming 3 cr**

This course presents programming concepts in an accelerated manner. Coverage includes ADT's, Classes and Class Libraries, and simple data structures such as linked lists, stacks, queues. Laboratory assignments will be done in a high level, object-oriented language. This course does not count towards a graduate degree in CIS. **Prerequisite:** Prior programming experience desired and permission of Coordinator.

**Cross-Listed:** CIS 121, CIS 401

**CIS 502 Accelerated OS-Comp Arch 3 cr**

This course presents computer architecture and operating systems in an accelerated manner. Coverage includes machine and assembly languages, functioning of a simple processor, machine level data flow, microprogramming, I/O, interrupts and processing drivers, memory management, dynamic process scheduling, and multi-tasking. This course does not count towards a graduate degree in CIS. **Prerequisites:** Prior programming experience and permission of Coordinator.

**Cross-Listed:** CIS 322, CIS 402

**CIS 503 Accelerated Data-File Structs 3 cr**

This course applies advanced programming concepts and techniques to data structures such as linear and linked list, trees, records, files, and database. Sequential and random access file processing methods; searching and sorting methods. Laboratory assignments will be done in a high-level object-oriented language. This course does not count towards a graduate degree in CIS.

**Prerequisite:** (CIS 121 Minimum Grade of B or CIS 123 Minimum Grade of B or CIS 142 Minimum Grade of B or CIS 501 Minimum Grade of B) or CIS 401 Minimum Grade of B

**Cross-Listed:** CIS 230, CIS 403

**CIS 504 Accelerated Networks - Comm 3 cr**

This course presents networks and communications concepts in an accelerated manner. Coverage includes signaling concepts, communications devices, switching, network architectures and protocols, OSI reference model, network management and planning. This course does not count towards a graduate degree in CIS.

**Prerequisite:** (CIS 222 Minimum Grade of B or CIS 322 Minimum Grade of B or CIS 402 Minimum Grade of B or CIS 502 Minimum Grade of B or ISC 506 Minimum Grade of B)

**Cross-Listed:** CIS 321, CIS 404

**CIS 505 Programming Languages 3 cr**

This course examines formal language concepts of programming languages including syntax and basic grammars. Language features such as data types and structures, control structures, and data flow will be studied. Laboratory assignments include the use of high level languages as well as the use of windows API.

**Prerequisite:** (CIS 230 Minimum Grade of B or CIS 263 Minimum Grade of B or CIS 403 Minimum Grade of B or CIS 503 Minimum Grade of B or ISC 508 Minimum Grade of B)

**Cross-Listed:** CIS 333, CIS 405

**CIS 506 IS in Organizations 3 cr**

An examination of the relationship of information systems in organizations and the impact on people in the organization with respect to planning and decision making. Other topics covered include general systems theory, data security and integrity, application access control, project management, and large group behaviors. This course does not count toward a graduate degree in CIS.

**Prerequisite:** (CIS 230 Minimum Grade of B or CIS 263 Minimum Grade of B or CIS 403 Minimum Grade of B or CIS 503 Minimum Grade of B or ISC 508 Minimum Grade of B) or (ITE 285 Minimum Grade of B or ITE 451 Minimum Grade of B)

**Cross-Listed:** CIS 406

**CIS 507 Database Programming 3 cr**

This course examines implementation and access of databases via event-driven applications developed with visual programming tools. Other topics covered are elementary E-R modeling, data integrity, referential integrity, report development, interface design. This course does not count towards a graduate degree in CIS.

**Prerequisite:** (CIS 230 Minimum Grade of B or CIS 263 Minimum Grade of B or CIS 403 Minimum Grade of B or CIS 503 Minimum Grade of B or ISC 508 Minimum Grade of B)

**Cross-Listed:** CIS 324, CIS 407

**CIS 518 CIS Research Methodologies 3 cr**

A review of computer and information science literature and research topics. Techniques for defining research goals will be described. Students will be expected to identify a research area and conduct a complete review of the literature.

**Prerequisite:** CSGR P

**CIS 530 Information Assurance/IT Audit 3 cr**

This course covers the understanding and managing of risks and threats to information and information systems. This includes protecting and defending information and information systems by ensuring through authorization and other means concepts such as accessibility, secrecy, reliability, and authentication.

**Prerequisite:** CSGR P

**CIS 535 Digital Forensic Analysis 3 cr**

This course provides students with advanced tools, techniques, and methodologies for accumulating, securing, analyzing, managing, and reporting evidence related to a forensics examination. The professional communication and presentation of the results of forensic investigations will be emphasized.

**Prerequisite:** CSGR P

**CIS 538 OS Concepts and Security 3 cr**

This course examines the concepts of operating systems such as memory and virtual memory management, as well as processor, process, device, and file management. Topics include the management and organization of network operating systems and operating system security and ethics. Students will manage, configure, and secure operating systems such as Windows, Unix, and Linux in laboratory environments.

**Prerequisite:** CSGR P

**CIS 539 Windows Programming 3 cr**

The practice and principles of developing interactive desktop computer applications. Aspects to be covered will include graphical user interface; use of sophisticated widget, container, and utility libraries; event-driven programming; two-dimensional graphics; in-memory database; and deployment.

**Prerequisite:** CSGR P

**CIS 540 Network Security Management 3 cr**

This course examines network and web security issues including: risks and threats, system access points, hardware and software defense methods, and organizational security policies. The course will cover the analysis of systems for vulnerabilities, the implementation of security procedures, the monitoring of systems for security breaches, and the recovery or restoration of breached systems.

**CIS 590 CIS Sp Top - 3 cr**

Advanced selected topics in computer and information sciences.

Requires permission of the CSC Coordinator

**Prerequisite:** CSGR P

**CIS 594 Directed Studies - 1-3 cr**

May be taken for a maximum of three credits to count toward the degree. Requires permission of the Director of Graduate Studies.

**CIS 595 CIS Research Development 1-3 cr**

Development of the research proposal for master's thesis. Graduate Professional Component. Requires permission of the Director of Graduate Studies.

**Prerequisite:** CIS 518 Minimum Grade of S

**CIS 596 CIS Graduate Internship 3 cr**

CIS graduate internship program is designed to give graduate students practical experience in the computer industry. Students will work on sponsored projects with faculty advisors. Up to three hours may be counted toward the degree. Requires permission of the Director of Graduate Studies.

**CIS 597 CIS Graduate Seminar 1 cr**

This course prepares graduate assistants in the School of CIS to provide support and assistance to faculty for instruction in School of CIS classes. Topical coverage includes but is not limited to: graduate assistant expectations and responsibilities, protection of student educational information (FERPA), practical skills in assisting in computing instruction, graduate assistant best practices, and tips from faculty and experienced graduate assistants. This course does not count towards a graduate degree in CIS. Requires permission of the Director of CIS Graduate Studies.

**CIS 598 CIS Project 1-3 cr**

Approved investigation of original problems under direction of a faculty member. This course may be repeated for a maximum of three hours of credit towards the degree. Requires permission of the Director of Graduate Studies.

**CIS 599 CIS Thesis 1-9 cr**

This course may be repeated for a maximum of six credits. A thesis committee will provide direction during the thesis. Requires approval of the thesis project by graduate faculty and the Director of Graduate Studies.

**Prerequisite:** CIS 595 Minimum Grade of B

**CIS 694 Directed Study - 3 cr**

This course focuses on the development of the doctoral prospectus leading to the the defense of a dissertation.

**CIS 799 Dissertation 1-9 cr**

This course focuses on the development of the dissertation.

**Computer Science (CSC)****CSC 108 Introduction to Programming 2 cr**

Problem-solving and pre-programming skills developed using hands-on activities in preparation for the introductory programming course.

**Prerequisite:** MA 112 Minimum Grade of C or A02 22 or MMT 070

**CSC 120 Prob Solv and Prog Concepts 4 cr**

An introduction to the design of algorithms and their implementation in a high-level programming language. Topics include: problem solving strategies, programming concepts, programming environment, control structures, methods, arrays, searching, sorting, object-oriented programming, and file input/output.

**Prerequisite:** (MA 113 Minimum Grade of C or MA 172 Minimum Grade of C) or (MA 115 Minimum Grade of C or MA 121 Minimum Grade of C) or (MA 125 Minimum Grade of C or MA 132 Minimum Grade of C) or A02 27 or MMT 090

**CSC 121 Prob Solv and Prog Concepts II 4 cr**

Continuation of CSC 120. Topics include: object-oriented programming concepts, abstract data types, graphical user interfaces and event-driven programming, exception handling, text and binary file I/O, and an overview of dynamic data structures.

**Prerequisite:** CSC 120 Minimum Grade of C or CIS 120 Minimum Grade of C

**CSC 190 CSC Special Topics - 1 cr**

Selected topics in computer science. Prerequisite: Permission of the CSC coordinator.

**CSC 228 Digital Logic Computer Arch 3 cr**

Topics include: Boolean algebra, minimization techniques, combinatorial and sequential circuit analysis, memory organization, microprocessor concepts, and CPU architecture.

**Prerequisite:** (MA 113 Minimum Grade of C or MA 115 Minimum Grade of C or MA 125 Minimum Grade of C or A02 27 or MMT 090)

**CSC 231 Intro Data Structures Algs 4 cr**

The course will cover techniques to organize and access collections of data, definition, implementation, and use of Classes and Abstract Data Types (ADT). Topics include: stacks, queues, heaps, search trees, recursion, algorithmic complexity, advance searching and sorting algorithms, and graphs and their application to problems.

**Prerequisite:** (CSC 120 Minimum Grade of C or CIS 210 Minimum Grade of C or CPE 260 Minimum Grade of C)

**CSC 311 Networking and Communications 3 cr**

An introduction to computer networks. Topics include: data transmission, network architectures, file compression algorithms, communication devices and protocols, network routing and flow algorithms.

**Prerequisite:** CSC 231 Minimum Grade of C or CSC 230 (may be taken concurrently) Minimum Grade of C

**CSC 320 Computer Org-Architect 3 cr**

An introduction to computer organization using a top down approach from system component to the register level, internal representation of data, general assembly and linking concepts, addressing modes, and introduction to a specific processor, its architecture and operating system.

**Prerequisite:** CSC 228 Minimum Grade of C and CSC 230 Minimum Grade of C or CSC 231 Minimum Grade of C

**CSC 322 Operating Systems 3 cr**

This course covers the development of operating systems that control computing systems. Topics include: file systems, process management, scheduling, memory management (real and virtual), security, and concurrency. Case studies of operating systems are examined.

**Prerequisite:** CSC 231 Minimum Grade of C

**CSC 324 Database Concepts 3 cr**

Introduction to database design and implementation. Aspects of data modeling, database design theory, storage, indexing, and database application development. Entity-relationship model, relational data model, schema refinement, normal forms, file organizations, index structures, and embedded SQL application development.

**Prerequisite:** CSC 231 Minimum Grade of C

**CSC 331 Software Engineering Prin - W 3 cr**

Models, techniques, and tools used in project management. Topics include: software development process, task scheduling, estimation and progress measurement. Coordination of development teams. Standards, testing plans, configuration management, metrics and use of CASE tools, system delivery and maintenance strategies.

**Prerequisite:** ((CSC 231 Minimum Grade of C or CSC 230 Minimum Grade of C or CIS 230 Minimum Grade of C)) and CA 275 (may be taken concurrently) Minimum Grade of C

**CSC 332 Adv Data Structures and Algs 3 cr**

Techniques for the design and analysis of efficient algorithms, emphasizing methods useful in practice. Topics covered include: mathematical foundations; all five asymptotic notations; analytic, empirical, and qualitative evaluation techniques; sorting algorithms; balanced trees (2-3-4 trees and red-black trees); dynamic programming; and NP-completeness.

**Prerequisite:** CSC 231 and MA 267

**CSC 333 Prog Language Theory 3 cr**

Formal examination of programming languages. Formal Language concepts including syntax and basic grammars are studied. Language features such as data types and structures, control structures, and data flow are examined. The run-time environment and the process of interpretation/compilation are covered. Interpreter and compilation techniques are introduced.

**Prerequisite:** (CSC 231 Minimum Grade of C)

**CSC 340 Secure Software Engineering 3 cr**

The objective of this course is to enhance the security of software by introducing sound security principles that should be incorporated into the software development process. Students will learn a risk management framework and best practices for software security including code reviews, architectural risk analysis, penetration testing, risk-based security test, abuse cases, security requirements, and security operations. Students will also learn common flaws that lead to exploitation and be able to identify and mitigate such errors in practice. Out of class labs and exercises reinforce concepts presented in class.

**Prerequisite:** CSC 331.

**Prerequisite:** (CSC 331 Minimum Grade of C or CIS 231 Minimum Grade of C)

**CSC 399 Conc and Distributed Comp 3 cr**

This course focuses on software development principles for concurrent and distributed systems. Topics include shared versus distributed systems, heterogeneous concurrent computing, high performance computing, concurrent design patterns and more.

**Prerequisite:** CSC 322 Minimum Grade of C

**CSC 404 Web Tech & Knowledge Modeling 3 cr**

The students will learn knowledge service design based on Web technologies and will develop a knowledge service project during the course. The course will highlight the features of different Web Services Technologies and introduce various Scripting Languages, provide an up-to-date survey of developments in Web Services Technologies, and Knowledge Modeling.

**Prerequisite:** (CSC 320 Minimum Grade of C or CSC 331 Minimum Grade of C)

**CSC 410 Compiler Design-Construction 3 cr**

Lexical analysis, syntactic analysis, intermediate code generation, object code generation, optimization, memory use, generators for scanners and parsers.

**Prerequisite:** CSC 332 Minimum Grade of C and CSC 333 Minimum Grade of C and CSC 320 Minimum Grade of C or EE 264 Minimum Grade of C

**CSC 411 Comm - Network Analysis 3 cr**

Data communications and computer networks. An in-depth treatment of network architectures and protocols for both WANS and LANS. Topics include: network routing and flow algorithms, internet working, and distributed systems.

**Prerequisite:** CSC 311 Minimum Grade of C and (CSC 322 Minimum Grade of C or CIS 322 Minimum Grade of C)

**CSC 412 Real-Time Software Systems 3 cr**

Design and implementation of software for real-time computer systems. Survey of typical real-time systems; techniques for code-conversion, error checking, and transmission monitoring.

**Prerequisite:** CSC 311 Minimum Grade of C and CSC 322 (may be taken concurrently) Minimum Grade of C and CSC 332 Minimum Grade of C

**CSC 413 Computer Graphics 3 cr**

An in-depth study of hardware and software techniques used in computer graphics. Study of display and entry devices, including refresh, storage, and raster scan topics. Software techniques will include display files, windowing, clipping, two and three-dimensional transformations, and hidden-surface removal.

**Prerequisite:** (CSC 231 Minimum Grade of C) and (MA 237 Minimum Grade of C or MA 227 Minimum Grade of C)

**CSC 414 Modeling and Simulation 3 cr**

Analytic and simulation models developed using deterministic and stochastic techniques. Topics include: event-driven simulations, queuing theory, Markov processes, and dynamical systems. "Real World" project required.

**Prerequisite:** (CSC 230 Minimum Grade of C or CIS 230 Minimum Grade of C) and (MA 126 Minimum Grade of C or MA 233 Minimum Grade of C) and (ST 310 Minimum Grade of C or ST 275 Minimum Grade of C) or ST 315 Minimum Grade of C or ST 320 Minimum Grade of C

**CSC 415 Numerical Analysis 3 cr**

Mathematical preliminaries, solving linear systems numerical solution of ordinary and partial differential equations.

**Prerequisite:** (CSC 230 Minimum Grade of C or CIS 230 Minimum Grade of C) and (MA 126 Minimum Grade of C or MA 233 Minimum Grade of C)

**CSC 416 AI Theory and Programming 3 cr**

Introduction to basic concepts, implementation techniques, and philosophies of artificial intelligence and intelligent systems. Introduction to expert systems, fuzzy logic systems, neural networks, and techniques for artificial intelligence programming. The fundamentals of an AI programming language (LISP or PROLOG) will be presented. The language will then be used to solve problems in typical AI applications.

**Prerequisite:** CSC 332 Minimum Grade of C or CSC 231 Minimum Grade of C

**CSC 417 Computer Game Development 3 cr**

Introduction to computer game development, including a variety of related topics. The course will be driven by research/technical paper discussions, student presentations and projects. The direction of the course will be guided to some extent by student interest.

**Prerequisite:** CSC 331 Minimum Grade of C or EE 368 Minimum Grade of C

**CSC 418 Adv Game & Simulation Dev 3 cr**

This course will cover advance topics related to the development of game and simulation software. Topics include game physics, collision techniques, game mechanics, level design, artificial intelligence, and security. Students will design and implement a game or simulation program that includes elements of artificial intelligence.

**Prerequisite:** CSC 417 Minimum Grade of C

**CSC 426 Data Mining 3 cr**

This course provides an in-depth study of data mining. Course content includes data preparation, feature selection, pattern mining, classification, clustering, and sequence mining. New research areas in data mining will also be discussed.

**Prerequisite:** CSC 332 Minimum Grade of C

**CSC 428 Introduction to Bioinformatics 3 cr**

Students in this course will study algorithms pertaining to bioinformatics (e.g. sequence alignment, biological database search, and phylogeny reconstruction); gain hands-on experience using bioinformatics tools; and understand the interaction of computer science and modern biology within the context of data-driven knowledge discovery.

**Prerequisite:** CSC 230 Minimum Grade of C

**CSC 433 Adv AI Theory and Programming 3 cr**

A study of advanced AI theory and implementation. Topics include neural networks, probability learning, and a variety of related topics. A programming language (LISP or R) will be utilized to solve complex industry problems associated with AI applications.

**Prerequisite:** CSC 416 Minimum Grade of C

**CSC 434 Form Lang - Automata Theory 3 cr**

Mathematical preliminaries, languages, context-free grammars, parsing, normal forms, finite automata, regular languages, pushdown automata, Turing machines.

**Prerequisite:** (CSC 333 Minimum Grade of C or CSC 340 Minimum Grade of C)

**CSC 440 Secure Software Engineering 3 cr**

The objective of this course is to enhance the security of software by introducing sound security principles that should be incorporated into the software development process. Students will learn a risk management framework and best practices for software security including code reviews, architectural risk analysis, penetration testing, risk-based security test, abuse cases, security requirements, and security operations. Students will also learn common flaws that lead to exploitation and be able to identify and mitigate such errors in practice. Out of class labs and exercises reinforce concepts presented in class.

**Prerequisite:** CSC 331 Minimum Grade of C and CSC 320 (may be taken concurrently) Minimum Grade of C or EE 264 Minimum Grade of C

**Cross-Listed:** CSC 340

**CSC 450 Surreptitious Software 3 cr**

Students in this course will learn about algorithms for software protection and learn how to use tools for program transformation. Specific topics include obfuscation, watermarking, tamperproofing, birthmarking, and hardware protection. Programming projects will be required in several different languages and course activities will involve preparing student-led lectures, working on programming projects, and writing reports.

**Prerequisite:** CSC 440 Minimum Grade of C

**CSC 457 Data Warehousing 3 cr**

This course focuses on the design, development and usage of data warehouses. Course content includes dimensional modeling, ETL processes, physical design, and analytical processing. New research areas related to data warehousing technology will also be discussed.

**Prerequisite:** CIS 324 Minimum Grade of C or CSC 324 Minimum Grade of C

**CSC 460 Security of HW Implementations 3 cr**

The objective of this course is for the student to build upon logic and architectural principles as applied to hardware designs. The key theme of the course is the security impacts of hardware design implementations.

**Prerequisite:** (CSC 320 Minimum Grade of C or EE 264 Minimum Grade of C)

**Cross-Listed:** CSC 560

**CSC 485 Cyber-Physical Security 3 cr**

This course focuses on the Security of Cyber-Physical Systems (CPS) and Internet of Things (IoT) that go beyond topics commonly considered in Computer and Network Security. This course aims to prepare participants for the cutting edge research undergoing in both areas. The successful participation in this course will require reading number of research papers, presenting learned material, active participation in in-class discussions, and successful accomplishment of a small research project.

**Prerequisite:** CSC 311 Minimum Grade of C and CSC 322 Minimum Grade of C

**CSC 490 Special Topics 3 cr**

Advanced selected topics in computer science. Prerequisite: Permission of the CSC Coordinator.

**CSC 504 Web Tech & Knowledge Modeling 3 cr**

The students will learn knowledge service design based on Web technologies and will develop a knowledge service project during the course. The course will highlight the features of different Web Services Technologies and introduce various Scripting Languages, provide an up-to-date survey of developments in Web Services Technologies, and Knowledge Modeling.

**CSC 510 Compiler Design-Construction 3 cr**

Lexical analysis, syntactic analysis, intermediate code generation, object code generation, memory use, generators for scanners and parsers.

**Prerequisite:** CSGR P

**CSC 511 Comm-Network Analysis 3 cr**

Data communications and computer networks. An in-depth treatment of network architectures and protocols for both WANs and LANs. Topics include: network routing and flow algorithms, internet working, and distributed systems.

**Prerequisite:** CSGR P

**CSC 512 Real -Time Software Systems 3 cr**

Design and implementation of software for real-time computer systems. Survey of typical real time systems; techniques for code conversion, error checking, and transmission monitoring.

**Prerequisite:** CSGR P

**CSC 513 Computer Graphics 3 cr**

An in-depth study of hardware and software techniques used in computer graphics. Study of display and entry devices, including refresh, storage, and raster scan topics. Software techniques will include display files, windowing, clipping, two and three-dimensional transformation, and hidden-surface removal.

**Prerequisite:** CSGR P

**CSC 514 Modeling and Simulation 3 cr**

Analytic and simulation models developed using deterministic and stochastic techniques. Topics include: event-driven simulations, queueing theory, Markov processes, and dynamical systems. "Real World" project required.

**Prerequisite:** CSGR P

**CSC 515 Numerical Analysis 3 cr**

Mathematical preliminaries, solving linear systems, numerical solution of ordinary and partial differential equations.

**Prerequisite:** CSGR P

**CSC 516 AI Theory and Programming 3 cr**

Introduction to basic concepts, implementation techniques, and philosophies of artificial intelligence and intelligent systems. Introduction to expert systems, fuzzy logic systems, neural networks, and techniques for artificial intelligence programming. The fundamentals of an AI programming language (LISP or PROLOG) will be presented. The language will then be used to solve problems in typical AI applications.

**Prerequisite:** Graduate Professional Component Standing.

**CSC 517 Computer Game Development 3 cr**

Introduction to computer game development, including a variety of related topics. The course will be driven by research/technical paper discussions, student presentations, and projects. The direction of the course will be guided to some extent by student interest.

**Prerequisite:** CSGR P

**CSC 520 Computer Architecture 3 cr**

Instruction set design, pipelining, instruction-level parallelism, memory hierarchy design, and multiprocessors.

**Prerequisite:** CSGR P

**CSC 522 Performance Eval of Algorithms 3 cr**

Mathematical foundations; analytic, empirical, and qualitative evaluation techniques; dynamic programming, greedy algorithms, graph algorithms; and selected advanced topics.

**Prerequisite:** CSGR P

**CSC 524 Computer Language Design 3 cr**

A study of programming language design and specification, including the compiling process, parsing, BNF grammars, and models of semantics. Differences between interpreters, assemblers, and compilers will be studied.

**Prerequisite:** CSGR P

**CSC 525 Complexity Theory 3 cr**

Mathematical preliminaries, languages, finite automata, Turing machines, decidability, recursive function theory, complexity, tractability and NP-complete problems.

**Prerequisite:** CSGR P

**CSC 526 Data Mining 3 cr**

This course provides an in-depth study of data mining. Course content includes data preparation, feature selection, pattern mining, classification, clustering, and sequence mining. New research areas in data mining will also be discussed. Laboratory assignments will provide students with opportunities to interact with and develop data mining technologies.

**Prerequisite:** CSGR P

**CSC 527 Software Engineering Princ 3 cr**

Advanced concepts of software engineering will be discussed. Program testing techniques including: structured design and walk throughs, proving program correctness and verifiability, and system coding standardization and integration will be covered in depth. Software team formulation and management techniques will be discussed.

**Prerequisite:** CSGR P

**CSC 528 Introduction to Bioinformatics 3 cr**

Bioinformatics is a highly interdisciplinary course between computer science and biology. It focuses on the analysis of proteins, genes, and genomes using computing technologies such as computer algorithms and computer databases. Students in this course will learn algorithms and databases pertaining to bioinformatics (e.g., sequence alignment, suffix tree and its biological/biomedical applications, genome alignment, biological/biomedical database search, and phylogeny reconstruction); gain knowledge and hands-on experience of bioinformatics tools; understand the interaction between computer science (in particular, semantic technologies) and modern biology within the context of data-driven knowledge discovery.

**Prerequisite:** CSGR P

**CSC 532 Distributed Systems 3 cr**

This course will further enhance the students understanding of the details of how an operating system functions. It will focus on the advanced concepts associated with distributed systems. The student will learn the underlying concepts of such systems and the algorithms needed to provide the required synchronization and communication.

**Prerequisite:** CSGR P

**CSC 533 Adv AI Theory and Programming 3 cr**

This course provides a broad introduction to machine learning and statistical pattern recognition. Topics include: supervised learning (generative/discriminative learning, parametric/non-parametric learning, neural networks, and support vector machines); unsupervised learning (clustering, dimensionality reduction, kernel methods); learning theory (bias/variance tradeoffs, practical advice); reinforcement learning and adaptive control. The course will also discuss recent applications of machine learning, such as to robotic control, data mining, autonomous navigation, bioinformatics, speech recognition, and text and web data processing.

**Prerequisite:** CSGR P

**CSC 550 Surreptitious Software 3 cr**

Students in this course will learn about Algorithms for software protection and learn how to use tools for program transformation. Specific topics include obfuscation, watermarking, tamperproofing, birthmarking and hardware protection. Programming projects will be required in several different languages and course activities will involve preparing student-led lectures, working on programming projects, and writing reports.

**Prerequisite:** CSGR P

**CSC 557 Data Warehousing 3 cr**

This course focuses on the design, development and usage of data warehouses. Course content includes dimensional modeling, ETL processes, physical design, and analytical processing. New research areas related to data warehousing technology will also be discussed.

**Prerequisite:** CSGR P

**CSC 560 Security of HW Implementations 3 cr**

The objective of this course is for the student to build upon logic and architectural principles as applies to hardware designs. The key theme of the course is the security impacts of hardware design implementations.

**Prerequisite:** CSGR P

**Cross-Listed:** CSC 460

**CSC 580 Data Security 3 cr**

The objective of this course is to introduce the inherent strengths and limitations of cryptography in data security applications, focusing on the basic principles of message privacy, key negotiation, and key management. The course covers various aspects of symmetric and asymmetric ciphers and provides a broad coverage of the core areas for engineering cryptographic systems. Students will be expected to implement and analyze simple cryptographic schemes and read supporting articles and papers for presentation. Prerequisite: CIS Graduate Professional Component.

**Prerequisite:** CSGR P

**CSC 582 Network Security 3 cr**

The objective of this course is to provide students with the knowledge and skills to begin supporting network security within an organization. Students will gain an understanding of fundamental network security concepts and mechanisms, be able to identify security threats and vulnerabilities, and help respond to and recover from security incidents. The course will provide an understanding of how to design and build secure network algorithms and environments while gaining an in-depth knowledge of protocol security, intrusion detection, and principles of cyber defense.

**Prerequisite:** CSGR P

**CSC 585 Cyber-Physical Security 3 cr**

This course focuses on the Security of Cyber-Physical Systems (CPS) and Internet of Things (IoT) that go beyond topics commonly considered in Computer and Network Security. This course aims to prepare participants for the cutting edge research undergoing in both areas. The successful participation in this course will require reading number of research papers, presenting learned material, active participation in in-class discussions, and successful accomplishment of a small research project.

**Prerequisite:** CSGR P

**CSC 590 CSC Sp Top - 3 cr**

Advanced selected topics in computer science. Prerequisite: Permission of the CSC coordinator.

**Prerequisite:** CSGR P

**CSC 595 CS Project Proposal Develop 1-3 cr**

Development of the project proposal for the Computer Science specialization master's project. Prerequisite: Graduate Professional Component and Permission of the Director of Graduate Studies.

**Prerequisite:** CIS 518 Minimum Grade of S

**CSC 598 Computer Science Project 1-3 cr**

This course may be repeated for a maximum of six (6) credits. A CIS project committee will provide direction during the project. Prerequisites: Approval of project proposal by student's project committee and permission of the Director of CIS Graduate Studies.

**Prerequisite:** (CSC 595 Minimum Grade of B and CSCS P)

**CSC 612 Cybersecurity 3 cr**

This course focuses on developing expertise and preparation for independent research in Cybersecurity through an in-depth review of the Cybersecurity literature. The student will be conversant in broad issues and trends in Cybersecurity as defined by skill sets and occupations.

**CSC 626 Advanced Big Data 3 cr**

This course focuses on developing expertise and preparation for independent research in big data through an in-depth review of the big data and data science literature. The student will be conversant in broad issues and trends in big data as defined by current tools and technologies.

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
ANDEL, TODD R. (tandel@southalabama.edu)	Computer Sciences	Professor	BS, University of Central Florida MS, Air Force Inst of Technology PHD, Florida State University
BENTON, RYAN G (rbenton@southalabama.edu)	Computer Sciences	Associate Professor	BS, Loyola University-New Orleans MS, University of LA at Lafayette PHD, University of LA at Lafayette
CLARK, GEORGE WINSTON (georgewclark@southalabama.edu)	Computer Sciences	Assistant Professor	BSEE, University of South Alabama MSCIS, University of South Alabama
DAVIDSON, CORDELL CLAY (ccdavidson@southalabama.edu)	Computer Sciences	Assistant Professor	PHD, University of South Alabama BSBA, University of Southern Miss MS, University of South Alabama PHD, University of South Alabama
HUANG, JINGSHAN (huang@southalabama.edu)	Computer Sciences	Professor	BE, Fuzhou University ME, University of SC-Columbia DPHIL, University of SC-Columbia PHD, University of SC-Columbia
JOHNSTEN, TOM (tjohnsten@southalabama.edu)	Computer Sciences	Associate Professor	BS, Oklahoma State University MS, Arizona State University-Main PHD, University of LA at Lafayette
MCDONALD, JEFFREY TODD (jtmcdonald@southalabama.edu)	Computer Sciences	Professor	BS, US Air Force Academy MBA, University of Phoenix MS, Air Force Inst of Technology PHD, Florida State University
SEGEV, AVIV (segev@southalabama.edu)	Computer Sciences	Professor	MS, Tel Aviv University PHD, Tel Aviv University
STACEY, KRISTA JOHNSON (kjstacey@southalabama.edu)	Computer Sciences	Instructor	BA, Troy University-Main MED, University of South Alabama MS, University of South Alabama

## Artificial Intelligence Certificate Non-Degree Program

### Certificate Requirements

The School of Computing is responding to its industry need for a skilled workforce in Artificial Intelligence.

Artificial Intelligence integrates many computing disciplines and specialty groups into a team effort forming a structured development process that advances development from production through operation and maintenance. Artificial Intelligence considers both the business and the technical needs of specialized customers with the goal of providing a quality product that meets the user needs.

The coursework will require successful completion of five baccalaureate level courses worth 3 credits each.

The five courses that will be required to attain this certificate are:

Code	Title	Hours
CSC 324	Database Concepts	3
or CSC 324	Database Design-Dev-Mgt	
CSC 416	AI Theory and Programming	3
CSC 426	Data Mining	3
CSC 433	Adv AI Theory and Programming	3

CSC 457	Data Warehousing	3
<b>Total Hours</b>		<b>15</b>

## Computer Science (BS)

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 926)		42
<b>Major Requirements</b>		
<i>Computer Science Core and Electives (a minimum grade of 'C' is required in all courses)</i>		
A. Complete the following:		
CIS 101	Freshman Seminar CIS	2
CSC 120	Prob Solv and Prog Concepts	4
CSC 228	Digital Logic Computer Arch	3
CSC 231	Intro Data Structures Algs	4
CIS 300	Information Tech in Society	1
CSC 311	Networking and Communications	3
CSC 320	Computer Org-Architect	3
CSC 322	Operating Systems	3
CSC 331	Software Engineering Prin - W	3
CSC 332	Adv Data Structures and Algs	3

CSC 333	Prog Language Theory	3
CSC 399	Conc and Distributed Comp	3
CSC 434	Form Lang - Automata Theory	3
CSC 440	Secure Software Engineering	3
CIS 497	Senior Capstone Experience-W	3
CIS 498	CIS Senior Seminar	0
B. Select 12 elective hours from the following:		12
CSC 404	Web Tech & Knowledge Modeling	
CSC 410	Compiler Design-Construction	
CSC 412	Real-Time Software Systems	
CSC 413	Computer Graphics	
CSC 416	AI Theory and Programming	
CSC 417	Computer Game Development	
CSC 418	Adv Game & Simulation Dev	
CSC 426	Data Mining	
CSC 428	Introduction to Bioinformatics	
CSC 433	Adv AI Theory and Programming	
CSC 450	Surreptitious Software	
CSC 457	Data Warehousing	
CSC 460	Security of HW Implementations	
CSC 485	Cyber-Physical Security	
CSC 490	Special Topics	
CIS 324	Database Design-Dev-Mgt (see footnote table below (p. 928)) <sup>1</sup>	
or CSC 324	Database Concepts	
CIS 494	Directed Studies	
ISC 472	Advanced Data Management	

*Additional Program Specific Requirements (a minimum grade of 'C' is required in all courses)*

<b>A. Additional Writing and Communications Requirements</b>		
CA 275	Decision Making - Small Groups	3
EH 372	Technical Writing - W	3
<b>B. Additional Math Requirements</b>		
a. 10 Hours:		
MA 126	Calculus II	4
MA 267	Discrete Math Structures	3
ST 315	Applied Probability-Statistics	3
b. 6 elective hours from:		
MA 227	Calculus III	
MA 237	Linear Algebra I	
MA 238	Differential Equations I	
MA 311	Intro to Number Theory	
MA 316	Linear Algebra II	
MA 320	Foundations of Math - W	
MA 321	Elementary Geometry	
MA 332	Differential Equations II	
MA 334	Advanced Calculus I	
MA 335	Advanced Calculus II	
MA 354	Comp Assist Math Modeling - W	
MA 367	Combinatorial Enumeration	
MA 410	History of Mathematics - W	
MA 413	Abstract Algebra I - W	

MA 414	Abstract Algebra II - W	
MA 434	Topology	
MA 436	Numerical Analysis	
MA 437	Complex Variables	
MA 451	Probability	
MA 458	Operations Research - W	
MA 467	Mathematical Logic	
MA 481	Cryptography	
MA 490	Special Topics	
C. Additional Science Requirements (cannot be lower level course from same sequence taken in Area III)		4
BLY 121 & 121L	General Biology I and General Biology I Lab	
BLY 122 & 122L	General Biology II and General Biology II Laboratory	
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	
CH 132 & 132L	General Chemistry II and General Chemistry II Lab	
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab	
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab	
GY 111 & 111L	Physical Geology and Physical Geology Lab	
GY 112 & 112L	Earth History and Earth History Lab	
MAS 134 & 134L	Ocean Science and Ocean Science Lab	
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab	
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab	

#### Minor Requirements

A minor is not required for this degree program 0

**Total Hours** 124

### General Education Requirements

Code	Title	Hours
<b>Area I - Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II - Humanities &amp; Fine Arts</b>		
A. Complete the following:		
CA 110	Public Speaking	3
B. Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/computing/computer-science/footnote1/">http://bulletin.southalabama.edu/programs-az/computing/computer-science/footnote1/</a> ) <sup>2</sup>		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	

EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
C. Select one of the following:		3
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	
D. Select three hours from the following:		3
AFR 101	Intro to African Amer Studies	
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARH 203	Survey of Non-Western Art	
ARS 101	Art Appreciation	
CLA 110	Intro Anc Greek Roman Culture	
DRA 110	Introduction to Theatre	
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
LG 101	Introductory Latin I	
LG 102	Introductory Latin II	
LG 111	Introductory French I	
LG 112	Introductory French II	
LG 121	Introductory Chinese I	
LG 122	Introductory Chinese II	
LG 131	Introductory Spanish I	
LG 132	Introductory Spanish II	
LG 141	Intro Classical Greek I	
LG 142	Intro Classical Greek II	
LG 151	Introductory German I	
LG 152	Introductory German II	
LG 153	Accelerated Intro German	
LG 171	Introductory Russian I	
LG 172	Introductory Russian II	
LG 173	Accelerated Intro Russian	
LG 201	Intermediate Latin I	
LG 202	Intermediate Latin II	
LG 211	Intermediate French I	
LG 212	Intermediate French II	
LG 213	Accelerated Inter French - H	
LG 221	Intermediate Chinese I	
LG 222	Intermediate Chinese II	
LG 231	Intermediate Spanish I	
LG 232	Intermediate Spanish II	
LG 234	Inter Spanish Accel -H	
LG 241	Interm Classical Greek I	

LG 242	Interm Classical Greek II	
LG 251	Intermediate German I	
LG 252	Intermediate German II	
LG 271	Intermediate Russian I	
LG 272	Intermediate Russian II	
LG 273	Intensive Second Year Russian	
LGS 101	Introductory Japanese I	
LGS 102	Introductory Japanese II	
LGS 106	Introductory Arabic I	
LGS 107	Introductory Arabic II	
LGS 110	Intro American Sign Language I	
LGS 111	Intro American Sign Lang II	
LGS 171	Introductory Korean I	
LGS 172	Introductory Korean II	
LGS 201	Intermediate Japanese I	
LGS 202	Intermediate Japanese II	
LGS 206	Intermediate Arabic I	
LGS 207	Intermediate Arabic II	
LGS 210	Intermediate ASL I	
LGS 211	Intermediate ASL II	
MUL 101	Introduction to Music	
PHL 110	Introduction to Philosophy	
PHL 120	Critical Thinking	
PHL 121	Introduction to Logic	
PHL 131	Introduction to Ethics	
PHL 231	Social Ethics	
PHL 240	Western Philosophy: Classical	
REL 100	Intro to the Study of Religion	
REL 200	Old Testament/Hebrew Bible	
REL 201	Survey of the New Testament	

**Area III – Natural Sciences & Mathematics (a minimum grade of 'C' is required in all courses)**

A. Complete the following:		
MA 125	Calculus I	4
B. Select an eight hour sequence from the following: ( <a href="http://bulletin.southalabama.edu/programs-az/computing/computer-science/footnote1/">http://bulletin.southalabama.edu/programs-az/computing/computer-science/footnote1/</a> ) <sup>3</sup>		8
BLY 121 & 121L	General Biology I and General Biology I Lab	
& BLY 122 & BLY 122L	and General Biology II and General Biology II Laboratory	
CH 131 & 131L	General Chemistry I and General Chemistry I Lab	
& CH 132 & CH 132L	and General Chemistry II and General Chemistry II Lab	
GY 111 & 111L	Physical Geology and Physical Geology Lab	
& GY 112 & GY 112L	and Earth History and Earth History Lab	
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab	
& PH 202 & PH 202L	and Calculus-Based Physics II and Calculus-Based Physics II Lab	

**Area IV – History, Social & Behavioral Sciences (<http://bulletin.southalabama.edu/programs-az/computing/computer-science/footnote1/>)<sup>2</sup>**

A. Select one of the following:	3
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
B. Select three of the following:	9
AN 100	Intro to Cultural Anthropology
AN 101	Intro Archaeology-Bio Anthro
CA 100	Intro to Communication
CA 211	Interpersonal Comm
CJ 105	Introduction to Criminal Justice
ECO 215	Prin of Microeconomics
ECO 216	Prin of Macroeconomics
GEO 114	People, Places, Environment
GEO 115	World Regional Geography
GS 101	Intro to Gender Studies
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
IS 100	Global Issues
IST 201	Seasons of Life
NAS 101	Intro Native American Studies
PSC 130	Intro to US Government
PSY 120	Introduction to Psychology
PSY 250	Life Span Development
SY 109	Introductory Sociology
SY 112	Social Problems

**Area V**

No Area V requirements

**Total Hours** 42

**Footnote**

<sup>1</sup> Credit for both CIS 324 & CSC 324 is not allowed.

<sup>2</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 135 & HY 136).

<sup>3</sup> Students must complete a 8-hour sequence in natural science (Area III – (BLY 121 / BLY 121L and BLY 122 / BLY 122L), or (CH 131 / CH 131L and CH 132 & CH 132L), or (GY 111 / GY 111L and GY 112 / GY 112L), or (PH 201 / PH 201L and PH 202 / PH 202L) )

**Notes:**

- All undergraduates must complete two designated writing credit (W) courses, at least one of which must be in the student's major.
- A minimum grade of 'C' is required for all courses in the CS major's block, including all *Additional Program Specific Requirements*, as well as math and physical science courses from *General Education Area III*.
- CSC 404 changed from a required course to an elective on 9/12/2024; effective Spring 2025.

## Graduation Plan

(124 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
CSC 120	Prob Solv and Prog Concepts	4
CIS 101	Freshman Seminar CIS	2
CA 275	Decision Making - Small Groups	3
MA 125	Calculus I	4
EH 101	English Composition I	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
CSC 231	Intro Data Structures Algs	4
CSC 228	Digital Logic Computer Arch	3
CA 110	Public Speaking	3
MA 126	Calculus II	4
EH 102	English Composition II	3
<b>Hours</b>		<b>17</b>
<b>Second Year</b>		
<b>Fall</b>		
CSC 331	Software Engineering Prin - W	3
CSC 311	Networking and Communications	3
MA 267	Discrete Math Structures	3
Nat Sci/Lab	Area III	4
Humanities/Hist	Area II or Area IV	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
CSC 320	Computer Org-Architect	3
CSC 332	Adv Data Structures and Algs	3
CSC 322	Operating Systems	3
Math Elective	Approved Math Elective	3
Nat Sci/Lab	Area III	4
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
CIS 300	Information Tech in Society	1
CSC 333	Prog Language Theory	3
CSC 399	Conc and Distributed Comp	3
Lit/Hist	Area II or Area IV	3
Nat Sci/Lab	Approved Natural Science Elective	4
Fine Arts/Hum Elective	Area II	3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
CSC 434	Form Lang - Automata Theory	3
CS Elective	Computer Science Elective	3
Social Science	Area IV, B	3
Math Elective	Approved Math Elective	3
Fine Arts/Hum	Area II Elective	3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
EH 372	Technical Writing - W	3
CSC 440	Secure Software Engineering	3
CS Elective	Computer Science Elective	3
CS Elective	Computer Science Elective	3
Social Science	Area IV, B	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
CIS 497	Senior Capstone Experience-W	3
CIS 498	CIS Senior Seminar	0

ST 315	Applied Probability-Statistics	3
CS Elective	Computer Science Elective	3
Lit/Hist	Area II or Area IV	3
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>124</b>

## Computer Science (MS)

### Degree Requirements

#### Requirements for Master's of Science in Computer Science Degree

Students must satisfactorily complete thirty-six (36) graduate credit hours for the Master's of Science in Computer Science degree and a comprehensive exam. Required prerequisite courses are prescribed by the Computer Science Chair after reviewing prior academic work.

Students must complete their program of study with a minimum grade of "B" in required courses, and an overall GPA of 3.0. The thirty-six (36) graduate semester hours consisting of eighteen (18) semester hours of **required** courses, and eighteen (18) semester hours of approved elective courses according to the selected concentration option.

#### Required Courses

(18 Semester Hours):

Code	Title	Hours
CSC 522	Performance Eval of Algorithms	3
CSC 527	Software Engineering Princ	3
or ISC 560	Info Systems Analysis-Design	
CSC 520	Computer Architecture	3
Select one of the following:		3
CSC 580	Data Security	
MA 581	Cryptography	
CSC 532	Distributed Systems	
CIS 518	CIS Research Methodologies	3
CSC 526	Data Mining	3
<b>Total Hours</b>		<b>18</b>

#### Concentrations

(18 Semester Hours)

Three concentrations of study are available. These are **thesis**, **project**, and **course-only** concentrations.

#### Thesis Concentration

##### Research Development

A minimum of three (3) semester credit hours of CIS 595, Computer and Information Sciences Research Development, are required. A Thesis Concentration student must be enrolled in CIS 595 in the semester during which they defend their thesis prospectus. A grade of "C" or lower in CIS 595 will result in the dismissal of the student from the Thesis Concentration. Students may only enroll in CIS 595 after successfully completing CIS 518.

##### Thesis

A minimum of three (3) semester credit hours of CIS 599, Computer and Information Sciences Thesis, must be applied towards the degree for the Thesis Concentration. Students may only enroll in CIS 599 after successfully defending their thesis prospectus (minimum grade of "B" in

CIS 595). A Thesis Concentration student must be enrolled in CIS 599 in the semester during which they defend and/or submit their thesis.

##### Elective Course Work

Twelve (12) semester hours of additional electives are required. (A maximum of three (3) semester hours of CIS 594 Directed Study courses may be applied to the degree for the Thesis Concentration.) A list of Pre-Approved Computer Science courses and a list of Special Permission courses are given at the end of this section.

##### Comprehensive Examination

All students in the Thesis Concentration must pass an oral comprehensive examination administered after the thesis committee accepts the thesis. The School of Computing Comprehensive Examination Policies and Procedures document and the Comprehensive Examination Application form are available at <https://www.southalabama.edu/colleges/soc/essentialstudentlinks.html>.

#### Project Concentration

##### Research

A minimum of three (3) semester credit hours of CSC 595, Computer Science Project Proposal Development are required. A Project Concentration student must be enrolled in CSC 595 in the semester during which they defend their project prospectus. A grade of "C" or lower in CSC 595 will result in the dismissal of the student from the Project Concentration. Students may only enroll in CSC 595 after successfully completing CIS 518.

##### Project

A minimum of three (3) semester credit hours of CSC 598, Computer Science Project, must be applied towards the degree for the Project Concentration. Students may only enroll in CSC 598 after successfully defending their project prospectus (minimum grade of "B" in CSC 595). A Project Concentration student must be enrolled in CSC 598 in the semester during which they defend and/or submit their project.

##### Elective Course Work

Twelve (12) semester hours of additional approved electives are required. (A maximum of three (3) semester hours of CIS 594 Directed Study courses may be applied to the degree for the Project Concentration.) A list of Pre-Approved Computer Science courses and a list of Special Permission courses are given at the end of this section.

##### Comprehensive Exam

All students in the Project Concentration must pass an oral comprehensive examination administered after the project committee accepts the project. The School of Computing Comprehensive Examination Policies and Procedures document and the Comprehensive Examination Application form are available at <https://www.southalabama.edu/colleges/soc/essentialstudentlinks.html>

#### Course Only Concentration

For the Course Only Concentration, eighteen (18) semester hours of elective course work are required.

##### Elective Course Work

Eighteen (18) semester hours of approved electives are required. (A maximum of 3 semester hours of CIS 594 Directed Study and a max of 3 hours in CSC 595 or CIS 595 may be applied to the degree for the Course Only Concentration.) No credits from CIS 599 or CSC 598 may be applied to the Course Only Concentration. A list of Pre-Approved Computer

Science courses and a list of Special Permission courses are given at the end of this section.

### Comprehensive Examination

Students in the Course Only Concentration must pass a written examination. Students wishing to sit for the examination must apply on-line to the Director of SoC Graduate Studies by the Friday of the first week of classes in the semester in which the examination is to be taken. The comprehensive examination is offered twice a year. The School of Computing Comprehensive Examination Policies and Procedures document and the Comprehensive Examination Application form are available at <https://www.southalabama.edu/colleges/soc/essentialstudentlinks.html>

### Computer Science Electives

A list of Pre-Approved Computer Science elective courses and a list of Special Permission courses are given below. All other courses must be approved by the Computer Sciences Chair.

#### Pre-Approved Computer Science Electives

- Artificial Intelligence and Heuristic Programming
- Artificial Intelligence Theory and Programming
- Big Data Analytics
- Communications and Network Analysis
- Compiler Design and Construction
- Computer Graphics
- Computer Language Design
- Computer Vision and Robotics
- Cyber Physical Security
- Data Mining
- Data Warehousing
- Digital Forensic Analysis
- Game Development
- Image Processing
- Information Assurance and IT Auditing
- Information Systems Database Management
- Introduction to Bioinformatics
- Modeling and Simulation
- Network Security
- Numerical Analysis
- Real-Time Software Systems
- Security in Hardware
- Surreptitious Software
- Web Technologies and Knowledge Modeling

## Computer Science Minor Minor Requirements

(23 hours)

A student wishing to obtain a minor in Computer Science must complete all courses shown below with a minimum grade of "C".

Code	Title	Hours
CSC 120	Prob Solv and Prog Concepts	4
CSC 228	Digital Logic Computer Arch	3
CSC 231	Intro Data Structures Algs	4

CSC 311	Networking and Communications	3
CSC 322	Operating Systems	3
CSC 332	Adv Data Structures and Algs	3
Select one of the following:		3
CSC 320	Computer Org-Architect	
CIS 324	Database Design-Dev-Mgt	
or CSC 324	Database Concepts	
CSC 331	Software Engineering Prin - W	
<b>Total Hours</b>		<b>23</b>

At least 9 hours of courses in the minor, including all 300 level courses, must be completed at the University of South Alabama.

## Graduate Computer Science Cybersecurity Certificate Certificate Requirements

The School of Computing is responding to its industry need for a skilled workforce in Cybersecurity.

Cybersecurity requirements for critical infrastructure continues to be vital for the US national defense and health of our national economy. Continued attacks, such as ransomware, against these systems requires advanced educational training to stay ahead of such threats. The goal of the graduate computer science cybersecurity certificate is to ensure educational relevancy in the identification and defense of current cyber threats to critical infrastructure. The certificate includes course options in Artificial Intelligence (AI) and Machine Learning (ML) as these have been deemed critical to the advancement of cybersecurity, to include using AI/ML for cybersecurity as well as the security of the AI/ML systems themselves. The included courses delve into the theory and mathematical foundations as well as hands-on components focused on security at both a software and hardware level.

This certificate can be completed by both graduate-level degree and non-degree seeking students that have completed an appropriate computer science or computer engineering undergraduate degree. We provide a choose five-of-eight approach as some of these courses may have been previously taken as cross-listed undergraduate courses and the proposed graduate certificate requires 15 graduate credits.

Code	Title	Hours
Choose 5 of the following courses		15
CSC 510	Compiler Design-Construction	
CSC 516	AI Theory and Programming	
CSC 526	Data Mining	
CSC 550	Surreptitious Software	
CSC 560	Security of HW Implementations	
CSC 582	Network Security	
CSC 585	Cyber-Physical Security	
MA 581	Cryptography	
or CSC 580	Data Security	
<b>Total Hours</b>		<b>15</b>

# Computing

## Department Information

PhD Program in Computing website  
<https://www.southalabama.edu/colleges/soc/phdprogram.html>

Title	Name
Assistant Professor & Director of Graduate Studies	Dr. Debra Chapman

Computing is a discipline that involves the understanding and design of computers and computational processes. In its most general form, it is concerned with the understanding of information transfer and transformation. Particular interest is placed on making processes efficient and endowing them with some form of intelligence. The discipline includes both advancing the fundamental understanding of algorithms and information processes in general, as well as the practical design of efficient, reliable software to meet given specifications. Courses offer students the opportunity to explore current trends in computing such as: game development, robotics, graphics, and data mining.

## Degrees, Programs, or Concentrations

- Computing (PhD) (p. 944)

## Courses

### Computer Info Sciences (CIS)

#### CIS 010 Computer Proficiency Exam 0 cr

The purpose of this course is to administer the Computer Proficiency Exam (CPE) for enrolled students. The CPE consists of multiple choice and performance-based questions for general computer, internet, WWW, e-mail, and office application concepts. Performance-based questions require a series of actions in a simulated environment to demonstrate specific skills being assessed. No outside materials or assistance from the applications' Help files are allowed.

#### CIS 100 Information Tech in Society 1 cr

A discussion of the impact of information technology on personal, local, national, and global issues. Not to be taken with CIS 110.

#### CIS 101 Freshman Seminar CIS 2 cr

A course for first-time students that assists with maximizing the student's potential to achieve academic success and to adjust responsibly to the individual and interpersonal challenges presented by college life for a major in the School of CIS. Taught in small groups, the course provides an introduction to the nature of higher education and a general orientation to the functions and resources of the University and the School of CIS. Extensive reading and writing assignments relevant to the student's first year experience are required.

#### CIS 110 Intro to Comp-Info Sciences 3 cr

An introduction to information technology using a programming language to study applications in text searching, in real-time 3-D animation, and in sound production. A discussion of the social, ethical, economic, and philosophical implications of computing.

#### CIS 115 Beginning Programming 3 cr

A first course in programming uses an interpreted, interactive, object-oriented programming language. Coverage includes algorithmic problem solving, logical thinking, fundamentals of programming, variables and static values, sequential coding, decisions, and repetition.

**Prerequisite:** MMT 080 or A02 23 or (MA 112 Minimum Grade of C or MA 171 Minimum Grade of C) or MA 267 Minimum Grade of C or (MA 125 Minimum Grade of C or MA 132 Minimum Grade of C)

#### CIS 121 Prob Solv-Prog Concepts II 4 cr

Continuation of CIS 120. Topics include: design concepts, abstract data types, use of object libraries, dynamic storage allocation, stacks, queues, link lists, random access files, testing and software engineering practices.

**Prerequisite:** (CIS 120 Minimum Grade of C or CIS 141 Minimum Grade of C)

#### CIS 140 Intro to Tech for Healthcare 3 cr

This course is designed to provide a broad-based introduction to the use of computers and productivity software technologies for healthcare providers. Topics to be covered include use of a current Operating System and basic file management; the fundamentals of word processing, spreadsheet and graphics-based presentation software; basic image management related to documents and reports; as well as electronic health records systems. Other topics covered include information assurance, protecting patient privacy, social networks, computing safety, and professional coping skills.

#### CIS 150 Intro to Computer Applications 3 cr

This course is designed to provide a broad based introduction to the use of computers and productivity software technologies. Topics to be covered include: use of a current Operating System and basic file management; the fundamentals of word processing, spreadsheet and graphics-based presentation software; and basic image management related to documents and reports. Other topics covered include information assurance and computing safety as related to PC/Internet usage.

#### CIS 150L Intro to Comp Applications Lab 0 cr

Laboratory course for CIS 150, Introduction to Computer Applications.

#### CIS 190 Special Topics- 1-3 cr

Selected topics in computer and information sciences. Requires permission of Specialization Coordinator.

#### CIS 210 Intro to C++ Programming 3 cr

Introduction and fundamentals of C++ programming, input-output operations, variables, data types, arithmetic expressions, control statements, looping, functions, arrays, pointers, strings, structures, and abstract data types.

**Prerequisite:** MA 125 (may be taken concurrently) Minimum Grade of C  
**Cross-Listed:** CPE 260

#### CIS 211 Advanced C++ Programming 1 cr

Advanced concepts in C++ programming, constructors, destructors, classes and operation overloading.

**Prerequisite:** (CIS 121 Minimum Grade of C or CIS 210 Minimum Grade of C)

#### CIS 227 Numerical Computation I 3 cr

Floating point numbers, representation, and errors; software tools for scientific computing; elementary problems in scientific computing.

**Prerequisite:** MA 126 Minimum Grade of C or MA 233 Minimum Grade of C

**CIS 230 Adv Data-File Structures 3 cr**

Extension of elementary data structures as covered in CIS 121, techniques to organize and access collections of data. Definition, implementation, and use of Classes and Abstract Data Types (ADT). The use of ADTs and objects for solving CIS problems. Network, hierarchical, and relational data models leading to Database Management Systems. Topics include: recursion, search trees, algorithmic complexity, advanced searching and sorting algorithms, and graphs.

**Prerequisite:** (CIS 121 Minimum Grade of C or CIS 142 Minimum Grade of C or CIS 211 Minimum Grade of C) and MA 267 Minimum Grade of C

**CIS 235 Programming Language Seminar 3 cr**

Fundamentals of syntax and style for a relevant, or current programming language. Includes application development in that language.

Recommended: Knowledge of a programming language.

**CIS 250 Advanced Comp Applications 3 cr**

This course is designed to provide continuing, advanced coverage of productivity software technologies. Topics to be covered in depth include: fundamental and advanced features of spreadsheet and database management software. Other topics covered include information assurance and computing safety as related to PC/Internet usage.

**CIS 250L Adv Comp Applications Lab 0 cr**

Laboratory course for CIS 250, Advanced Computer Applications.

**Prerequisite:** CIS P or CIS 150 Minimum Grade of C

**CIS 300 Information Tech in Society 1 cr**

A discussion of personal, local, national, and global impact of information technology on ethical, legal, and social issues. Requires Junior standing in the School of Computing.

**CIS 321 Data Comm and Networking 3 cr**

An introduction to data communications, computer networking and network operating systems. Topics include: basic concepts of data transmission, network architectures, communications devices, and communication protocols.

**Prerequisite:** ISC 245 Minimum Grade of C or ITE 271 Minimum Grade of C or CIS 120 Minimum Grade of C or CSC 120 Minimum Grade of C

**CIS 322 Operating Systems 3 cr**

This course covers the development of operating systems that control computing systems. Topics include: file systems, process management, scheduling, memory management (real and virtual), security, and concurrency. Case studies of operating systems are examined.

**Prerequisite:** (CIS 230 Minimum Grade of C or CIS 263 Minimum Grade of C)

**CIS 324 Database Design-Dev-Mgt 3 cr**

Analysis, design, and development of desktop database systems. Coverage of normalization concepts, DBMS models, E-R/Semantic modeling, and query processing.

**Prerequisite:** ((MA 112 Minimum Grade of C or MA 171 Minimum Grade of C) or (MA 120 Minimum Grade of C or MA 287 Minimum Grade of C) or MA 267 Minimum Grade of C or (MA 125 Minimum Grade of C or MA 132 Minimum Grade of C) or A02 23) or MMT 080 and (ISC 245 Minimum Grade of C or ITE 271 Minimum Grade of C) or (CSC 121 Minimum Grade of N or CIS 121 Minimum Grade of C)

**CIS 401 Accelerated Programming 3 cr**

This course presents programming concepts in an accelerated manner. Coverage includes ADT's, Classes and Class Libraries, and simple data structures such as linked lists, stacks, queues. Laboratory assignments will be done in a high level, object-oriented language. This course does not count towards a graduate degree in CIS. Requires prior programming experience and permission of Coordinator.

**Cross-Listed:** CIS 121, CIS 123, CIS 501

**CIS 402 Accelerated OS-Comp Arch 3 cr**

This course presents computer architecture and operating systems concepts in an accelerated manner. Coverage includes machine and assembly languages, functioning of a simple processor, machine level data flow, microprogramming, I/O, interrupts and processing drivers, memory management, dynamic process scheduling, and multi-tasking. This course does not count toward a graduate degree in CIS. Requires prior programming experience desired and permission of Coordinator.

**Cross-Listed:** CIS 322, CIS 502

**CIS 403 Accelerated Data-File Structs 3 cr**

This course applies advanced programming concepts and techniques to data structures such as linear and linked list trees, records, files, and database. Sequential and random access file processing methods; searching and sorting methods. Laboratory assignments will be done in a high-level, object-oriented language. This course does not count toward a graduate degree in CIS.

**Prerequisite:** CIS 121 Minimum Grade of B or CIS 123 Minimum Grade of B or CIS 142 Minimum Grade of B or CIS 401 Minimum Grade of B or CIS 501 Minimum Grade of B

**Cross-Listed:** CIS 230

**CIS 404 Accelerated Networks-Comm 3 cr**

This course presents network and communications concepts in an accelerated manner. Coverage includes signaling concepts, communication devices, switching, network architectures and protocols, OSI reference model, network management and planning. This course does not count toward a graduate degree in CIS.

**Prerequisite:** CIS 222 Minimum Grade of B or CIS 322 Minimum Grade of B or CIS 402 Minimum Grade of B or CIS 502 Minimum Grade of B

**Cross-Listed:** CIS 321, CIS 504

**CIS 405 Programming Languages 3 cr**

This course examines formal language concepts of programming languages including syntax and basic grammars. Language features such as data types and structures, control structures, and data flow will be studied. Laboratory assignments include the use of high level languages as well as the use of windows API.

**Prerequisite:** CIS 230 Minimum Grade of B or CIS 263 Minimum Grade of B or CIS 403 Minimum Grade of B

**Cross-Listed:** CIS 333

**CIS 406 IS in Organizations 3 cr**

An examination of the relationship of information systems in organizations and the impact on people in the organization with respect to planning and decision making. Other topics covered include general systems theory, data security and integrity, application access control, project management, and large group behaviors.

**Prerequisite:** (CIS 230 Minimum Grade of B or CIS 263 Minimum Grade of B or CIS 403 Minimum Grade of B or CIS 503 Minimum Grade of B or (ITE 285 Minimum Grade of B or ISC 508 Minimum Grade of B) or ITE 451 Minimum Grade of B)

**CIS 407 Database Programming 3 cr**

This course examines implementation and access of databases via event-driven applications developed with visual programming tools. Other topics covered are elementary E-R modeling, data integrity, referential integrity, report development, interface design. This course does not count towards a graduate degree in CIS.

**Prerequisite:** (CIS 230 Minimum Grade of B or CIS 263 Minimum Grade of B or CIS 403 Minimum Grade of B)

**Cross-Listed:** CIS 324

**CIS 439 Windows Programming 3 cr**

This course continues and expands the study of programming begun in either ITE 285 or CIS 121. Concepts previously learned are extended to application programming in the windows (GUI) environments. Students will make use of the OLE, DDE, API features of windows in programming projects. Students will write and use their own DLL's in producing user interfaces and applications projects.

**Prerequisite:** CIS 230 Minimum Grade of C or CIS 263 Minimum Grade of C or ITE 285 Minimum Grade of C or ITE 451 Minimum Grade of C or CSGD 030

**CIS 490 CIS Sp Top - 3 cr**

Advanced selected topics in computer and information sciences. Requires permission of the specialization coordinator.

**Prerequisite:** CSPC 30

**CIS 494 Directed Studies 1-3 cr**

May be taken for a maximum of six credits, only three of which may be applied to the CIS major or minor. Requires permission of the specialization coordinator.

**CIS 496 CIS Internship 3 cr**

CIS internship program is designed to give advanced students practical experience in the computer industry. Students will work on sponsored projects with faculty advisors. Credit may apply to degree with approval of the dean. Requires GPA 2.75 or higher and permission of the Dean.

**CIS 497 Senior Capstone Experience-W 3 cr**

A comprehensive team project will be completed and documented. Writing assignments will reinforce the importance of life-long learning, leadership skills, and the ethical issues of computing as well as appropriate resume and job application cover letter creation. Oral and written reports will be required. This course is to be taken the final semester of the student's degree program. Requires application for graduation filed the semester before registering for the course. Completion of the following courses according to major: Computer Science-CSC 322 and CSC 333; Information Systems-ISC 360; Information Technology-ITE 370.

**Prerequisite:** (EH 372 Minimum Grade of C or EH 373 Minimum Grade of C) and (CSC 322 Minimum Grade of C and CSC 333 Minimum Grade of C) or ISC 360 Minimum Grade of C or ITE 370 Minimum Grade of C

**Corequisite:** CIS 498

**CIS 498 CIS Senior Seminar 0 cr**

A series of mini-seminars designed to prepare graduating seniors for transition to professional careers in computing or graduate study and to assess student learning outcomes in the curriculum. Mini-seminars would include, but would not be limited to: resume development, interviewing tips and techniques, career planning, professionalism and ethics in the workplace, and advanced graduate study and professional development. Each student will be required to complete one or more senior exit exams and a senior exit survey. **Prerequisite:** Computer Science: CSC 331; Information Systems: ISC 360; Information Technology: ITE 370.

**Prerequisite:** CIS 497 (may be taken concurrently) Minimum Grade of C and (CSC 331 Minimum Grade of C or ISC 360 Minimum Grade of C or ITE 370 Minimum Grade of C)

**Corequisite:** CIS 497

**CIS 499 CIS Senior Honors Project - H 3-6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project, relevant to the field of computing, that will lead to a formal presentation at the annual Honors Student Colloquium. The senior honors project will be judged and graded by three faculty chaired by the honors mentor. This course is required for Honors recognition and may be repeated for up to 6 credit hours. Requires completion of an approved project prospectus and permission of the appropriate Coordinator.

**Prerequisite:** CSPC 30

**CIS 500 Basic Computing Prin and Appl 3 cr**

Introduction to computers and computer applications. Components of a computer system will be presented. Word processing, systems design and implementation, and programming concepts will be introduced. Not to be taken for CIS graduate credit.

**CIS 501 Accelerated Programming 3 cr**

This course presents programming concepts in an accelerated manner. Coverage includes ADT's, Classes and Class Libraries, and simple data structures such as linked lists, stacks, queues. Laboratory assignments will be done in a high level, object-oriented language. This course does not count towards a graduate degree in CIS. **Prerequisite:** Prior programming experience desired and permission of Coordinator.

**Cross-Listed:** CIS 121, CIS 401

**CIS 502 Accelerated OS-Comp Arch 3 cr**

This course presents computer architecture and operating systems in an accelerated manner. Coverage includes machine and assembly languages, functioning of a simple processor, machine level data flow, microprogramming, I/O, interrupts and processing drivers, memory management, dynamic process scheduling, and multi-tasking. This course does not count towards a graduate degree in CIS. **Prerequisites:** Prior programming experience and permission of Coordinator.

**Cross-Listed:** CIS 322, CIS 402

**CIS 503 Accelerated Data-File Structs 3 cr**

This course applies advanced programming concepts and techniques to data structures such as linear and linked list, trees, records, files, and database. Sequential and random access file processing methods; searching and sorting methods. Laboratory assignments will be done in a high-level object-oriented language. This course does not count towards a graduate degree in CIS.

**Prerequisite:** (CIS 121 Minimum Grade of B or CIS 123 Minimum Grade of B or CIS 142 Minimum Grade of B or CIS 501 Minimum Grade of B) or CIS 401 Minimum Grade of B

**Cross-Listed:** CIS 230, CIS 403

**CIS 504 Accelerated Networks - Comm 3 cr**

This course presents networks and communications concepts in an accelerated manner. Coverage includes signaling concepts, communications devices, switching, network architectures and protocols, OSI reference model, network management and planning. This course does not count towards a graduate degree in CIS.

**Prerequisite:** (CIS 222 Minimum Grade of B or CIS 322 Minimum Grade of B or CIS 402 Minimum Grade of B or CIS 502 Minimum Grade of B or ISC 506 Minimum Grade of B)

**Cross-Listed:** CIS 321, CIS 404

**CIS 505 Programming Languages 3 cr**

This course examines formal language concepts of programming languages including syntax and basic grammars. Language features such as data types and structures, control structures, and data flow will be studied. Laboratory assignments include the use of high level languages as well as the use of windows API.

**Prerequisite:** (CIS 230 Minimum Grade of B or CIS 263 Minimum Grade of B or CIS 403 Minimum Grade of B or CIS 503 Minimum Grade of B or ISC 508 Minimum Grade of B)

**Cross-Listed:** CIS 333, CIS 405

**CIS 506 IS in Organizations 3 cr**

An examination of the relationship of information systems in organizations and the impact on people in the organization with respect to planning and decision making. Other topics covered include general systems theory, data security and integrity, application access control, project management, and large group behaviors. This course does not count toward a graduate degree in CIS.

**Prerequisite:** (CIS 230 Minimum Grade of B or CIS 263 Minimum Grade of B or CIS 403 Minimum Grade of B or CIS 503 Minimum Grade of B or ISC 508 Minimum Grade of B) or (ITE 285 Minimum Grade of B or ITE 451 Minimum Grade of B)

**Cross-Listed:** CIS 406

**CIS 507 Database Programming 3 cr**

This course examines implementation and access of databases via event-driven applications developed with visual programming tools. Other topics covered are elementary E-R modeling, data integrity, referential integrity, report development, interface design. This course does not count towards a graduate degree in CIS.

**Prerequisite:** (CIS 230 Minimum Grade of B or CIS 263 Minimum Grade of B or CIS 403 Minimum Grade of B or CIS 503 Minimum Grade of B or ISC 508 Minimum Grade of B)

**Cross-Listed:** CIS 324, CIS 407

**CIS 518 CIS Research Methodologies 3 cr**

A review of computer and information science literature and research topics. Techniques for defining research goals will be described. Students will be expected to identify a research area and conduct a complete review of the literature.

**Prerequisite:** CSGR P

**CIS 530 Information Assurance/IT Audit 3 cr**

This course covers the understanding and managing of risks and threats to information and information systems. This includes protecting and defending information and information systems by ensuring through authorization and other means concepts such as accessibility, secrecy, reliability, and authentication.

**Prerequisite:** CSGR P

**CIS 535 Digital Forensic Analysis 3 cr**

This course provides students with advanced tools, techniques, and methodologies for accumulating, securing, analyzing, managing, and reporting evidence related to a forensics examination. The professional communication and presentation of the results of forensic investigations will be emphasized.

**Prerequisite:** CSGR P

**CIS 538 OS Concepts and Security 3 cr**

This course examines the concepts of operating systems such as memory and virtual memory management, as well as processor, process, device, and file management. Topics include the management and organization of network operating systems and operating system security and ethics. Students will manage, configure, and secure operating systems such as Windows, Unix, and Linux in laboratory environments.

**Prerequisite:** CSGR P

**CIS 539 Windows Programming 3 cr**

The practice and principles of developing interactive desktop computer applications. Aspects to be covered will include graphical user interface; use of sophisticated widget, container, and utility libraries; event-driven programming; two-dimensional graphics; in-memory database; and deployment.

**Prerequisite:** CSGR P

**CIS 540 Network Security Management 3 cr**

This course examines network and web security issues including: risks and threats, system access points, hardware and software defense methods, and organizational security policies. The course will cover the analysis of systems for vulnerabilities, the implementation of security procedures, the monitoring of systems for security breaches, and the recovery or restoration of breached systems.

**CIS 590 CIS Sp Top - 3 cr**

Advanced selected topics in computer and information sciences.

Requires permission of the CSC Coordinator

**Prerequisite:** CSGR P

**CIS 594 Directed Studies - 1-3 cr**

May be taken for a maximum of three credits to count toward the degree.

Requires permission of the Director of Graduate Studies.

**CIS 595 CIS Research Development 1-3 cr**

Development of the research proposal for master's thesis. Graduate Professional Component. Requires permission of the Director of Graduate Studies.

**Prerequisite:** CIS 518 Minimum Grade of S

**CIS 596 CIS Graduate Internship 3 cr**

CIS graduate internship program is designed to give graduate students practical experience in the computer industry. Students will work on sponsored projects with faculty advisors. Up to three hours may be counted toward the degree. Requires permission of the Director of Graduate Studies.

**CIS 597 CIS Graduate Seminar 1 cr**

This course prepares graduate assistants in the School of CIS to provide support and assistance to faculty for instruction in School of CIS classes. Topical coverage includes but is not limited to: graduate assistant expectations and responsibilities, protection of student educational information (FERPA), practical skills in assisting in computing instruction, graduate assistant best practices, and tips from faculty and experienced graduate assistants. This course does not count towards a graduate degree in CIS. Requires permission of the Director of CIS Graduate Studies.

**CIS 598 CIS Project 1-3 cr**

Approved investigation of original problems under direction of a faculty member. This course may be repeated for a maximum of three hours of credit towards the degree. Requires permission of the Director of Graduate Studies.

**CIS 599 CIS Thesis 1-9 cr**

This course may be repeated for a maximum of six credits. A thesis committee will provide direction during the thesis. Requires approval of the thesis project by graduate faculty and the Director of Graduate Studies.

**Prerequisite:** CIS 595 Minimum Grade of B

**CIS 694 Directed Study - 3 cr**

This course focuses on the development of the doctoral prospectus leading to the the defense of a dissertation.

**CIS 799 Dissertation 1-9 cr**

This course focuses on the development of the dissertation.

**Computer Science (CSC)****CSC 108 Introduction to Programming 2 cr**

Problem-solving and pre-programming skills developed using hands-on activities in preparation for the introductory programming course.

**Prerequisite:** MA 112 Minimum Grade of C or A02 22 or MMT 070

**CSC 120 Prob Solv and Prog Concepts 4 cr**

An introduction to the design of algorithms and their implementation in a high-level programming language. Topics include: problem solving strategies, programming concepts, programming environment, control structures, methods, arrays, searching, sorting, object-oriented programming, and file input/output.

**Prerequisite:** (MA 113 Minimum Grade of C or MA 172 Minimum Grade of C) or (MA 115 Minimum Grade of C or MA 121 Minimum Grade of C) or (MA 125 Minimum Grade of C or MA 132 Minimum Grade of C) or A02 27 or MMT 090

**CSC 121 Prob Solv and Prog Concepts II 4 cr**

Continuation of CSC 120. Topics include: object-oriented programming concepts, abstract data types, graphical user interfaces and event-driven programming, exception handling, text and binary file I/O, and an overview of dynamic data structures.

**Prerequisite:** CSC 120 Minimum Grade of C or CIS 120 Minimum Grade of C

**CSC 190 CSC Special Topics - 1 cr**

Selected topics in computer science. Prerequisite: Permission of the CSC coordinator.

**CSC 228 Digital Logic Computer Arch 3 cr**

Topics include: Boolean algebra, minimization techniques, combinatorial and sequential circuit analysis, memory organization, microprocessor concepts, and CPU architecture.

**Prerequisite:** (MA 113 Minimum Grade of C or MA 115 Minimum Grade of C or MA 125 Minimum Grade of C or A02 27 or MMT 090)

**CSC 231 Intro Data Structures Algs 4 cr**

The course will cover techniques to organize and access collections of data, definition, implementation, and use of Classes and Abstract Data Types(ADT). Topics include: stacks, queues, heaps, search trees, recursion, algorithmic complexity, advance searching and sorting algorithms, and graphs and their application to problems.

**Prerequisite:** (CSC 120 Minimum Grade of C or CIS 210 Minimum Grade of C or CPE 260 Minimum Grade of C)

**CSC 311 Networking and Communications 3 cr**

An introduction to computer networks. Topics include: data transmission, network architectures, file compression algorithms, communication devices and protocols, network routing and flow algorithms.

**Prerequisite:** CSC 231 Minimum Grade of C or CSC 230 (may be taken concurrently) Minimum Grade of C

**CSC 320 Computer Org-Architect 3 cr**

An introduction to computer organization using a top down approach from system component to the register level, internal representation of data, general assembly and linking concepts, addressing modes, and introduction to a specific processor, its architecture and operating system.

**Prerequisite:** CSC 228 Minimum Grade of C and CSC 230 Minimum Grade of C or CSC 231 Minimum Grade of C

**CSC 322 Operating Systems 3 cr**

This course covers the development of operating systems that control computing systems. Topics include: file systems, process management, scheduling, memory management (real and virtual), security, and concurrency. Case studies of operating systems are examined.

**Prerequisite:** CSC 231 Minimum Grade of C

**CSC 324 Database Concepts 3 cr**

Introduction to database design and implementation. Aspects of data modeling, database design theory, storage, indexing, and database application development. Entity-relationship model, relational data model, schema refinement, normal forms, file organizations, index structures, and embedded SQL application development.

**Prerequisite:** CSC 231 Minimum Grade of C

**CSC 331 Software Engineering Prin - W 3 cr**

Models, techniques, and tools used in project management. Topics include: software development process, task scheduling, estimation and progress measurement. Coordination of development teams. Standards, testing plans, configuration management, metrics and use of CASE tools, system delivery and maintenance strategies.

**Prerequisite:** ((CSC 231 Minimum Grade of C or CSC 230 Minimum Grade of C or CIS 230 Minimum Grade of C)) and CA 275 (may be taken concurrently) Minimum Grade of C

**CSC 332 Adv Data Structures and Algs 3 cr**

Techniques for the design and analysis of efficient algorithms, emphasizing methods useful in practice. Topics covered include: mathematical foundations; all five asymptotic notations; analytic, empirical, and qualitative evaluation techniques; sorting algorithms; balanced trees (2-3-4 trees and red-black trees); dynamic programming; and NP-completeness.

**Prerequisite:** CSC 231 and MA 267

**CSC 333 Prog Language Theory 3 cr**

Formal examination of programming languages. Formal Language concepts including syntax and basic grammars are studied. Language features such as data types and structures, control structures, and data flow are examined. The run-time environment and the process of interpretation/compilation are covered. Interpreter and compilation techniques are introduced.

**Prerequisite:** (CSC 231 Minimum Grade of C)

**CSC 340 Secure Software Engineering 3 cr**

The objective of this course is to enhance the security of software by introducing sound security principles that should be incorporated into the software development process. Students will learn a risk management framework and best practices for software security including code reviews, architectural risk analysis, penetration testing, risk-based security test, abuse cases, security requirements, and security operations. Students will also learn common flaws that lead to exploitation and be able to identify and mitigate such errors in practice. Out of class labs and exercises reinforce concepts presented in class. Prerequisite: CSC 331.

**Prerequisite:** (CSC 331 Minimum Grade of C or CIS 231 Minimum Grade of C)

**CSC 399 Conc and Distributed Comp 3 cr**

This course focuses on software development principles for concurrent and distributed systems. Topics include shared versus distributed systems, heterogeneous concurrent computing, high performance computing, concurrent design patterns and more.

**Prerequisite:** CSC 322 Minimum Grade of C

**CSC 404 Web Tech & Knowledge Modeling 3 cr**

The students will learn knowledge service design based on Web technologies and will develop a knowledge service project during the course. The course will highlight the features of different Web Services Technologies and introduce various Scripting Languages, provide an up-to-date survey of developments in Web Services Technologies, and Knowledge Modeling.

**Prerequisite:** (CSC 320 Minimum Grade of C or CSC 331 Minimum Grade of C)

**CSC 410 Compiler Design-Construction 3 cr**

Lexical analysis, syntactic analysis, intermediate code generation, object code generation, optimization, memory use, generators for scanners and parsers.

**Prerequisite:** CSC 332 Minimum Grade of C and CSC 333 Minimum Grade of C and CSC 320 Minimum Grade of C or EE 264 Minimum Grade of C

**CSC 411 Comm - Network Analysis 3 cr**

Data communications and computer networks. An in-depth treatment of network architectures and protocols for both WANS and LANS. Topics include: network routing and flow algorithms, internet working, and distributed systems.

**Prerequisite:** CSC 311 Minimum Grade of C and (CSC 322 Minimum Grade of C or CIS 322 Minimum Grade of C)

**CSC 412 Real-Time Software Systems 3 cr**

Design and implementation of software for real-time computer systems. Survey of typical real-time systems; techniques for code-conversion, error checking, and transmission monitoring.

**Prerequisite:** CSC 311 Minimum Grade of C and CSC 322 (may be taken concurrently) Minimum Grade of C and CSC 332 Minimum Grade of C

**CSC 413 Computer Graphics 3 cr**

An in-depth study of hardware and software techniques used in computer graphics. Study of display and entry devices, including refresh, storage, and raster scan topics. Software techniques will include display files, windowing, clipping, two and three-dimensional transformations, and hidden-surface removal.

**Prerequisite:** (CSC 231 Minimum Grade of C) and (MA 237 Minimum Grade of C or MA 227 Minimum Grade of C)

**CSC 414 Modeling and Simulation 3 cr**

Analytic and simulation models developed using deterministic and stochastic techniques. Topics include: event-driven simulations, queuing theory, Markov processes, and dynamical systems. "Real World" project required.

**Prerequisite:** (CSC 230 Minimum Grade of C or CIS 230 Minimum Grade of C) and (MA 126 Minimum Grade of C or MA 233 Minimum Grade of C) and (ST 310 Minimum Grade of C or ST 275 Minimum Grade of C) or ST 315 Minimum Grade of C or ST 320 Minimum Grade of C

**CSC 415 Numerical Analysis 3 cr**

Mathematical preliminaries, solving linear systems numerical solution of ordinary and partial differential equations.

**Prerequisite:** (CSC 230 Minimum Grade of C or CIS 230 Minimum Grade of C) and (MA 126 Minimum Grade of C or MA 233 Minimum Grade of C)

**CSC 416 AI Theory and Programming 3 cr**

Introduction to basic concepts, implementation techniques, and philosophies of artificial intelligence and intelligent systems. Introduction to expert systems, fuzzy logic systems, neural networks, and techniques for artificial intelligence programming. The fundamentals of an AI programming language (LISP or PROLOG) will be presented. The language will then be used to solve problems in typical AI applications.

**Prerequisite:** CSC 332 Minimum Grade of C or CSC 231 Minimum Grade of C

**CSC 417 Computer Game Development 3 cr**

Introduction to computer game development, including a variety of related topics. The course will be driven by research/technical paper discussions, student presentations and projects. The direction of the course will be guided to some extent by student interest.

**Prerequisite:** CSC 331 Minimum Grade of C or EE 368 Minimum Grade of C

**CSC 418 Adv Game & Simulation Dev 3 cr**

This course will cover advance topics related to the development of game and simulation software. Topics include game physics, collision techniques, game mechanics, level design, artificial intelligence, and security. Students will design and implement a game or simulation program that includes elements of artificial intelligence.

**Prerequisite:** CSC 417 Minimum Grade of C

**CSC 426 Data Mining 3 cr**

This course provides an in-depth study of data mining. Course content includes data preparation, feature selection, pattern mining, classification, clustering, and sequence mining. New research areas in data mining will also be discussed.

**Prerequisite:** CSC 332 Minimum Grade of C

**CSC 428 Introduction to Bioinformatics 3 cr**

Students in this course will study algorithms pertaining to bioinformatics (e.g. sequence alignment, biological database search, and phylogeny reconstruction); gain hands-on experience using bioinformatics tools; and understand the interaction of computer science and modern biology within the context of data-driven knowledge discovery.

**Prerequisite:** CSC 230 Minimum Grade of C

**CSC 433 Adv AI Theory and Programming 3 cr**

A study of advanced AI theory and implementation. Topics include neural networks, probability learning, and a variety of related topics. A programming language (LISP or R) will be utilized to solve complex industry problems associated with AI applications.

**Prerequisite:** CSC 416 Minimum Grade of C

**CSC 434 Form Lang - Automata Theory 3 cr**

Mathematical preliminaries, languages, context-free grammars, parsing, normal forms, finite automata, regular languages, pushdown automata, Turing machines.

**Prerequisite:** (CSC 333 Minimum Grade of C or CSC 340 Minimum Grade of C)

**CSC 440 Secure Software Engineering 3 cr**

The objective of this course is to enhance the security of software by introducing sound security principles that should be incorporated into the software development process. Students will learn a risk management framework and best practices for software security including code reviews, architectural risk analysis, penetration testing, risk-based security test, abuse cases, security requirements, and security operations. Students will also learn common flaws that lead to exploitation and be able to identify and mitigate such errors in practice. Out of class labs and exercises reinforce concepts presented in class.

**Prerequisite:** CSC 331 Minimum Grade of C and CSC 320 (may be taken concurrently) Minimum Grade of C or EE 264 Minimum Grade of C

**Cross-Listed:** CSC 340

**CSC 450 Surreptitious Software 3 cr**

Students in this course will learn about algorithms for software protection and learn how to use tools for program transformation. Specific topics include obfuscation, watermarking, tamperproofing, birthmarking, and hardware protection. Programming projects will be required in several different languages and course activities will involve preparing student-led lectures, working on programming projects, and writing reports.

**Prerequisite:** CSC 440 Minimum Grade of C

**CSC 457 Data Warehousing 3 cr**

This course focuses on the design, development and usage of data warehouses. Course content includes dimensional modeling, ETL processes, physical design, and analytical processing. New research areas related to data warehousing technology will also be discussed.

**Prerequisite:** CIS 324 Minimum Grade of C or CSC 324 Minimum Grade of C

**CSC 460 Security of HW Implementations 3 cr**

The objective of this course is for the student to build upon logic and architectural principles as applied to hardware designs. The key theme of the course is the security impacts of hardware design implementations.

**Prerequisite:** (CSC 320 Minimum Grade of C or EE 264 Minimum Grade of C)

**Cross-Listed:** CSC 560

**CSC 485 Cyber-Physical Security 3 cr**

This course focuses on the Security of Cyber-Physical Systems (CPS) and Internet of Things (IoT) that go beyond topics commonly considered in Computer and Network Security. This course aims to prepare participants for the cutting edge research undergoing in both areas. The successful participation in this course will require reading number of research papers, presenting learned material, active participation in in-class discussions, and successful accomplishment of a small research project.

**Prerequisite:** CSC 311 Minimum Grade of C and CSC 322 Minimum Grade of C

**CSC 490 Special Topics 3 cr**

Advanced selected topics in computer science. Prerequisite: Permission of the CSC Coordinator.

**CSC 504 Web Tech & Knowledge Modeling 3 cr**

The students will learn knowledge service design based on Web technologies and will develop a knowledge service project during the course. The course will highlight the features of different Web Services Technologies and introduce various Scripting Languages, provide an up-to-date survey of developments in Web Services Technologies, and Knowledge Modeling.

**CSC 510 Compiler Design-Construction 3 cr**

Lexical analysis, syntactic analysis, intermediate code generation, object code generation, memory use, generators for scanners and parsers.

**Prerequisite:** CSGR P

**CSC 511 Comm-Network Analysis 3 cr**

Data communications and computer networks. An in-depth treatment of network architectures and protocols for both WANs and LANs. Topics include: network routing and flow algorithms, internet working, and distributed systems.

**Prerequisite:** CSGR P

**CSC 512 Real -Time Software Systems 3 cr**

Design and implementation of software for real-time computer systems. Survey of typical real time systems; techniques for code conversion, error checking, and transmission monitoring.

**Prerequisite:** CSGR P

**CSC 513 Computer Graphics 3 cr**

An in-depth study of hardware and software techniques used in computer graphics. Study of display and entry devices, including refresh, storage, and raster scan topics. Software techniques will include display files, windowing, clipping, two and three-dimensional transformation, and hidden-surface removal.

**Prerequisite:** CSGR P

**CSC 514 Modeling and Simulation 3 cr**

Analytic and simulation models developed using deterministic and stochastic techniques. Topics include: event-driven simulations, queueing theory, Markov processes, and dynamical systems. "Real World" project required.

**Prerequisite:** CSGR P

**CSC 515 Numerical Analysis 3 cr**

Mathematical preliminaries, solving linear systems, numerical solution of ordinary and partial differential equations.

**Prerequisite:** CSGR P

**CSC 516 AI Theory and Programming 3 cr**

Introduction to basic concepts, implementation techniques, and philosophies of artificial intelligence and intelligent systems. Introduction to expert systems, fuzzy logic systems, neural networks, and techniques for artificial intelligence programming. The fundamentals of an AI programming language (LISP or PROLOG) will be presented. The language will then be used to solve problems in typical AI applications.

**Prerequisite:** Graduate Professional Component Standing

**CSC 517 Computer Game Development 3 cr**

Introduction to computer game development, including a variety of related topics. The course will be driven by research/technical paper discussions, student presentations, and projects. The direction of the course will be guided to some extent by student interest.

**Prerequisite:** CSGR P

**CSC 520 Computer Architecture 3 cr**

Instruction set design, pipelining, instruction-level parallelism, memory hierarchy design, and multiprocessors.

**Prerequisite:** CSGR P

**CSC 522 Performance Eval of Algorithms 3 cr**

Mathematical foundations; analytic, empirical, and qualitative evaluation techniques; dynamic programming, greedy algorithms, graph algorithms; and selected advanced topics.

**Prerequisite:** CSGR P

**CSC 524 Computer Language Design 3 cr**

A study of programming language design and specification, including the compiling process, parsing, BNF grammars, and models of semantics. Differences between interpreters, assemblers, and compilers will be studied.

**Prerequisite:** CSGR P

**CSC 525 Complexity Theory 3 cr**

Mathematical preliminaries, languages, finite automata, Turing machines, decidability, recursive function theory, complexity, tractability and NP-complete problems.

**Prerequisite:** CSGR P

**CSC 526 Data Mining 3 cr**

This course provides an in-depth study of data mining. Course content includes data preparation, feature selection, pattern mining, classification, clustering, and sequence mining. New research areas in data mining will also be discussed. Laboratory assignments will provide students with opportunities to interact with and develop data mining technologies.

**Prerequisite:** CSGR P

**CSC 527 Software Engineering Princ 3 cr**

Advanced concepts of software engineering will be discussed. Program testing techniques including: structured design and walk throughs, proving program correctness and verifiability, and system coding standardization and integration will be covered in depth. Software team formulation and management techniques will be discussed.

**Prerequisite:** CSGR P

**CSC 528 Introduction to Bioinformatics 3 cr**

Bioinformatics is a highly interdisciplinary course between computer science and biology. It focuses on the analysis of proteins, genes, and genomes using computing technologies such as computer algorithms and computer databases. Students in this course will learn algorithms and databases pertaining to bioinformatics (e.g., sequence alignment, suffix tree and its biological/biomedical applications, genome alignment, biological/biomedical database search, and phylogeny reconstruction); gain knowledge and hands-on experience of bioinformatics tools; understand the interaction between computer science (in particular, semantic technologies) and modern biology within the context of data-driven knowledge discovery.

**Prerequisite:** CSGR P

**CSC 532 Distributed Systems 3 cr**

This course will further enhance the students understanding of the details of how an operating system functions. It will focus on the advanced concepts associated with distributed systems. The student will learn the underlying concepts of such systems and the algorithms needed to provide the required synchronization and communication.

**Prerequisite:** CSGR P

**CSC 533 Adv AI Theory and Programming 3 cr**

This course provides a broad introduction to machine learning and statistical pattern recognition. Topics include: supervised learning (generative/discriminative learning, parametric/non-parametric learning, neural networks, and support vector machines); unsupervised learning (clustering, dimensionality reduction, kernel methods); learning theory (bias/variance tradeoffs, practical advice); reinforcement learning and adaptive control. The course will also discuss recent applications of machine learning, such as to robotic control, data mining, autonomous navigation, bioinformatics, speech recognition, and text and web data processing.

**Prerequisite:** CSGR P

**CSC 550 Surreptitious Software 3 cr**

Students in this course will learn about Algorithms for software protection and learn how to use tools for program transformation. Specific topics include obfuscation, watermarking, tamperproofing, birthmarking and hardware protection. Programming projects will be required in several different languages and course activities will involve preparing student-led lectures, working on programming projects, and writing reports.

**Prerequisite:** CSGR P

**CSC 557 Data Warehousing 3 cr**

This course focuses on the design, development and usage of data warehouses. Course content includes dimensional modeling, ETL processes, physical design, and analytical processing. New research areas related to data warehousing technology will also be discussed.

**Prerequisite:** CSGR P

**CSC 560 Security of HW Implementations 3 cr**

The objective of this course is for the student to build upon logic and architectural principles as applies to hardware designs. The key theme of the course is the security impacts of hardware design implementations.

**Prerequisite:** CSGR P

**Cross-Listed:** CSC 460

**CSC 580 Data Security 3 cr**

The objective of this course is to introduce the inherent strengths and limitations of cryptography in data security applications, focusing on the basic principles of message privacy, key negotiation, and key management. The course covers various aspects of symmetric and asymmetric ciphers and provides a broad coverage of the core areas for engineering cryptographic systems. Students will be expected to implement and analyze simple cryptographic schemes and read supporting articles and papers for presentation. Prerequisite: CIS Graduate Professional Component.

**Prerequisite:** CSGR P

**CSC 582 Network Security 3 cr**

The objective of this course is to provide students with the knowledge and skills to begin supporting network security within an organization. Students will gain an understanding of fundamental network security concepts and mechanisms, be able to identify security threats and vulnerabilities, and help respond to and recover from security incidents. The course will provide an understanding of how to design and build secure network algorithms and environments while gaining an in-depth knowledge of protocol security, intrusion detection, and principles of cyber defense.

**Prerequisite:** CSGR P

**CSC 585 Cyber-Physical Security 3 cr**

This course focuses on the Security of Cyber-Physical Systems (CPS) and Internet of Things (IoT) that go beyond topics commonly considered in Computer and Network Security. This course aims to prepare participants for the cutting edge research undergoing in both areas. The successful participation in this course will require reading number of research papers, presenting learned material, active participation in in-class discussions, and successful accomplishment of a small research project.

**Prerequisite:** CSGR P

**CSC 590 CSC Sp Top - 3 cr**

Advanced selected topics in computer science. Prerequisite: Permission of the CSC coordinator.

**Prerequisite:** CSGR P

**CSC 595 CS Project Proposal Develop 1-3 cr**

Development of the project proposal for the Computer Science specialization master's project. Prerequisite: Graduate Professional Component and Permission of the Director of Graduate Studies.

**Prerequisite:** CIS 518 Minimum Grade of S

**CSC 598 Computer Science Project 1-3 cr**

This course may be repeated for a maximum of six (6) credits. A CIS project committee will provide direction during the project. Prerequisites: Approval of project proposal by student's project committee and permission of the Director of CIS Graduate Studies.

**Prerequisite:** (CSC 595 Minimum Grade of B and CSCS P)

**CSC 612 Cybersecurity 3 cr**

This course focuses on developing expertise and preparation for independent research in Cybersecurity through an in-depth review of the Cybersecurity literature. The student will be conversant in broad issues and trends in Cybersecurity as defined by skill sets and occupations.

**CSC 626 Advanced Big Data 3 cr**

This course focuses on developing expertise and preparation for independent research in big data through an in-depth review of the big data and data science literature. The student will be conversant in broad issues and trends in big data as defined by current tools and technologies.

**Cybersecurity (CYB)****CYB 530 Information Assurance/IT Audit 3 cr**

This course covers the understanding and managing of risks and threats to information and information systems. This includes protecting and defending information and information systems by ensuring through authorization and other means concepts such as accessibility, secrecy, reliability, and authentication.

**Prerequisite:** CSGR P

**CYB 535 Digital Forensic Analysis 3 cr**

This course provides students with advanced tools, techniques, and methodologies for accumulating, securing, analyzing, managing, and reporting evidence related to a forensics examination. The professional communication and presentation of the results of forensic investigations will be emphasized.

**Prerequisite:** CSGR P

**CYB 538 OS Concepts and Security 3 cr**

This course examines the concepts of operating systems such as memory and virtual memory management, as well as processor, process, device, and file management. Topics include the management and organization of network operating systems and operating system security and ethics. Students will manage, configure, and secure operating systems such as Windows, Unix, and Linux in laboratory environments.

**Prerequisite:** CSGR P

**CYB 540 Network Security Management 3 cr**

This course examines network and web security issues including: risks and threats, system access points, hardware and software defense methods, and organizational security policies. The course will cover the analysis of systems for vulnerabilities, the implementation of security procedures, the monitoring of systems for security breaches, and the recovery or restoration of breached systems.

**Prerequisite:** CSGR P

**CYB 555 Data Security 3 cr**

This course examines the major concepts of data security such as confidentiality, integrity, availability, authenticity, and non-repudiation. Topics include the four types of data security, the five major elements of data security, the three A's of data security, and the seven components of data security strategies. Students will conduct labs that will expose them to the techniques and tools used in data security management within an organization.

**CYB 570 Cybersecurity Ethics 3 cr**

This course examines the topic of ethics from a cybersecurity perspective. Topics include an introduction to the field of ethics; the three ethical frameworks; ethical hacking; issues related to privacy rights, surveillance, and intellectual property; and current cybersecurity codes of ethics. Students will further examine the topic of ethics through writing assignments, utilizing the major ethical frameworks ? virtue, utilitarian, and communitarian.

**Information Systems (ISC)****ISC 190 IS Special Topics 1 cr**

Selected topics in information systems. Prerequisite: Permission of the ISC coordinator.

**ISC 245 Info Systems in Organizations 3 cr**

An overview of information systems topics from an organizational and managerial perspective. Topics include current information technology and systems, such as the Internet and its organizational impacts; the emergence of global economy and digital firms; and the ethical and social impacts of information systems, such as privacy, intellectual property rights, and liability. Issues and strategies regarding information systems planning, systems development, decision making, and using IT for competitive advantage are discussed. Throughout the course, students will investigate the strategic uses of information technology in current industry-specific situations.

**ISC 272 Systems Architecture 3 cr**

This course introduces students to Information Technology hardware and systems software concepts. Topics include: computer hardware, operating systems, system software, hardware and software integration, operating procedures, system performance, security/safety, and compatibility. Student labs and hands-on activities will include: Windows, Unix, and Linux systems, system utilities and software tools. Credit cannot be received for both ITE 272 and ISC 272.

**Prerequisite:** CIS 115 Minimum Grade of C

**Cross-Listed:** ITE 272

**ISC 285 Intermediate Programming 4 cr**

A second course in programming (using a visual, event-driven programming language) that builds on CIS 115. Topics include: transition to visual language, processing data, decisions, loops, methods, arrays and lists, text processing, structured data types. Programming projects are required. Credit cannot be received for both ISC 285 and ITE 285.

**Prerequisite:** CIS 115 Minimum Grade of C

**Cross-Listed:** ITE 285

**ISC 300 Health Informatics Clin Env 3 cr**

This course provides an overview of concepts, terms, organization, and processes associated with patient care and clinical environments as they pertain to health informatics. The entire process of how a person accesses, moves within, and exits the system both as an inpatient and outpatient to obtain care. Students will observe and report on a variety of clinical settings and healthcare specializations throughout the semester. This course is designed for students with no prior clinical experience.

**ISC 305 Info Systems-Technology 3 cr**

The analysis, design, and implementation of information systems. Analysis of the functional areas of business and integration of computer tools to satisfy information requirements. Current development in business computer systems, including surveys of current systems and the Internet. Computer classrooms are utilized to provide students with "hands on" experience.

**Prerequisite:** CIS 250 Minimum Grade of C

**ISC 310 Health Informatics 3 cr**

This course provides an overview of the concepts, terms, tools, and architectures associated with health informatics as applied to healthcare delivery. Topics include: electronic record systems, computerized physician order entry, health system standards, terminologies, workflow modeling, security and privacy of clinical data, clinical reporting, and the impact of information technology use on the quality and efficiency of health care delivery and outcomes. ISC 300 is a corequisite for students with no prior clinical experience.

**ISC 353 Info Sys Appl Development 3 cr**

This course provides an accelerated approach to programming in a high-level, object-oriented language, especially for information systems. Coverage includes algorithmic problem solving, fundamentals of programming, procedures, decisions, repetition, arrays, files, exception handling, and object-oriented programming. The format for this course is lecture/lab. The instructor will demonstrate in class, and students will learn by doing homework problems and programming assignments. This course does not count towards a graduate degree in CIS. Some prior programming experience is desired and permission of Coordinator. Prerequisites: Math placement score of 65 or higher.

**Prerequisite:** UTM 65 or DS 090 Minimum Grade of C or (MA 112 Minimum Grade of C or MA 171 Minimum Grade of C)

**ISC 360 Info Sys Analysis and Design-W 3 cr**

A thorough examination of the analysis and design of computer information systems from the systems analysts view. The course will use an established software development methodology. At each step in the software development life cycle, both the methodologies used and the documentation required will be examined.

**Prerequisite:** ISC 245 Minimum Grade of C and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**ISC 361 Advanced Application Development 3 cr**

This course explores advanced topics in applications development by connecting web applications written in a modern programming language with databases. Other topics: integrating programming components and libraries, application development and testing methodologies, and using an object oriented approach for multi-tiered applications. Programming projects are required. Credit cannot be received for both ITE 370 and ISC 361

**Prerequisite:** CIS 324 Minimum Grade of C and (ISC 285 Minimum Grade of C or ITE 285 Minimum Grade of C)

**Cross-Listed:** ITE 370

**ISC 362 IS Object-Oriented Analy-Des 3 cr**

This course provides an introduction to an object-oriented analysis and design (OOAD) methodology as well as the tools and techniques for supplementing this methodology. The course will also cover the use of notational metalanguages such as Unified Modeling Language (UML) and OOAD computer-assisted software engineering (CASE) tools.

**Prerequisite:** ISC 245 Minimum Grade of C

**ISC 410 Health Informatics 3 cr**

This course provides an overview of the concepts, terms, tools, and architectures associated with health informatics as applied to healthcare delivery. Topics include: electronic record systems, computerized physician order entry, health system standards, terminologies, workflow modeling, security and privacy of clinical data, clinical reporting, and the impact of information technology use on the quality and efficiency of health care delivery and outcomes.

**ISC 450 Health Sys Analysis and Design 3 cr**

This course provides an overview of the concepts, terms, tools, and architectures associated with health informatics as applied to healthcare delivery. Topics include: electronic record systems, computerized physician order entry, health system standards, terminologies, workflow modeling, security and privacy of clinical data, clinical reporting, and the impact of information technology use on the quality and efficiency of health care delivery and outcomes.

**Prerequisite:** ISC 410 Minimum Grade of C

**ISC 455 Health Data Mgt Decision 3 cr**

This course focuses on the design and management of electronic medical record systems and clinical decision support systems. Course content related to electronic medical record systems includes architectural components, technical design issues, and management; and, content related to clinical decision support systems includes decision support roles, extracting useful information from data, and legal and regulatory restrictions. Laboratory assignments will provide students with opportunities to interact with these systems.

**Prerequisite:** ISC 410 Minimum Grade of C

**ISC 457 Data Ware-Decision Support 3 cr**

This course examines the analysis and design issues as well as the architectural infrastructures associated with enterprise data warehouses for decision support. Prerequisites: CIS 324.

**Prerequisite:** CIS 324 Minimum Grade of C

**ISC 459 IS Appl Design-Implementation 3 cr**

Analysis and design of information systems to support multiple locations via Intranet/Internet access. Additional and supporting topics, such as corporate privacy and security are also covered.

**Prerequisite:** CIS 324 Minimum Grade of C

**ISC 462 IS Strategy and Policy 3 cr**

This course provides the top management, strategic perspective for aligning competitive strategy with information systems. Issues include the development and implementation of policies and plans to achieve organizational goals, including security policy.

**Prerequisite:** CIS 324 Minimum Grade of C

**ISC 463 IS Database Admn and Security 3 cr**

An examination of the issues and activities associated with the administrator function for databases. This course will cover installation, implementation, user management, backup, and security.

**Prerequisite:** CIS 324 Minimum Grade of C

**ISC 464 IS Security and Risk Mgmt 3 cr**

This course provides an introduction to the fundamental principles and topics of information systems security and risk management at the organizational level. This course views information security as a management issue that incorporates technical and management solutions. Topics include risk management, security policy, disaster planning, security law and ethics, and security education, training and awareness.

**Prerequisite:** (MGT 300 Minimum Grade of C or MGT 322 Minimum Grade of C) and (CIS 321 Minimum Grade of C or CIS 221 Minimum Grade of C)

**ISC 467 Enterprise Information Systems 3 cr**

This course provides an introduction to enterprise information systems and to business process modeling. Key concepts and techniques for identifying, designing, and documenting business processes will be presented. The way information technology can be used to manage, transform business processes is discussed. Successful organizational change strategies will be reviewed.

**Prerequisite:** (MGT 300 Minimum Grade of C or MGT 322 Minimum Grade of C) and CIS 324 Minimum Grade of C

**ISC 472 Advanced Data Management 3 cr**

This course provides an introduction to the concepts and technologies of big data. Key concepts and techniques allow organizations to analyze structured and unstructured data/information collected from transaction processing systems, data warehouses, and distributed systems. The ultimate purpose of descriptive, predictive, and prescriptive analytics is to support high quality decision support for executives and managers. Concepts of data mining, data storage, non-relational platforms, and considerations for new and emerging technologies are described in detail.

**Prerequisite:** (CIS 324 Minimum Grade of C or CSC 324 Minimum Grade of C) and (ISC 285 Minimum Grade of C or ITE 285 Minimum Grade of C or CSC 231 Minimum Grade of C)

**ISC 475 Info Systems Proj Management 3 cr**

This course examines the principles and techniques of project management from an information systems perspective. Major topics covered include project context, project selection, and project planning. Students work in collaborative teams and are instructed in the use of a project software tool. Credit cannot be received for both ITE 475 and ISC 475.

**Prerequisite:** CIS 324 Minimum Grade of C

**Cross-Listed:** ITE 475

**ISC 490 Special Topics 3 cr**

Advanced selected topics in information systems. Prerequisite: Permission of the ISC Coordinator.

**ISC 501 Programming for IS 3 cr**

This course covers programming concepts required by Information Systems professionals to provide a solid foundation for building applications. Coverage includes: data types, decision structures, repetition structures, graphical user interfaces (GUI), methods, arrays, files, and object oriented programming (OOP) concepts.

**ISC 507 IS Database Processing 3 cr**

Analysis, design and implementation of database systems for IS professionals. Coverage includes DBMS models, E-R modeling, normalization concepts, and the use of queries for processing data.

**ISC 510 Health Informatics 3 cr**

This course provides an overview of the concepts, terms, tools, and architectures associated with health informatics as applied to healthcare delivery. Selected research topics are introduced and independently studied. Topics include: electronic record systems, computerized physician order entry, health system standards, terminologies, workflow modeling, security and privacy of clinical data, clinical reporting, and the impact of information technology use on the quality and efficiency of health care delivery and outcomes. Prerequisite: Permission of the Director of CI Graduate Studies.

**Prerequisite:** CSGR P

**ISC 516 AI Theory and Programming 3 cr**

Introduction to basic concepts, implementation techniques, and philosophies of artificial intelligence and intelligent systems. Introduction to expert systems, fuzzy logic systems, neural networks, and techniques for artificial intelligence programming. The fundamentals of an AI programming language (LISP or PROLOG) will be presented. The language will then be used to solve problems in typical AI applications.

**Prerequisite:** Graduate Professional Component Standing.

**Prerequisite:** CSGD 030

**ISC 545 Management Information Systems 3 cr**

This course provides an overview of information systems from an organizational, managerial, and technical perspective. The topics covered will focus on the strategic role of information systems and information technology in business processes, change and knowledge management, group and individual decision-making, and electronic commerce. Specific topics include current hardware, infrastructure and connectivity technologies, software and systems development methodologies. Internet-based applications, management challenges and opportunities created by information systems and global connectivity such as privacy, data and systems security and control, intellectual property, ethical and social consequences of information technology, and the impact of digital integration on an organization's competitiveness, products, services, procedures, and management structures. Prerequisite: Permission of the Director of CIS Graduate Studies.

**ISC 550 Health Data Security & Comp 3 cr**

This course involves a thorough examination of the security and privacy requirements of the Health Insurance Portability and Accountability Act (HIPAA) and the implementation of these requirements in the clinical environment. Students will learn how to address security development all the way through post-implementation, how to evaluate systems for vulnerabilities, and how to identify protected health information and covered entities.

**ISC 551 Human-Comp Interface Design 3 cr**

The course covers principles, guidelines, and methods in human computer interface design. Students complete a project involving the development, evaluation, and demonstration of a user interface. The interface is designed around a user and task analysis performed on a given problem. Students plan and conduct a usability study of a working prototype and report on results and recommendations. Prerequisite: Graduate Professional Component.

**Prerequisite:** (CIS 501 Minimum Grade of B and CIS 507 Minimum Grade of B)

**ISC 553 IS Web Site Management 3 cr**

This course addresses the design, development, and management of a web server. Topics include the selection, installation, and configuration of an operating system and web server software, web server security and monitoring, and website maintenance. Prerequisites: Graduate Professional Component.

**Prerequisite:** CSGR P

**ISC 555 Health Data Mgt/Decision Supp 3 cr**

This course focuses on the design and management of electronic medical record systems and clinical decision support systems. Course content related to electronic medical record systems includes architectural components, technical design issues, and management; and, content related to clinical decision support systems includes decision support roles, extracting useful information from data, and legal and regulatory restrictions. Laboratory assignments will provide students with opportunities to interact with these systems.

**Prerequisite:** CSGR P

**ISC 557 Data Ware-Dec Support Systems 3 cr**

This course examines the analysis and design issues as well as the architectural infrastructures associated with enterprise-wide data warehouses. Prerequisite: CIS Graduate Professional Component.

**Prerequisite:** CSGD 030

**ISC 559 IS App Design-Implementation 3 cr**

Analysis and design of information systems infrastructures to support multiple locations, intranet/internet access, corporate privacy, and security. Capacity analysis and planning, installation, performance monitoring, and problem solving strategies. Prerequisites: ISC 501 and ISC 507

**Prerequisite:** (ISC 501 Minimum Grade of B and ISC 507 Minimum Grade of B)

**ISC 560 Info Systems Analysis-Design 3 cr**

This course will include an introduction to the systems development life cycle as well as a survey of analysis and design techniques. Detail topics will include information systems planning and project identification and selection, requirements collection and structuring, process modeling, data modeling, design of interface and data management, system implementation and operation, system maintenance, and change management implications of systems. Globalization issues in systems will also be discussed. Students will use current methods and tools such as rapid application development, prototyping, and visual development.

**ISC 561 IS Database Management 3 cr**

An introduction to database management systems. The data environment, basic technical concepts and systems resources, database concepts, including use and management of databases. Classical and current DBMS models will be presented. Laboratory project activity will involve definition, creation, and development of a database. Prerequisites: Graduate Professional Component.

**Prerequisite:** (ISC 507 Minimum Grade of B)

**ISC 562 IS Policy and Strategy 3 cr**

This course provides the top management, strategic perspective for aligning competitive strategy, core competencies, and information systems. Issues include the development and implementation of policies and plans to achieve organizational goals, including defining systems that support the operational, administrative, and strategic needs of the organization, its business units, and individual employees. Prerequisites: Professional Component

**Prerequisite:** CSGR P

**ISC 563 IS Database Administration 3 cr**

This course will examine the issues and activities associated with the administrator function for organizational databases. Topics include storage and indexing, query evaluation, physical database design, crash recovery, and security. Prerequisite: CIS Graduate Professional Component.

**Prerequisite:** CSGR P

**ISC 565 IS Project-Change Management 3 cr**

A study of the concepts and techniques of project management from an information systems perspective. The course provides an overview of project lifecycle activities, and a focus on managerial, behavioral, and process issues that surround the dynamic context of systems development. The issue of managing the change brought about by the introduction or modification of information systems in organizations will be discussed. Students will be instructed in the use of software tools for project management.

**ISC 567 IS Function Integration 3 cr**

The tactical/operational responsibilities and roles of the CIO. Governance considerations that link the IS-business organizations. Current/emerging issues in creating and coordinating the key activities necessary to manage the day-to-day operations of the IS function. Coordinating skills and organizational IS infrastructure.

**Prerequisite:** (ISC 501 Minimum Grade of B and ISC 561 Minimum Grade of B)

**ISC 568 IS Enterprise Integration 3 cr**

Information systems role in transforming organizations and industries. An integrated view of the organization from an external and internal perspective. IS' internal role in integrating the enterprise through a cohesive set of business processes and functional applications to meet business needs. Enterprise resource planning and enterprise functionality. Collaborative systems. Consideration of external relations with suppliers, outsourcers, and customers. Prerequisite: ISC 559.

**Prerequisite:** ISC 559 Minimum Grade of B

**ISC 572 Advanced Data Management 3 cr**

The focus here is on the management of data and the technologies which specifically targets mass data storage with a view to online and after-the-fact examination of data to acquire new insights. The major topics include: data warehouse planning, data warehouse models, and supporting software, data mining concepts and tools, creation of data mining models for the tools and matching the tool to the task. Prerequisite: CIS Graduate Professional Component

**Prerequisite:** CSGR P

**ISC 590 IS Sp Top - 3 cr**

Advanced selected topics in information systems. Prerequisite: Permission of ISC coordinator.

**Prerequisite:** CSGR P

**ISC 595 IS Project Proposal Develop 1-3 cr**

Development of the project proposal for the Information Systems specialization master's project. Prerequisites: CIS 518, Graduate Professional Component, Permission of Director of CIS Graduate Studies.

**Prerequisite:** CIS 518 Minimum Grade of S

**ISC 598 Information Systems Project 1-3 cr**

This course may be repeated for a maximum of six (6) credits. A CIS project committee will provide direction during the project. Prerequisite: Approval of project proposal by the student's project committee, and permission by Director of CIS Graduate Studies.

**Prerequisite:** (ISC 595 Minimum Grade of B and CSIP P)

**ISC 629 Comp Ecosystems 3 cr**

This course focuses on developing expertise and preparation for independent research in computing ecosystems through an in-depth review of the computing literature. The course will explore concepts and issues associated with large scale parallel data processing, virtualized storage, application, and infrastructure architectures and the attendant security, privacy and legal issues.

**ISC 673 Digital Investigations 3 cr**

This course focuses on developing expertise and preparation for independent research in Digital Forensics Investigations through an in-depth review of the Digital Forensics literature. The student will be conversant in broad issues and trends in Digital Forensics as defined by skill sets and occupations.

**ISC 675 Information Systems 3 cr**

This course focuses on developing expertise and preparation for independent research in information systems through an in-depth review of the information systems literature. The course will explore the current major streams of theory, research, and methodologies in information systems.

**ISC 686 Risk Analysis 3 cr**

This course focuses on developing expertise and preparation for independent research in risk analysis through an in-depth review of the risk assessment and information assurance literature. The student will be conversant in broad issues and trends in risk analysis as defined by techniques, methodologies, policies, frameworks, and skill sets.

## Faculty Computer Science

Faculty Name	Faculty Department	Faculty Position	Degrees Held
ANDEL, TODD R. (tandel@southalabama.edu)	Computer Sciences	Professor	BS, University of Central Florida MS, Air Force Inst of Technology PHD, Florida State University
BENTON, RYAN G (rbenton@southalabama.edu)	Computer Sciences	Associate Professor	BS, Loyola University-New Orleans MS, University of LA at Lafayette PHD, University of LA at Lafayette
CLARK, GEORGE WINSTON (georgewclark@southalabama.edu)	Computer Sciences	Assistant Professor	BSEE, University of South Alabama MSCIS, University of South Alabama
DAVIDSON, CORDELL CLAY (ccdavidson@southalabama.edu)	Computer Sciences	Assistant Professor	PHD, University of South Alabama BSBA, University of Southern Miss MS, University of South Alabama PHD, University of South Alabama
HUANG, JINGSHAN (huang@southalabama.edu)	Computer Sciences	Professor	BE, Fuzhou University ME, University of SC-Columbia DPHIL, University of SC-Columbia PHD, University of SC-Columbia
JOHNSTEN, TOM (tjohnsten@southalabama.edu)	Computer Sciences	Associate Professor	BS, Oklahoma State University MS, Arizona State University-Main PHD, University of LA at Lafayette
MCDONALD, JEFFREY TODD (jtmcdonald@southalabama.edu)	Computer Sciences	Professor	BS, US Air Force Academy MBA, University of Phoenix MS, Air Force Inst of Technology PHD, Florida State University
SEGEV, AVIV (segev@southalabama.edu)	Computer Sciences	Professor	MS, Tel Aviv University PHD, Tel Aviv University
STACEY, KRISTA JOHNSON (kjstacey@southalabama.edu)	Computer Sciences	Instructor	BA, Troy University-Main MED, University of South Alabama MS, University of South Alabama

## Information Systems and Technology

Faculty Name	Faculty Department	Faculty Position	Degrees Held
BLACK, MICHAEL EUGENE (mblack@southalabama.edu)	Information & Systems Tech	Assistant Professor	BS, University of South Alabama MS, University of South Alabama PHD, Capella University
BOURRIE, DAVID M (dbourrie@southalabama.edu)	Information & Systems Tech	Associate Professor	BA, Michigan State University PHD, Auburn University
CAMPBELL, AMY ASHE (amycampbell@southalabama.edu)	Information & Systems Tech	Assistant Professor	BSN, Tennessee Technological U MSN, University of South Alabama DNP, University of South Alabama
CAMPBELL, STEPHEN MATTHEW (mattcampbell@southalabama.edu)	Information & Systems Tech	Associate Professor	BS, Tennessee Technological U MBA, Tennessee Technological U PHD, University of NC- Charlotte
CHAPMAN, DEBRA LAIER (dchapman@southalabama.edu)	Information & Systems Tech	Assistant Professor	BS, University of Southern Miss MS, University of South Alabama PHD, University of Southern Miss
CLARK, ANGELA MONTGOMERY (amclark@southalabama.edu)	Information & Systems Tech	Senior Instructor	BS, University of South Alabama MS, University of South Alabama
COBB, DAVID ANDREW (dacobb@southalabama.edu)	Information & Systems Tech	Instructor	AH, Remington College BS, University of South Alabama MS, University of South Alabama
GREEN, RICKY ELDON (rgreen@southalabama.edu)	Information & Systems Tech	Instructor	BSITE, University of South Alabama MSCIS, University of South Alabama
HOLIFIELD, JEFFREY (jholifield@southalabama.edu)	Information & Systems Tech	Senior Instructor	AAS-AT, Community College Of Air Force BS, Southern Illinois U-Carbondale MA, George Washington University MMOAS, Air University MSCIS, University of South Alabama
KIBBY, HANNAH VICTORIA (kibby@southalabama.edu)	Information & Systems Tech	Assistant Professor	BS, University of South Alabama MS, University of South Alabama PHD, University of South Alabama
LANDRY, JEFFREY P. (jlandry@southalabama.edu)	Information & Systems Tech	Professor	BS, University of New Orleans MBA, University of New Orleans PHD, Florida State University
OVERSTREET, PAUL R. (poverstreet@southalabama.edu)	Information & Systems Tech	Instructor	BS, University of Alabama MS, University of Alabama
ROBINSON, OCLLO PARKS (orobinson@southalabama.edu)	Information & Systems Tech	Instructor	BS, Auburn University MS, University of South Alabama
SHROPSHIRE, JORDAN D. (jshropshire@southalabama.edu)	Information & Systems Tech	Professor	BBA, University of Florida PHD, Mississippi State University
SMITH, MELISSA E. (mesmith@southalabama.edu)	Information & Systems Tech	Senior Instructor	BS, Troy University-Main MS, University of South Alabama
VAN DEVENDER, MAUREEN STAKELUM (mvandevender@southalabama.edu)	Information & Systems Tech	Senior Instructor	BS, University of South Alabama MBA, Spring Hill College PHD, University of South Alabama

## Computing (PhD)

### Degree Requirements

#### Doctor of Philosophy in Computing

The interdisciplinary Doctor of Philosophy degree in Computing integrates coursework and research projects from three related disciplines: computer science, information systems, and information technology. The program emphasizes advanced discovery and the

development of solutions to research-focused problems in the areas of cyber assurance, risk assessment, forensics, and data analytics. Ph.D. graduates are eligible for research positions in academia, industry, and government.

The Ph.D. degree is awarded to candidates who have demonstrated a capacity for conducting original research, have made a meaningful contribution to knowledge in the computing discipline, and have successfully defended a dissertation.

If you have any questions, please contact the SoC Director of Graduate Studies, Dr. Debra Chapman - [dchapman@southalabama.edu](mailto:dchapman@southalabama.edu)

## Requirements for Admission

To apply to the Ph.D. in computing degree program, please visit the University of South Alabama (USA) Graduate School website.

In addition to the general admission requirements of the USA Graduate School, admission requirements for the Computing Ph.D. program are:

1. A baccalaureate or graduate degree in Computer Science, Information Systems, Information Technology or a closely related field. A graduate degree is not required for admission.
2. An undergraduate minimum GPA of 3.3 (4.0 scale) for all completed post-secondary coursework or a 3.5 overall (4.0 scale) for a **completed graduate program**.
3. Official scores for the Graduate Records Examination (GRE) including the AW portion.
  - Any applicant with an undergraduate or graduate degree from a regionally accredited U.S. institution is not required to provide GRE scores.
4. A statement of purpose indicating the student's personal goals and research interests. Because prospective students are matched with a faculty mentor, competitive applications will align with the research areas of School of Computing graduate faculty.
5. Three letters of recommendation from persons able to speak directly to the applicant's ability to engage in advanced discovery and contribute new knowledge to the discipline.
6. Curriculum vita.
7. An official transcript from each college or university attended.
8. A completed application for admission to the Graduate School.
9. For international students, an official TOEFL, IELTS, DuoLingo, iTEP, or Pearsons (PTE Academic) score, or an equivalent level of competence as exhibited by a bachelor or graduate degree from a regionally accredited university in the United States is required. See the policy of the Graduate School: <https://www.southalabama.edu/bulletin/> (<https://www.southalabama.edu/bulletin/>).

Admission may be granted by the Director of Graduate Studies, when supported by a vote of the Graduate Faculty, in special cases where a holistic evaluation of the applicant's credentials is appropriate.

Admission is competitive and the decision is based on a review of all submitted admission materials. A personal interview may be requested. Applicants are encouraged to submitted samples of prior work. All admissions materials should be submitted online at:

<https://explore.southalabama.edu/apply/?sr=15732969-d778-4ade-a6c6-4678cd7b7221>

## Graduate Assistantships

A limited number of graduate assistantships are available on a competitive basis and are awarded on the recommendation of the School of Computing. Applications are available on-line at: <https://www.southalabama.edu/departments/eforms/graduateschool/graduateassistantappform.pdf>. Applications must be received by April 1st for fall applicants or November 1st for spring applicants.

## Program Requirements

To qualify for the Ph.D. in Computing, a minimum of 72 semester hours of approved graduate credit is required and the following program of study must be completed with a grade of "B" or better in all course work.

### Core Courses

(18 hours)

You should expect a lot of reading and writing of academic material in each of these courses. The purpose of the core courses is to provide you with a broad view of the relevant academic literature in computing and to prepare you to become an independent researcher and help you narrow down research topics that may interest you. The goal is to have a general idea of your dissertation topic at the completion of your core course work.

Code	Title	Hours
CSC 612	Cybersecurity	3
CSC 626	Advanced Big Data	3
ISC 629	Comp Ecosystems	3
ISC 673	Digital Investigations	3
ISC 675	Information Systems	3
ISC 686	Risk Analysis	3
<b>Total Hours</b>		<b>18</b>

### Candidacy

After successfully completing the 6 core courses, PhD students must pass a Qualifying Exam to achieve candidacy. The purpose of the Qualifying Exam is to demonstrate the candidate's preparedness to successfully write a dissertation.

1. This requires that a Dissertation Committee Chair has been identified
2. Students will schedule this exam with their Dissertation Committee Chair

A doctoral student is admitted to candidacy upon successful completion of a comprehensive examination. Candidacy indicates the student has completed the required coursework and is eligible to begin the dissertation research project.

### Comprehensive Examinations

Doctoral students must pass a comprehensive examination. The format of the examination will be determined by the comprehensive examination committee. Normally the examination is based on the required coursework. Failure to pass the comprehensive examination within three attempts will result in dismissal from the program.

### Electives

(24 Hours)

Student will complete 24 semester hours of 500-level or higher approved graduate coursework.

Courses must be offered within the SoC, with a prefix of CIS, CSC, or ISC, unless approved by your Dissertation Committee Chair and the Director of Graduate studies.

A maximum of 6 semester hours of CIS 694 Directed Study may be counted towards fulfilling the electives requirement.

Any student without an academic research background should take CIS 518 (Research Methodologies) or other similar research course as an elective.

If you are planning on conducting dissertation research that requires statistical analysis, you should take elective courses in statistics. Options include ST 540 and ST 545 (Stats in Research I & II) or ST 550 (Environmental Stats), or BA 602/702 (Applied Stats) and BA 604/704 (Multivariate Analysis), and for students using causal models BUS 610/BA 799 (Structural Equation Modeling). You should consult with your advisor or Dissertation Committee Chair to determine which course(s) to take.

## Dissertation

(30 Hours)

A primary educational objective of the Ph.D. program is for students to develop the ability to conduct advanced research and contribute new knowledge to the discipline. To that end, the student will complete 30 hours of CIS 799 Dissertation.

### Dissertation Hours and Defense

Students cannot enroll in CIS 799 (Dissertation) until they have achieved doctoral candidacy.

With the approval of the Director of Graduate programs and under the supervision of your Dissertation Committee Chair, CIS 694 Directed Study credit may be taken to complete preliminary preparation for the dissertation study. These hours may be substituted for CIS 799.

Students should work out a schedule and estimated timeline with their Dissertation Committee Chair to appropriately schedule the number of hours of CIS 799 to take each semester.

While only 30 hours of CIS 799 may be counted toward the degree, a student must continuously enroll in at least 1 credit hour of dissertation during the fall and spring semesters until the dissertation is successfully defended. Failure to enroll continuously without the written approval of the Director of the Graduate program may lead to dismissal from the program.

The Dissertation is completed only when the student has successfully completed an oral defense of the research project and the dissertation has been accepted by the Graduate School - regardless of how many hours of CIS 799 has been taken. Students must be enrolled in at least 1 hour of CIS 799 in the semester they defend their dissertation.

Your dissertation, once completed and approved by your committee and the Director of Graduate Studies, will be submitted to the USA Graduate School to meet final program requirements. Graduate School Submission deadlines are set by the USA Graduate School and can be found on their website - <https://www.southalabama.edu/colleges/graduateschool/thesis.html>

1. The document submitted for the "First Submission" is your fully defended and updated copy approved by your committee and the SoC Director of Graduate Studies.
2. The "Final Submission" must include all corrections identified by the USA Graduate School after the first submission.

## Time Limit

All requirements for the PhD in Computing degree must be completed within ten (10) calendar years from the date of matriculation as a School

of Computing PhD student. This ten calendar year constraint also applies to all transfer credit.

After reaching candidacy, a student has a maximum of 3 years to complete the dissertation. A student may apply to the Director of Graduate programs for an extension to complete the degree.

## Transfer Credit

A maximum of 24 semester hours of graduate credit earned at a regionally accredited, or approved, graduate school may be counted toward the Ph.D. program. Transfer credit may be approved after the completion of nine (9) semester hours of credit at the University of South Alabama. Transfer credit must be approved by the School of Computing Director of Graduate programs and the Dean of USA Graduate School with the recommendation of the student's advisor or Dissertation Committee Chair.

## Academic Standards

Student must maintain a cumulative 3.0 GPA in order to be in good standing. Failure to maintain a cumulative 3.0 GPA will result in the student being placed on academic probation. The School of Computing Director of Graduate Programs may recommend dismissal of a student who does not maintain good academic standing or is not making sufficient progress.

## Student Expectations

The PhD Program requires independent work. Faculty members take on much more of a mentoring role than teacher/student. Students are expected to:

- Work independently
- Be responsible for their own academic progress
- Build relationships with faculty members ( you will need committee members and people to write letters of recommendation later)
  - a. Identify Dissertation Committee Chair, and other members
- Become a Researcher
  - a. Attend available and relevant distinguished lecture presentations, research group meetings, participate when appropriate.
  - b. Attend appropriate conferences - these allow you meet other researchers in your area of study.
    - i. Limited funding for graduate students to attend conferences is available through the USA Graduate School. This is typically used to support students who are presenting their accepted papers at the conference.
    - ii. Students working on funded research grants may also have limited travel funding available as part of the grant budget.
  - c. Seek out opportunities to collaborate with faculty on research projects.
  - d. Volunteer to help in a research lab.
  - e. Identify your own areas of research and develop dissertation topic.

## Academic Advisor

Upon entry into the PhD program, the Director of Graduate Studies will serve as your initial academic advisor. As you discover a research interest and develop relationships with our researchers, you will identify a SoC researcher who can help guide your research and serve as the Chair of your Dissertation Committee. At the time, your Dissertation Committee Chair will take over as your primary academic advisor.

- You must ask the researcher if they are willing to serve as your Dissertation Committee Chair. They can say no - it is a voluntary position.

## Dissertation Work

A primary educational objective of the PhD program is for students to develop the ability to conduct advanced research and contribute new knowledge to the discipline. Your thesis or dissertation is a significant and time-consuming undertaking that must reflect a mastery of your field, contribute to the existing body of knowledge of your field and demonstrate the level of high quality expected by the Graduate School and USA. A dissertation can take several years to complete. You, as the independent researcher, with the support and direction of the SoC graduate faculty, are responsible for identifying your dissertation topic, Dissertation Committee and Committee Chair. Your Dissertation Committee Chair can assist you in identifying appropriate committee members.

- Dissertation Committee — Your dissertation committee must consist of a minimum of 4 members:
  - a. One-half of the committee must be members of the USA Graduate Faculty (members are listed here - <https://www.southalabama.edu/colleges/graduateschool/faculty.html>) but consist of most of the tenured or tenure-track assistant, associate, or full professors).
  - b. The Dissertation Committee Chair must be a full member of the USA Graduate Faculty.
  - c. One committee member must be from outside the SoC.
  - d. Committee members may be external to USA or someone is not a member of the graduate faculty, if it benefits the research. This person cannot serve as Chair, but may be Co-Chair. An Outside Member Committee Appointment Form (<https://www.southalabama.edu/departments/eforms/graduateschool/thesisdissertationcompcommitteeapptnongradfaculty.pdf>) must be submitted to the Director of Graduate Studies.
    - i. A committee member who is external to USA would also meet the requirement for a member outside the SOC.
  - e. The Committee is formed with the submission of the Dissertation Committee Form (<https://www.southalabama.edu/colleges/graduateschool/resources/thesisdissertationcompcommitteeappt111523.pdf>) to the Director of Graduate Studies.
  - f. Your Dissertation Committee and, especially your Dissertation Committee Chair should be identified as early in the process as possible so they can help guide you in the choice of electives and participation in research activities.
  - g. Committee Changes — It is possible that your committee will change after it has been established. Members may decide they no longer want to work on your committee, you may want to replace members of your committee, faculty members may leave, etc. **It is the responsibility of the student to identify new committee members and/or chair as necessary.** Students will not be able to progress in the dissertation process without a Dissertation Committee Chair and a full committee.
- Dissertation Prospectus — Your dissertation will begin with the prospectus, which is a written document that identifies the problem you have chosen to study, why it is important, and your anticipated research methodology. It will, once approved, establish expectations between you and the SoC graduate faculty as to what is expected from your dissertation work.
  - a. Key Components - A prospectus is a written document that contains the following key elements:
    - i. Problem/topic
    - ii. Review of existing body of knowledge
    - iii. Description of study (must include subjects, procedures, equipment, materials, schedule, and other pertinent information)
    - iv. Anticipated nature of results
    - v. Description of anticipated method of analysis
    - vi. Implications and impact on existing body of knowledge
  - b. Your prospectus must be presented to your committee during an oral defense meeting.
    - i. A complete Dissertation Committee is required for a prospectus defense.
    - ii. All members of your committee must attend (in person or virtually) the Prospectus Defense meeting.
    - iii. You must be prepared to answer questions regarding your prospectus.
    - iv. A successful defense of your prospectus **MUST** be completed before you begin work on your research project, including any data collection.
      1. NOTE: This requirement does not apply to a 3-paper model dissertation. In this case, papers may be in progress prior to the successful prospectus defense.
    - v. See the USA Graduate School website (<https://www.southalabama.edu/colleges/graduateschool/>) for additional information, guidelines, and template.
- IRB Approval - If your study involves human research, you must obtain USA Institutional Review Board (IRB) approval (<https://www.southalabama.edu/departments/research/compliance/humansubjects/>) prior to data collection.
- Dissertation Writing — Your dissertation is the written document detailing the results of your research study.
  - a. Key Components (Traditional Dissertation Model) - Your dissertation must contain and address certain key elements:
    - i. Problem/topic
    - ii. Review of existing body of knowledge
    - iii. Description of study (must include subjects, procedures, equipment, materials and other pertinent information)
    - iv. Results
    - v. Analysis of results
    - vi. Implications and impact on existing body of knowledge
  - b. Requirements for a 3-Article Dissertation - A 3-Article Dissertation model may only be used with the approval of the Dissertation Chair. This model is not appropriate for all areas of research.
    - i. If approved, the Dissertation Chair will provide details on specifications, components, and requirements for this type of dissertation.
    - ii. Be sure to review the School of Computing 3 Model Dissertation Model document, available from the Director of Graduate Studies.
  - c. Formatting — Your dissertation must follow acceptable formatting and referencing styles. You may use APA, MLA, IEEE, etc. However, you must follow exactly the formatting requirements of the USA Graduate School as indicated in their documentation <https://www.southalabama.edu/colleges/graduateschool/thesis.html>. Be sure to review the specific requirements outlined in the Guide for Preparing Theses and

Dissertations (<https://www.southalabama.edu/colleges/graduateschool/resources/thesisdissertationguide9822.pdf>) and the Thesis Template (be sure to read all of the comments as well as the text contained in the template). All dissertations completed at USA are published in the ProQuest online database.

- d. Approval Process – You will work primarily, but not exclusively, with your Dissertation Committee Chair on the writing of your dissertation. The writing process will be iterative and cyclical – be sure you allocate sufficient time in your schedule for the entire review process.
  - i. Chair Review - You will write portions or chapters of it at a time, submit it to your Committee Chair for review and feedback (this may take 1-2 weeks), make corrections, and submit again for additional review and feedback.
    - 1. The chair is responsible for ensuring that the dissertation has been checked for plagiarism through TurnItIn, or another similar program.
  - ii. Committee Review - Once the document has the approval of your Committee Chair, it will be sent to the entire committee for their review and feedback (this may take 1-2 weeks), make corrections, and submit again for additional review and feedback.
    - 1. Once the entire committee approves, a dissertation defense meeting may be scheduled.
  - iii. Director of Graduate Studies Review – You need to submit your almost finalized dissertation to the Director of Graduate Studies for review of the formatting and template requirements. This process is cyclical as well so allow adequate time for the review, feedback, and correction cycle.
  - iv. Submit a copy of your signature page to the USA Graduate School for approval before the defense meeting.
- e. Dissertation Defense – Your dissertation must be presented to your committee, and the USA Research Community, during a publicized dissertation defense meeting.
  - i. Students must be enrolled in at least one semester hour of CIS 799 during the semester they defend their dissertation.
  - ii. All members of your committee must attend (in person or virtually) the Dissertation Defense meeting.
  - iii. You must be prepared to answer questions regarding your research, including methodology, data analysis, and conclusions.
  - iv. A successful defense of your dissertation, including all indicated updates and corrections, MUST be completed before it can be submitted to the USA Graduate School.
- f. Defense Submission
  - i. Once your dissertation has been successfully defended, the members of your committee and the Director of Graduate Studies must sign your approved signature page. This may be done electronically.
  - ii. The finalized copy of dissertation must be submitted to the Director of Graduate Studies for final review and approval.
  - iii. The members of your committee and the Director of Graduate Studies must also sign your [Dissertation Submission form](#). This may be done electronically or in person.
    - 1. The Director of Graduate Studies will not sign the submission form until the finalized copy of the dissertation has been submitted to them and approved.
  - iv. The student will electronically submit the signed signature page, the dissertation document (as a searchable pdf or word document), and the signed Dissertation Submission Form to

the USA Graduate School. Scanned pdf's and paper copies will not be accepted. Be sure to be aware of the submission deadline dates as indicated on the USA Graduate School (<https://www.southalabama.edu/colleges/graduateschool/thesis.html>) website.

## Graduation

PhD students must apply for graduation in the term they submit their finalized and approved dissertation to the USA Graduate School. For specific information see the Registrar's Website. (<https://www.southalabama.edu/departments/registrar/>)

- Due to the cyclical review process and the graduate school submission deadlines, it may not be possible to know which semester you are going to graduate until after the posted graduation application deadline.
- Many PhD students complete a Late Graduation Application ([https://www.southalabama.edu/departments/eforms/registrar/late\\_graduation\\_application.pdf](https://www.southalabama.edu/departments/eforms/registrar/late_graduation_application.pdf)) to avoid having to apply for graduation multiple times, as the graduation fee is required to be paid every time you apply for graduation. This does incur a small late fee.
- PhD students who participate in the USA Graduation ceremony will be hooded on stage by their Dissertation Committee Chair, or other committee member if the Chair is not available.

## Graduation Plan

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
ISC 673	Digital Investigations	3
CSC 612	Cybersecurity	3
ISC 629	Comp Ecosystems	3
Elective	Elective	3
<b>Hours</b>		<b>12</b>
<b>Spring</b>		
ISC 686	Risk Analysis	3
CSC 626	Advanced Big Data	3
ISC 675	Information Systems	3
Elective	Elective	3
<b>Hours</b>		<b>12</b>
<b>Second Year</b>		
<b>Fall</b>		
CIS 799	Dissertation	3
CIS 799	Dissertation	3
Elective	Elective	3
Elective	Elective	3
<b>Hours</b>		<b>12</b>
<b>Spring</b>		
CIS 799	Dissertation	3
CIS 799	Dissertation	3
Elective	Elective	3
Elective	Elective	3
<b>Hours</b>		<b>12</b>
<b>Third Year</b>		
<b>Fall</b>		
Elective	Elective	3
CIS 799	Dissertation	3
CIS 799	Dissertation	3
CIS 799	Dissertation	3
<b>Hours</b>		<b>12</b>

Spring		
Elective	Elective	3
CIS 799	Dissertation	3
CIS 799	Dissertation	3
CIS 799	Dissertation	3
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>72</b>

## Information Systems And Technology

### Department Information

Department of Information Systems and Technology website  
<https://www.southalabama.edu/colleges/soc/cist> (<https://www.southalabama.edu/colleges/soc/cist/>)

Title	Name
Senior Instructor, Information Technology Degree Program Coordinator, and Department Chair	Mrs. Angela M. Clark
Professor, Information Systems Degree Program Coordinator	Dr. Jeffrey P. Landry
Associate Professor, Health Informatics Degree Program Coordinator	Dr. Matt Campbell

### Information Systems

The Information Systems (IS) discipline centers on the development of systems that will improve the performance of people in organizations. Information Systems professionals design, implement, and maintain the information systems that form the backbone of today's global economy. Information Systems graduates pursue professional careers as application developers, database analysts, systems analysts, IS project managers and directors. The combination of business, technical, and interpersonal skills are what recruiters seek in IS graduates.

### Health Informatics

Technology is revolutionizing the way that healthcare is delivered both in the United States and around the world. The Health Informatics discipline focuses on improving patient care and outcomes through the use of information systems. Health Informaticists accomplish this in three main ways: supporting the healthcare provider, improving the efficiency and effectiveness of the healthcare organization, and empowering the patient to be more involved in their own care. Health Informatics graduates pursue professional careers with hospitals, large clinics, healthcare software vendors, and various state and federal agencies. The combination of healthcare, technical, and interpersonal skills allow HI graduates to enter these organizations and be productive immediately without the additional training that other traditional technologists may require. Health Informatics is a rapidly growing field that provides graduates who save lives and impact society through the use of technology.

### Information Technology

Information technology professionals utilize state-of-the-art, computer-based tools to deliver today's rapidly evolving computing technology to knowledge workers in widely diverse situations. The information technologist must be prepared to work in the complex network and World-Wide-Web environments to meet the needs of the end users in today's organizations. These tasks require bringing solutions together using the

different technologies developed by the computer engineers, computer scientists, and information scientists.

## Degrees, Programs, or Concentrations

- Cybersecurity (MS) (p. 960)
- Graduate Information Systems Cybersecurity Certificate (p. 961)
- Health Informatics (BS) (p. 961)
- Health Informatics Certificate (p. 964)
- Information Systems (BS) (p. 964)
- Information Systems (MS) (p. 968)
- Information Systems Minor (p. 968)
- Information Technology (BS) (p. 968)
- Information Technology Minor (p. 971)
- Process Technology Certificate Non-Degree Program (p. 972)

## Courses

### Computer Info Sciences (CIS)

#### CIS 010 Computer Proficiency Exam 0 cr

The purpose of this course is to administer the Computer Proficiency Exam (CPE) for enrolled students. The CPE consists of multiple choice and performance-based questions for general computer, internet, WWW, e-mail, and office application concepts. Performance-based questions require a series of actions in a simulated environment to demonstrate specific skills being assessed. No outside materials or assistance from the applications' Help files are allowed.

#### CIS 100 Information Tech in Society 1 cr

A discussion of the impact of information technology on personal, local, national, and global issues. Not to be taken with CIS 110.

#### CIS 101 Freshman Seminar CIS 2 cr

A course for first-time students that assists with maximizing the student's potential to achieve academic success and to adjust responsibly to the individual and interpersonal challenges presented by college life for a major in the School of CIS. Taught in small groups, the course provides an introduction to the nature of higher education and a general orientation to the functions and resources of the University and the School of CIS. Extensive reading and writing assignments relevant to the student's first year experience are required.

#### CIS 110 Intro to Comp-Info Sciences 3 cr

An introduction to information technology using a programming language to study applications in text searching, in real-time 3-D animation, and in sound production. A discussion of the social, ethical, economic, and philosophical implications of computing.

#### CIS 115 Beginning Programming 3 cr

A first course in programming uses an interpreted, interactive, object-oriented programming language. Coverage includes algorithmic problem solving, logical thinking, fundamentals of programming, variables and static values, sequential coding, decisions, and repetition.

**Prerequisite:** MMT 080 or A02 23 or (MA 112 Minimum Grade of C or MA 171 Minimum Grade of C) or MA 267 Minimum Grade of C or (MA 125 Minimum Grade of C or MA 132 Minimum Grade of C)

#### CIS 121 Prob Solv-Prog Concepts II 4 cr

Continuation of CIS 120. Topics include: design concepts, abstract data types, use of object libraries, dynamic storage allocation, stacks, queues, link lists, random access files, testing and software engineering practices.  
**Prerequisite:** (CIS 120 Minimum Grade of C or CIS 141 Minimum Grade of C)

**CIS 140 Intro to Tech for Healthcare 3 cr**

This course is designed to provide a broad-based introduction to the use of computers and productivity software technologies for healthcare providers. Topics to be covered include use of a current Operating System and basic file management; the fundamentals of word processing, spreadsheet and graphics-based presentation software; basic image management related to documents and reports; as well as electronic health records systems. Other topics covered include information assurance, protecting patient privacy, social networks, computing safety, and professional coping skills.

**CIS 150 Intro to Computer Applications 3 cr**

This course is designed to provide a broad based introduction to the use of computers and productivity software technologies. Topics to be covered include: use of a current Operating System and basic file management; the fundamentals of word processing, spreadsheet and graphics-based presentation software; and basic image management related to documents and reports. Other topics covered include information assurance and computing safety as related to PC/Internet usage.

**CIS 150L Intro to Comp Applications Lab 0 cr**

Laboratory course for CIS 150, Introduction to Computer Applications.

**CIS 190 Special Topics- 1-3 cr**

Selected topics in computer and information sciences. Requires permission of Specialization Coordinator.

**CIS 210 Intro to C++ Programming 3 cr**

Introduction and fundamentals of C++ programming, input-output operations, variables, data types, arithmetic expressions, control statements, looping, functions, arrays, pointers, strings, structures, and abstract data types.

**Prerequisite:** MA 125 (may be taken concurrently) Minimum Grade of C  
**Cross-Listed:** CPE 260

**CIS 211 Advanced C++ Programming 1 cr**

Advanced concepts in C++ programming, constructors, destructors, classes and operation overloading.

**Prerequisite:** (CIS 121 Minimum Grade of C or CIS 210 Minimum Grade of C)

**CIS 227 Numerical Computation I 3 cr**

Floating point numbers, representation, and errors; software tools for scientific computing; elementary problems in scientific computing.

**Prerequisite:** MA 126 Minimum Grade of C or MA 233 Minimum Grade of C

**CIS 230 Adv Data-File Structures 3 cr**

Extension of elementary data structures as covered in CIS 121, techniques to organize and access collections of data. Definition, implementation, and use of Classes and Abstract Data Types (ADT). The use of ADTs and objects for solving CIS problems. Network, hierarchical, and relational data models leading to Database Management Systems. Topics include: recursion, search trees, algorithmic complexity, advanced searching and sorting algorithms, and graphs.

**Prerequisite:** (CIS 121 Minimum Grade of C or CIS 142 Minimum Grade of C or CIS 211 Minimum Grade of C) and MA 267 Minimum Grade of C

**CIS 235 Programming Language Seminar 3 cr**

Fundamentals of syntax and style for a relevant, or current programming language. Includes application development in that language. Recommended: Knowledge of a programming language.

**CIS 250 Advanced Comp Applications 3 cr**

This course is designed to provide continuing, advanced coverage of productivity software technologies. Topics to be covered in depth include: fundamental and advanced features of spreadsheet and database management software. Other topics covered include information assurance and computing safety as related to PC/Internet usage.

**CIS 250L Adv Comp Applications Lab 0 cr**

Laboratory course for CIS 250, Advanced Computer Applications.

**Prerequisite:** CIS P or CIS 150 Minimum Grade of C

**CIS 300 Information Tech in Society 1 cr**

A discussion of personal, local, national, and global impact of information technology on ethical, legal, and social issues. Requires Junior standing in the School of Computing.

**CIS 321 Data Comm and Networking 3 cr**

An introduction to data communications, computer networking and network operating systems. Topics include: basic concepts of data transmission, network architectures, communications devices, and communication protocols.

**Prerequisite:** ISC 245 Minimum Grade of C or ITE 271 Minimum Grade of C or CIS 120 Minimum Grade of C or CSC 120 Minimum Grade of C

**CIS 322 Operating Systems 3 cr**

This course covers the development of operating systems that control computing systems. Topics include: file systems, process management, scheduling, memory management (real and virtual), security, and concurrency. Case studies of operating systems are examined.

**Prerequisite:** (CIS 230 Minimum Grade of C or CIS 263 Minimum Grade of C)

**CIS 324 Database Design-Dev-Mgt 3 cr**

Analysis, design, and development of desktop database systems. Coverage of normalization concepts, DBMS models, E-R/Semantic modeling, and query processing.

**Prerequisite:** ((MA 112 Minimum Grade of C or MA 171 Minimum Grade of C) or (MA 120 Minimum Grade of C or MA 287 Minimum Grade of C) or MA 267 Minimum Grade of C or (MA 125 Minimum Grade of C or MA 132 Minimum Grade of C) or A02 23) or MMT 080 and (ISC 245 Minimum Grade of C or ITE 271 Minimum Grade of C) or (CSC 121 Minimum Grade of N or CIS 121 Minimum Grade of C)

**CIS 401 Accelerated Programming 3 cr**

This course presents programming concepts in an accelerated manner. Coverage includes ADT's, Classes and Class Libraries, and simple data structures such as linked lists, stacks, queues. Laboratory assignments will be done in a high level, object-oriented language. This course does not count towards a graduate degree in CIS. Requires prior programming experience and permission of Coordinator.

**Cross-Listed:** CIS 121, CIS 123, CIS 501

**CIS 402 Accelerated OS-Comp Arch 3 cr**

This course presents computer architecture and operating systems concepts in an accelerated manner. Coverage includes machine and assembly languages, functioning of a simple processor, machine level data flow, microprogramming, I/O, interrupts and processing drivers, memory management, dynamic process scheduling, and multi-tasking. This course does not count toward a graduate degree in CIS. Requires prior programming experience desired and permission of Coordinator.

**Cross-Listed:** CIS 322, CIS 502

**CIS 403 Accelerated Data-File Structs 3 cr**

This course applies advanced programming concepts and techniques to data structures such as linear and linked list trees, records, files, and database. Sequential and random access file processing methods; searching and sorting methods. Laboratory assignments will be done in a high-level, object-oriented language. This course does not count toward a graduate degree in CIS.

**Prerequisite:** CIS 121 Minimum Grade of B or CIS 123 Minimum Grade of B or CIS 142 Minimum Grade of B or CIS 401 Minimum Grade of B or CIS 501 Minimum Grade of B

**Cross-Listed:** CIS 230

**CIS 404 Accelerated Networks-Comm 3 cr**

This course presents network and communications concepts in an accelerated manner. Coverage includes signaling concepts, communication devices, switching, network architectures and protocols, OSI reference model, network management and planning. This course does not count toward a graduate degree in CIS.

**Prerequisite:** CIS 222 Minimum Grade of B or CIS 322 Minimum Grade of B or CIS 402 Minimum Grade of B or CIS 502 Minimum Grade of B

**Cross-Listed:** CIS 321, CIS 504

**CIS 405 Programming Languages 3 cr**

This course examines formal language concepts of programming languages including syntax and basic grammars. Language features such as data types and structures, control structures, and data flow will be studied. Laboratory assignments include the use of high level languages as well as the use of windows API.

**Prerequisite:** CIS 230 Minimum Grade of B or CIS 263 Minimum Grade of B or CIS 403 Minimum Grade of B

**Cross-Listed:** CIS 333

**CIS 406 IS in Organizations 3 cr**

An examination of the relationship of information systems in organizations and the impact on people in the organization with respect to planning and decision making. Other topics covered include general systems theory, data security and integrity, application access control, project management, and large group behaviors.

**Prerequisite:** (CIS 230 Minimum Grade of B or CIS 263 Minimum Grade of B or CIS 403 Minimum Grade of B or CIS 503 Minimum Grade of B or (ITE 285 Minimum Grade of B or ISC 508 Minimum Grade of B) or ITE 451 Minimum Grade of B)

**CIS 407 Database Programming 3 cr**

This course examines implementation and access of databases via event-driven applications developed with visual programming tools. Other topics covered are elementary E-R modeling, data integrity, referential integrity, report development, interface design. This course does not count towards a graduate degree in CIS.

**Prerequisite:** (CIS 230 Minimum Grade of B or CIS 263 Minimum Grade of B or CIS 403 Minimum Grade of B)

**Cross-Listed:** CIS 324

**CIS 439 Windows Programming 3 cr**

This course continues and expands the study of programming begun in either ITE 285 or CIS 121. Concepts previously learned are extended to application programming in the windows (GUI) environments. Students will make use of the OLE, DDE, API features of windows in programming projects. Students will write and use their own DLL's in producing user interfaces and applications projects.

**Prerequisite:** CIS 230 Minimum Grade of C or CIS 263 Minimum Grade of C or ITE 285 Minimum Grade of C or ITE 451 Minimum Grade of C or CSGD 030

**CIS 490 CIS Sp Top - 3 cr**

Advanced selected topics in computer and information sciences. Requires permission of the specialization coordinator.

**Prerequisite:** CSPC 30

**CIS 494 Directed Studies 1-3 cr**

May be taken for a maximum of six credits, only three of which may be applied to the CIS major or minor. Requires permission of the specialization coordinator.

**CIS 496 CIS Internship 3 cr**

CIS internship program is designed to give advanced students practical experience in the computer industry. Students will work on sponsored projects with faculty advisors. Credit may apply to degree with approval of the dean. Requires GPA 2.75 or higher and permission of the Dean.

**CIS 497 Senior Capstone Experience-W 3 cr**

A comprehensive team project will be completed and documented. Writing assignments will reinforce the importance of life-long learning, leadership skills, and the ethical issues of computing as well as appropriate resume and job application cover letter creation. Oral and written reports will be required. This course is to be taken the final semester of the student's degree program. Requires application for graduation filed the semester before registering for the course.

Completion of the following courses according to major: Computer Science-CSC 322 and CSC 333; Information Systems-ISC 360; Information Technology-ITE 370.

**Prerequisite:** (EH 372 Minimum Grade of C or EH 373 Minimum Grade of C) and (CSC 322 Minimum Grade of C and CSC 333 Minimum Grade of C) or ISC 360 Minimum Grade of C or ITE 370 Minimum Grade of C

**Corequisite:** CIS 498

**CIS 498 CIS Senior Seminar 0 cr**

A series of mini-seminars designed to prepare graduating seniors for transition to professional careers in computing or graduate study and to assess student learning outcomes in the curriculum. Mini-seminars would include, but would not be limited to: resume development, interviewing tips and techniques, career planning, professionalism and ethics in the workplace, and advanced graduate study and professional development. Each student will be required to complete one or more senior exit exams and a senior exit survey. **Prerequisite:** Computer Science: CSC 331; Information Systems: ISC 360; Information Technology: ITE 370.

**Prerequisite:** CIS 497 (may be taken concurrently) Minimum Grade of C and (CSC 331 Minimum Grade of C or ISC 360 Minimum Grade of C or ITE 370 Minimum Grade of C)

**Corequisite:** CIS 497

**CIS 499 CIS Senior Honors Project - H 3-6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project, relevant to the field of computing, that will lead to a formal presentation at the annual Honors Student Colloquium. The senior honors project will be judged and graded by three faculty chaired by the honors mentor. This course is required for Honors recognition and may be repeated for up to 6 credit hours. Requires completion of an approved project prospectus and permission of the appropriate Coordinator.

**Prerequisite:** CSPC 30

**CIS 500 Basic Computing Prin and Appl 3 cr**

Introduction to computers and computer applications. Components of a computer system will be presented. Word processing, systems design and implementation, and programming concepts will be introduced. Not to be taken for CIS graduate credit.

**CIS 501 Accelerated Programming 3 cr**

This course presents programming concepts in an accelerated manner. Coverage includes ADT's, Classes and Class Libraries, and simple data structures such as linked lists, stacks, queues. Laboratory assignments will be done in a high level, object-oriented language. This course does not count towards a graduate degree in CIS. Prerequisite: Prior programming experience desired and permission of Coordinator.

**Cross-Listed:** CIS 121, CIS 401

**CIS 502 Accelerated OS-Comp Arch 3 cr**

This course presents computer architecture and operating systems in an accelerated manner. Coverage includes machine and assembly languages, functioning of a simple processor, machine level data flow, microprogramming, I/O, interrupts and processing drivers, memory management, dynamic process scheduling, and multi-tasking. This course does not count towards a graduate degree in CIS. Prerequisites: Prior programming experience and permission of Coordinator.

**Cross-Listed:** CIS 322, CIS 402

**CIS 503 Accelerated Data-File Structs 3 cr**

This course applies advanced programming concepts and techniques to data structures such as linear and linked list, trees, records, files, and database. Sequential and random access file processing methods; searching and sorting methods. Laboratory assignments will be done in a high-level object-oriented language. This course does not count towards a graduate degree in CIS.

**Prerequisite:** (CIS 121 Minimum Grade of B or CIS 123 Minimum Grade of B or CIS 142 Minimum Grade of B or CIS 501 Minimum Grade of B) or CIS 401 Minimum Grade of B

**Cross-Listed:** CIS 230, CIS 403

**CIS 504 Accelerated Networks - Comm 3 cr**

This course presents networks and communications concepts in an accelerated manner. Coverage includes signaling concepts, communications devices, switching, network architectures and protocols, OSI reference model, network management and planning. This course does not count towards a graduate degree in CIS.

**Prerequisite:** (CIS 222 Minimum Grade of B or CIS 322 Minimum Grade of B or CIS 402 Minimum Grade of B or CIS 502 Minimum Grade of B or ISC 506 Minimum Grade of B)

**Cross-Listed:** CIS 321, CIS 404

**CIS 505 Programming Languages 3 cr**

This course examines formal language concepts of programming languages including syntax and basic grammars. Language features such as data types and structures, control structures, and data flow will be studied. Laboratory assignments include the use of high level languages as well as the use of windows API.

**Prerequisite:** (CIS 230 Minimum Grade of B or CIS 263 Minimum Grade of B or CIS 403 Minimum Grade of B or CIS 503 Minimum Grade of B or ISC 508 Minimum Grade of B)

**Cross-Listed:** CIS 333, CIS 405

**CIS 506 IS in Organizations 3 cr**

An examination of the relationship of information systems in organizations and the impact on people in the organization with respect to planning and decision making. Other topics covered include general systems theory, data security and integrity, application access control, project management, and large group behaviors. This course does not count toward a graduate degree in CIS.

**Prerequisite:** (CIS 230 Minimum Grade of B or CIS 263 Minimum Grade of B or CIS 403 Minimum Grade of B or CIS 503 Minimum Grade of B or ISC 508 Minimum Grade of B) or (ITE 285 Minimum Grade of B or ITE 451 Minimum Grade of B)

**Cross-Listed:** CIS 406

**CIS 507 Database Programming 3 cr**

This course examines implementation and access of databases via event-driven applications developed with visual programming tools. Other topics covered are elementary E-R modeling, data integrity, referential integrity, report development, interface design. This course does not count towards a graduate degree in CIS.

**Prerequisite:** (CIS 230 Minimum Grade of B or CIS 263 Minimum Grade of B or CIS 403 Minimum Grade of B or CIS 503 Minimum Grade of B or ISC 508 Minimum Grade of B)

**Cross-Listed:** CIS 324, CIS 407

**CIS 518 CIS Research Methodologies 3 cr**

A review of computer and information science literature and research topics. Techniques for defining research goals will be described. Students will be expected to identify a research area and conduct a complete review of the literature.

**Prerequisite:** CSGR P

**CIS 530 Information Assurance/IT Audit 3 cr**

This course covers the understanding and managing of risks and threats to information and information systems. This includes protecting and defending information and information systems by ensuring through authorization and other means concepts such as accessibility, secrecy, reliability, and authentication.

**Prerequisite:** CSGR P

**CIS 535 Digital Forensic Analysis 3 cr**

This course provides students with advanced tools, techniques, and methodologies for accumulating, securing, analyzing, managing, and reporting evidence related to a forensics examination. The professional communication and presentation of the results of forensic investigations will be emphasized.

**Prerequisite:** CSGR P

**CIS 538 OS Concepts and Security 3 cr**

This course examines the concepts of operating systems such as memory and virtual memory management, as well as processor, process, device, and file management. Topics include the management and organization of network operating systems and operating system security and ethics. Students will manage, configure, and secure operating systems such as Windows, Unix, and Linux in laboratory environments.

**Prerequisite:** CSGR P

**CIS 539 Windows Programming 3 cr**

The practice and principles of developing interactive desktop computer applications. Aspects to be covered will include graphical user interface; use of sophisticated widget, container, and utility libraries; event-driven programming; two-dimensional graphics; in-memory database; and deployment.

**Prerequisite:** CSGR P

**CIS 540 Network Security Management 3 cr**

This course examines network and web security issues including: risks and threats, system access points, hardware and software defense methods, and organizational security policies. The course will cover the analysis of systems for vulnerabilities, the implementation of security procedures, the monitoring of systems for security breaches, and the recovery or restoration of breached systems.

**CIS 590 CIS Sp Top - 3 cr**

Advanced selected topics in computer and information sciences.

Requires permission of the CSC Coordinator

**Prerequisite:** CSGR P

**CIS 594 Directed Studies - 1-3 cr**

May be taken for a maximum of three credits to count toward the degree. Requires permission of the Director of Graduate Studies.

**CIS 595 CIS Research Development 1-3 cr**

Development of the research proposal for master's thesis. Graduate Professional Component. Requires permission of the Director of Graduate Studies.

**Prerequisite:** CIS 518 Minimum Grade of S

**CIS 596 CIS Graduate Internship 3 cr**

CIS graduate internship program is designed to give graduate students practical experience in the computer industry. Students will work on sponsored projects with faculty advisors. Up to three hours may be counted toward the degree. Requires permission of the Director of Graduate Studies.

**CIS 597 CIS Graduate Seminar 1 cr**

This course prepares graduate assistants in the School of CIS to provide support and assistance to faculty for instruction in School of CIS classes. Topical coverage includes but is not limited to: graduate assistant expectations and responsibilities, protection of student educational information (FERPA), practical skills in assisting in computing instruction, graduate assistant best practices, and tips from faculty and experienced graduate assistants. This course does not count towards a graduate degree in CIS. Requires permission of the Director of CIS Graduate Studies.

**CIS 598 CIS Project 1-3 cr**

Approved investigation of original problems under direction of a faculty member. This course may be repeated for a maximum of three hours of credit towards the degree. Requires permission of the Director of Graduate Studies.

**CIS 599 CIS Thesis 1-9 cr**

This course may be repeated for a maximum of six credits. A thesis committee will provide direction during the thesis. Requires approval of the thesis project by graduate faculty and the Director of Graduate Studies.

**Prerequisite:** CIS 595 Minimum Grade of B

**CIS 694 Directed Study - 3 cr**

This course focuses on the development of the doctoral prospectus leading to the the defense of a dissertation.

**CIS 799 Dissertation 1-9 cr**

This course focuses on the development of the dissertation.

**Health Informatics (HI)****HI 300 Health Info Clinical Environme 3 cr**

This course provides an overview of concepts, terms, organization, and processes associated with patient care and clinical environments as they pertain to health informatics. The entire process of how a person accesses, moves within, and exits the system both as in inpatient and outpatient to obtain care. Students will observe and report on a variety of clinical settings and healthcare specializations throughout the semester. This course is designed for students with no prior clinical experience.

**Cross-Listed:** ISC 300

**HI 410 Health Informatics 3 cr**

This course provides an overview of the concepts, terms, tools, and architectures associated with health informatics as applied to healthcare delivery. Topics include: electronic record systems, computerized physician order entry, health system standards, terminologies, workflow modeling, security and privacy of clinical data, clinical reporting, and the impact of information technology use on the quality and efficiency of health care delivery and outcomes.

**Cross-Listed:** ISC 310, ISC 410

**HI 450 Health Data Secur/Compliance 3 cr**

This course involves a thorough examination of the security and privacy requirements of the Health Insurance Portability and Accountability Act (HIPAA) and the implementation of these requirements in the clinical environment. Students will learn how to address security issues from system development all the way through post-implementation, how to evaluate systems for vulnerabilities, and how to identify protected health information and covered entities.

**Prerequisite:** ISC 300 Minimum Grade of C or HI 300 Minimum Grade of C and (ISC 410 Minimum Grade of C or HI 410 Minimum Grade of C)

**Cross-Listed:** ISC 450

**HI 455 Hlth Data Mgt & Decision Supp 3 cr**

This course focuses on the design and management of electronic medical record systems and clinical decision support systems. Course content related to electronic medical record systems includes architectural components, technical design issues, and management; and, content related to clinical decision support systems includes decision support roles, extracting useful information from data, and legal and regulatory restrictions. Laboratory assignments will provide students with opportunities to interact with these systems. Prerequisites: HI 300 or ISC 300 and HI 410 or ISC 410.

**Prerequisite:** ISC 300 Minimum Grade of C or HI 300 Minimum Grade of C and ISC 410 Minimum Grade of C or HI 410 Minimum Grade of C

**Cross-Listed:** ISC 455

**HI 460 Consumer Health Informatics 3 cr**

This course provides an overview of the concepts, terms, tools, and architectures associated with consumer health informatics. It explores the design, use and impact of technologies that aim to engage consumers to participate in their health and healthcare. Topics include: patient engagement, persuasive system design, gamification, behavior change theory, patient portals, wearables, IoT and mHealth (mobile health).

**Prerequisite:** (HI 300 Minimum Grade of C and HI 410 Minimum Grade of C)

**HI 550 Health Data Secur/Compliance 3 cr**

This course involves a thorough examination of the security and privacy requirements of the Health Insurance Portability and Accountability Act (HIPAA) and the implementation of these requirements in the clinical environment. Students will learn how to address security issues from system development all the way through post-implementation, how to evaluate systems for vulnerabilities, and how to identify protected health information and covered entities.

**HI 555 Hlth Data Mgt & Decision Supp 3 cr**

This course focuses on the design and management of electronic medical record systems and clinical decision support systems.

Course content related to electronic medical record systems includes architectural components, technical design issues, and management; and, content related to clinical decision support systems includes decision support roles, extracting useful information from data, and legal and regulatory restrictions. Laboratory assignments will provide students with opportunities to interact with these systems.

**Information Systems (ISC)****ISC 190 IS Special Topics 1 cr**

Selected topics in information systems. Prerequisite: Permission of the ISC coordinator.

**ISC 245 Info Systems in Organizations 3 cr**

An overview of information systems topics from an organizational and managerial perspective. Topics include current information technology and systems, such as the Internet and its organizational impacts; the emergence of global economy and digital firms; and the ethical and social impacts of information systems, such as privacy, intellectual property rights, and liability. Issues and strategies regarding information systems planning, systems development, decision making, and using IT for competitive advantage are discussed. Throughout the course, students will investigate the strategic uses of information technology in current industry-specific situations.

**ISC 272 Systems Architecture 3 cr**

This course introduces students to Information Technology hardware and systems software concepts. Topics include: computer hardware, operating systems, system software, hardware and software integration, operating procedures, system performance, security/safety, and compatibility. Student labs and hands-on activities will include: Windows, Unix, and Linux systems, system utilities and software tools. Credit cannot be received for both ITE 272 and ISC 272.

**Prerequisite:** CIS 115 Minimum Grade of C

**Cross-Listed:** ITE 272

**ISC 285 Intermediate Programming 4 cr**

A second course in programming (using a visual, event-driven programming language) that builds on CIS 115. Topics include: transition to visual language, processing data, decisions, loops, methods, arrays and lists, text processing, structured data types. Programming projects are required. Credit cannot be received for both ISC 285 and ITE 285.

**Prerequisite:** CIS 115 Minimum Grade of C

**Cross-Listed:** ITE 285

**ISC 300 Health Informatics Clin Env 3 cr**

This course provides an overview of concepts, terms, organization, and processes associated with patient care and clinical environments as they pertain to health informatics. The entire process of how a person accesses, moves within, and exits the system both as an inpatient and outpatient to obtain care. Students will observe and report on a variety of clinical settings and healthcare specializations throughout the semester. This course is designed for students with no prior clinical experience.

**ISC 305 Info Systems-Technology 3 cr**

The analysis, design, and implementation of information systems. Analysis of the functional areas of business and integration of computer tools to satisfy information requirements. Current development in business computer systems, including surveys of current systems and the Internet. Computer classrooms are utilized to provide students with "hands on" experience.

**Prerequisite:** CIS 250 Minimum Grade of C

**ISC 310 Health Informatics 3 cr**

This course provides an overview of the concepts, terms, tools, and architectures associated with health informatics as applied to healthcare delivery. Topics include: electronic record systems, computerized physician order entry, health system standards, terminologies, workflow modeling, security and privacy of clinical data, clinical reporting, and the impact of information technology use on the quality and efficiency of health care delivery and outcomes. ISC 300 is a corequisite for students with no prior clinical experience.

**ISC 353 Info Sys Appl Development 3 cr**

This course provides an accelerated approach to programming in a high-level, object-oriented language, especially for information systems. Coverage includes algorithmic problem solving, fundamentals of programming, procedures, decisions, repetition, arrays, files, exception handling, and object-oriented programming. The format for this course is lecture/lab. The instructor will demonstrate in class, and students will learn by doing homework problems and programming assignments. This course does not count towards a graduate degree in CIS. Some prior programming experience is desired and permission of Coordinator. Prerequisites: Math placement score of 65 or higher.

**Prerequisite:** UTM 65 or DS 090 Minimum Grade of C or (MA 112 Minimum Grade of C or MA 171 Minimum Grade of C)

**ISC 360 Info Sys Analysis and Design-W 3 cr**

A thorough examination of the analysis and design of computer information systems from the systems analysts view. The course will use an established software development methodology. At each step in the software development life cycle, both the methodologies used and the documentation required will be examined.

**Prerequisite:** ISC 245 Minimum Grade of C and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**ISC 361 Advanced Application Development 3 cr**

This course explores advanced topics in applications development by connecting web applications written in a modern programming language with databases. Other topics: integrating programming components and libraries, application development and testing methodologies, and using an object oriented approach for multi-tiered applications. Programming projects are required. Credit cannot be received for both ITE 370 and ISC 361

**Prerequisite:** CIS 324 Minimum Grade of C and (ISC 285 Minimum Grade of C or ITE 285 Minimum Grade of C)

**Cross-Listed:** ITE 370

**ISC 362 IS Object-Oriented Analy-Des 3 cr**

This course provides an introduction to an object-oriented analysis and design (OOAD) methodology as well as the tools and techniques for supplementing this methodology. The course will also cover the use of notational metalanguages such as Unified Modeling Language (UML) and OOAD computer-assisted software engineering (CASE) tools.

**Prerequisite:** ISC 245 Minimum Grade of C

**ISC 410 Health Informatics 3 cr**

This course provides an overview of the concepts, terms, tools, and architectures associated with health informatics as applied to healthcare delivery. Topics include: electronic record systems, computerized physician order entry, health system standards, terminologies, workflow modeling, security and privacy of clinical data, clinical reporting, and the impact of information technology use on the quality and efficiency of health care delivery and outcomes.

**ISC 450 Health Sys Analysis and Design 3 cr**

This course provides an overview of the concepts, terms, tools, and architectures associated with health informatics as applied to healthcare delivery. Topics include: electronic record systems, computerized physician order entry, health system standards, terminologies, workflow modeling, security and privacy of clinical data, clinical reporting, and the impact of information technology use on the quality and efficiency of health care delivery and outcomes.

**Prerequisite:** ISC 410 Minimum Grade of C

**ISC 455 Health Data Mgt Decision 3 cr**

This course focuses on the design and management of electronic medical record systems and clinical decision support systems. Course content related to electronic medical record systems includes architectural components, technical design issues, and management; and, content related to clinical decision support systems includes decision support roles, extracting useful information from data, and legal and regulatory restrictions. Laboratory assignments will provide students with opportunities to interact with these systems.

**Prerequisite:** ISC 410 Minimum Grade of C

**ISC 457 Data Ware-Decision Support 3 cr**

This course examines the analysis and design issues as well as the architectural infrastructures associated with enterprise data warehouses for decision support. Prerequisites: CIS 324.

**Prerequisite:** CIS 324 Minimum Grade of C

**ISC 459 IS Appl Design-Implementation 3 cr**

Analysis and design of information systems to support multiple locations via Intranet/Internet access. Additional and supporting topics, such as corporate privacy and security are also covered.

**Prerequisite:** CIS 324 Minimum Grade of C

**ISC 462 IS Strategy and Policy 3 cr**

This course provides the top management, strategic perspective for aligning competitive strategy with information systems. Issues include the development and implementation of policies and plans to achieve organizational goals, including security policy.

**Prerequisite:** CIS 324 Minimum Grade of C

**ISC 463 IS Database Admn and Security 3 cr**

An examination of the issues and activities associated with the administrator function for databases. This course will cover installation, implementation, user management, backup, and security.

**Prerequisite:** CIS 324 Minimum Grade of C

**ISC 464 IS Security and Risk Mgmt 3 cr**

This course provides an introduction to the fundamental principles and topics of information systems security and risk management at the organizational level. This course views information security as a management issue that incorporates technical and management solutions. Topics include risk management, security policy, disaster planning, security law and ethics, and security education, training and awareness.

**Prerequisite:** (MGT 300 Minimum Grade of C or MGT 322 Minimum Grade of C) and (CIS 321 Minimum Grade of C or CIS 221 Minimum Grade of C)

**ISC 467 Enterprise Information Systems 3 cr**

This course provides an introduction to enterprise information systems and to business process modeling. Key concepts and techniques for identifying, designing, and documenting business processes will be presented. The way information technology can be used to manage, transform business processes is discussed. Successful organizational change strategies will be reviewed.

**Prerequisite:** (MGT 300 Minimum Grade of C or MGT 322 Minimum Grade of C) and CIS 324 Minimum Grade of C

**ISC 472 Advanced Data Management 3 cr**

This course provides an introduction to the concepts and technologies of big data. Key concepts and techniques allow organizations to analyze structured and unstructured data/information collected from transaction processing systems, data warehouses, and distributed systems. The ultimate purpose of descriptive, predictive, and prescriptive analytics is to support high quality decision support for executives and managers. Concepts of data mining, data storage, non-relational platforms, and considerations for new and emerging technologies are described in detail.

**Prerequisite:** (CIS 324 Minimum Grade of C or CSC 324 Minimum Grade of C) and (ISC 285 Minimum Grade of C or ITE 285 Minimum Grade of C or CSC 231 Minimum Grade of C)

**ISC 475 Info Systems Proj Management 3 cr**

This course examines the principles and techniques of project management from an information systems perspective. Major topics covered include project context, project selection, and project planning. Students work in collaborative teams and are instructed in the use of a project software tool. Credit cannot be received for both ITE 475 and ISC 475.

**Prerequisite:** CIS 324 Minimum Grade of C

**Cross-Listed:** ITE 475

**ISC 490 Special Topics 3 cr**

Advanced selected topics in information systems. Prerequisite: Permission of the ISC Coordinator.

**ISC 501 Programming for IS 3 cr**

This course covers programming concepts required by Information Systems professionals to provide a solid foundation for building applications. Coverage includes: data types, decision structures, repetition structures, graphical user interfaces (GUI), methods, arrays, files, and object oriented programming (OOP) concepts.

**ISC 507 IS Database Processing 3 cr**

Analysis, design and implementation of database systems for IS professionals. Coverage includes DBMS models, E-R modeling, normalization concepts, and the use of queries for processing data.

**ISC 510 Health Informatics 3 cr**

This course provides an overview of the concepts, terms, tools, and architectures associated with health informatics as applied to healthcare delivery. Selected research topics are introduced and independently studied. Topics include: electronic record systems, computerized physician order entry, health system standards, terminologies, workflow modeling, security and privacy of clinical data, clinical reporting, and the impact of information technology use on the quality and efficiency of health care delivery and outcomes. Prerequisite: Permission of the Director of CI Graduate Studies.

**Prerequisite:** CSGR P

**ISC 516 AI Theory and Programming 3 cr**

Introduction to basic concepts, implementation techniques, and philosophies of artificial intelligence and intelligent systems. Introduction to expert systems, fuzzy logic systems, neural networks, and techniques for artificial intelligence programming. The fundamentals of an AI programming language (LISP or PROLOG) will be presented. The language will then be used to solve problems in typical AI applications. Prerequisite: Graduate Professional Component Standing.

**Prerequisite:** CSGD 030

**ISC 545 Management Information Systems 3 cr**

This course provides an overview of information systems from an organizational, managerial, and technical perspective. The topics covered will focus on the strategic role of information systems and information technology in business processes, change and knowledge management, group and individual decision-making, and electronic commerce.

Specific topics include current hardware, infrastructure and connectivity technologies, software and systems development methodologies. Internet-based applications, management challenges and opportunities created by information systems and global connectivity such as privacy, data and systems security and control, intellectual property, ethical and social consequences of information technology, and the impact of digital integration on an organization's competitiveness, products, services, procedures, and management structures. Prerequisite: Permission of the Director of CIS Graduate Studies.

**ISC 550 Health Data Security & Comp 3 cr**

This course involves a thorough examination of the security and privacy requirements of the Health Insurance Portability and Accountability Act (HIPAA) and the implementation of these requirements in the clinical environment. Students will learn how to address security development all the way through post-implementation, how to evaluate systems for vulnerabilities, and how to identify protected health information and covered entities.

**ISC 551 Human-Comp Interface Design 3 cr**

The course covers principles, guidelines, and methods in human computer interface design. Students complete a project involving the development, evaluation, and demonstration of a user interface. The interface is designed around a user and task analysis performed on a given problem. Students plan and conduct a usability study of a working prototype and report on results and recommendations. Prerequisite: Graduate Professional Component.

**Prerequisite:** (CIS 501 Minimum Grade of B and CIS 507 Minimum Grade of B)

**ISC 553 IS Web Site Management 3 cr**

This course addresses the design, development, and management of a web server. Topics include the selection, installation, and configuration of an operating system and web server software, web server security and monitoring, and website maintenance. Prerequisites: Graduate Professional Component.

**Prerequisite:** CSGR P

**ISC 555 Health Data Mgt/Decision Supp 3 cr**

This course focuses on the design and management of electronic medical record systems and clinical decision support systems. Course content related to electronic medical record systems includes architectural components, technical design issues, and management; and, content related to clinical decision support systems includes decision support roles, extracting useful information from data, and legal and regulatory restrictions. Laboratory assignments will provide students with opportunities to interact with these systems.

**Prerequisite:** CSGR P

**ISC 557 Data Ware-Dec Support Systems 3 cr**

This course examines the analysis and design issues as well as the architectural infrastructures associated with enterprise-wide data warehouses. Prerequisite: CIS Graduate Professional Component.

**Prerequisite:** CSGD 030

**ISC 559 IS App Design-Implementation 3 cr**

Analysis and design of information systems infrastructures to support multiple locations, intranet/internet access, corporate privacy, and security. Capacity analysis and planning, installation, performance monitoring, and problem solving strategies. Prerequisites: ISC 501 and ISC 507

**Prerequisite:** (ISC 501 Minimum Grade of B and ISC 507 Minimum Grade of B)

**ISC 560 Info Systems Analysis-Design 3 cr**

This course will include an introduction to the systems development life cycle as well as a survey of analysis and design techniques. Detail topics will include information systems planning and project identification and selection, requirements collection and structuring, process modeling, data modeling, design of interface and data management, system implementation and operation, system maintenance, and change management implications of systems. Globalization issues in systems will also be discussed. Students will use current methods and tools such as rapid application development, prototyping, and visual development.

**ISC 561 IS Database Management 3 cr**

An introduction to database management systems. The data environment, basic technical concepts and systems resources, database concepts, including use and management of databases. Classical and current DBMS models will be presented. Laboratory project activity will involve definition, creation, and development of a database. Prerequisites: Graduate Professional Component.

**Prerequisite:** (ISC 507 Minimum Grade of B)

**ISC 562 IS Policy and Strategy 3 cr**

This course provides the top management, strategic perspective for aligning competitive strategy, core competencies, and information systems. Issues include the development and implementation of policies and plans to achieve organizational goals, including defining systems that support the operational, administrative, and strategic needs of the organization, its business units, and individual employees. Prerequisites: Professional Component

**Prerequisite:** CSGR P

**ISC 563 IS Database Administration 3 cr**

This course will examine the issues and activities associated with the administrator function for organizational databases. Topics include storage and indexing, query evaluation, physical database design, crash recovery, and security. Prerequisite: CIS Graduate Professional Component.

**Prerequisite:** CSGR P

**ISC 565 IS Project-Change Management 3 cr**

A study of the concepts and techniques of project management from an information systems perspective. The course provides an overview of project lifecycle activities, and a focus on managerial, behavioral, and process issues that surround the dynamic context of systems development. The issue of managing the change brought about by the introduction or modification of information systems in organizations will be discussed. Students will be instructed in the use of software tools for project management.

**ISC 567 IS Function Integration 3 cr**

The tactical/operational responsibilities and roles of the CIO. Governance considerations that link the IS-business organizations. Current/emerging issues in creating and coordinating the key activities necessary to manage the day-to-day operations of the IS function. Coordinating skills and organizational IS infrastructure.

**Prerequisite:** (ISC 501 Minimum Grade of B and ISC 561 Minimum Grade of B)

**ISC 568 IS Enterprise Integration 3 cr**

Information systems role in transforming organizations and industries. An integrated view of the organization from an external and internal perspective. IS' internal role in integrating the enterprise through a cohesive set of business processes and functional applications to meet business needs. Enterprise resource planning and enterprise functionality. Collaborative systems. Consideration of external relations with suppliers, outsourcers, and customers. Prerequisite: ISC 559.

**Prerequisite:** ISC 559 Minimum Grade of B

**ISC 572 Advanced Data Management 3 cr**

The focus here is on the management of data and the technologies which specifically targets mass data storage with a view to online and after-the-fact examination of data to acquire new insights. The major topics include: data warehouse planning, data warehouse models, and supporting software, data mining concepts and tools, creation of data mining models for the tools and matching the tool to the task.

Prerequisite: CIS Graduate Professional Component

**Prerequisite:** CSGR P

**ISC 590 IS Sp Top - 3 cr**

Advanced selected topics in information systems. Prerequisite: Permission of ISC coordinator.

**Prerequisite:** CSGR P

**ISC 595 IS Project Proposal Develop 1-3 cr**

Development of the project proposal for the Information Systems specialization master's project. Prerequisites: CIS 518, Graduate Professional Component, Permission of Director of CIS Graduate Studies.

**Prerequisite:** CIS 518 Minimum Grade of S

**ISC 598 Information Systems Project 1-3 cr**

This course may be repeated for a maximum of six (6) credits. A CIS project committee will provide direction during the project. Prerequisite: Approval of project proposal by the student's project committee, and permission by Director of CIS Graduate Studies.

**Prerequisite:** (ISC 595 Minimum Grade of B and CSIP P)

**ISC 629 Comp Ecosystems 3 cr**

This course focuses on developing expertise and preparation for independent research in computing ecosystems through an in-depth review of the computing literature. The course will explore concepts and issues associated with large scale parallel data processing, virtualized storage, application, and infrastructure architectures and the attendant security, privacy and legal issues.

**ISC 673 Digital Investigations 3 cr**

This course focuses on developing expertise and preparation for independent research in Digital Forensics Investigations through an in-depth review of the Digital Forensics literature. The student will be conversant in broad issues and trends in Digital Forensics as defined by skill sets and occupations.

**ISC 675 Information Systems 3 cr**

This course focuses on developing expertise and preparation for independent research in information systems through an in-depth review of the information systems literature. The course will explore the current major streams of theory, research, and methodologies in information systems.

**ISC 686 Risk Analysis 3 cr**

This course focuses on developing expertise and preparation for independent research in risk analysis through an in-depth review of the risk assessment and information assurance literature. The student will be conversant in broad issues and trends in risk analysis as defined by techniques, methodologies, policies, frameworks, and skill sets.

**Information Technology (ITE)****ITE 190 ITE Special Topics 1 cr**

Selected topics in information technology. Prerequisite: Permission of the ITE coordinator.

**ITE 271 Info Techn in Organizations 3 cr**

This course introduces students to the Information Technology (IT) concepts and the software that facilitates IT solutions. Topics include: data, information, and knowledge concepts, productivity software tools, role of networking and communication, the "digital phenomena", and the benefits of IT. Also included are IT program concepts such as: ethics, the importance of effective written and oral communication, continuous learning, and technology monitoring-evaluation.

**ITE 272 Systems Architecture 3 cr**

This course introduces students to the Information Technology (IT) hardware and systems software concepts. Topics include: computer hardware, operating systems, system software, hardware and software integration, operating procedures, system performance, security/safety, and compatibility. Student labs and hands-on activities will include: Windows, Unix, and Linux systems, system utilities and software tools.

**Prerequisite:** CIS 115 Minimum Grade of C

**Cross-Listed:** ISC 272

**ITE 285 Intermediate Programming 4 cr**

A second course in programming (using a visual, event-driven programming language) that builds on CIS 115. Topics include: transition to visual language, processing data, decisions, loops, methods, arrays and lists, text processing, structured data types. Programming projects are required. Credit cannot be received for both ISC 285 and ITE 285.

**Prerequisite:** CIS 115 Minimum Grade of C

**Cross-Listed:** ISC 285

**ITE 370 Adv Application Development 3 cr**

This course explores advanced topics in applications development by connecting web applications written in a modern programming language with databases. Other topics: integrating programming components and libraries, application development and testing methodologies, and using an object oriented approach for multi-tiered applications. Programming projects are required. Credit cannot be received for both ITE 370 and ISC 361.

**Prerequisite:** (ITE 285 Minimum Grade of C or ISC 285 Minimum Grade of C) and CIS 324 Minimum Grade of C

**Cross-Listed:** ISC 361

**ITE 372 Advanced Operating Systems 3 cr**

This course introduces students to advanced Operating Systems techniques and related system architecture concepts. Students will examine how Operating Systems retain parameters set during installation and customization as well as the basic strategies used in Operating System security. Students will use advanced command-line tools to discover and modify settings within the Operating System and will use advanced scripting techniques to parse data within Operating System's files.

**Prerequisite:** (ISC 272 Minimum Grade of C or ITE 272 Minimum Grade of C) and (ISC 285 Minimum Grade of C or ITE 285 Minimum Grade of C)

**ITE 373 File Sys for Digital Forensics 3 cr**

This course introduces students to advanced file system techniques used in Forensic Analysis. Students will examine the current principles in drive storage hardware and file systems, including Windows and Linux-based systems and evaluate possible data hiding techniques which can be employed within these systems. Students will be required to perform imaging of hard drives for analysis of possible hidden data using techniques covered in this course.

**Prerequisite:** (ISC 272 Minimum Grade of C or ITE 272 Minimum Grade of C)

**ITE 375 Publishing for the WWW 3 cr**

This course is an introduction to the models and tools used to develop documents for the World Wide Web. Course topics include website planning and design, markup and styling languages, graphics, multimedia utilization, typography, and scripting. Website design issues such as ethics, copyright and intellectual property rights are also covered.

**Prerequisites:** CIS 321 and either ISC 272 or ITE 272 and either ISC 285 or ITE 285.

**Prerequisite:** CIS 321 Minimum Grade of C and (ISC 272 Minimum Grade of C or ITE 272 Minimum Grade of C) and (ISC 285 Minimum Grade of C or ITE 285 Minimum Grade of C)

**ITE 380 Multimedia Production 3 cr**

This course covers the models and tools of multimedia development and production. Development models include: message analysis, audience analysis, and media formats. Technical issues include: data formats, data interoperability, and hardware concepts. From a practical perspective, students will develop a multimedia project.

**Prerequisite:** (ISC 272 Minimum Grade of C or ITE 272 Minimum Grade of C)

**ITE 382 Network Administration 3 cr**

This course examines the network and database administrator functions in an organization. Students study the functions required of an administrator to facilitate the usage of the environment while securing the resources. Various methods and software products will demonstrate the areas of access and security.

**Prerequisite:** CIS 321 Minimum Grade of C and (ISC 272 Minimum Grade of C or ITE 272 Minimum Grade of C)

**ITE 384 Network Infrastructure Systems 3 cr**

This course focuses upon the concepts of network hardware systems that provide interconnection of communication devices. Topics include: network architectures and technologies, concepts such as routing, addressing, and network protocols (TCP/IP and others). Students will be required to setup, configure, and manage wired and wireless network equipment such as switches, routers, access points, and gateways

**Prerequisite:** CIS 321 Minimum Grade of C and (ISC 272 Minimum Grade of C or ITE 272 Minimum Grade of C)

**ITE 453 Web Site Management 3 cr**

This course addresses the design, establishment and implementation of a World Wide Web site. Issues addressed are: definition of the site, establishment of a physical site, choice of a Web server, determination of software requirements, implementation details, security, management, and monitoring of the site.

**Prerequisite:** CIS 321 Minimum Grade of C and (ISC 272 Minimum Grade of C or ITE 272 Minimum Grade of C)

**ITE 473 Digital Forensic Analysis 3 cr**

This course introduces students to acceptable methodologies of securing, collecting, analyzing and reporting data of a computer forensics investigation. Topics include: Ethics, introduction to computer investigations, evidence control, forensics tools, data acquisition, data recovery, data analysis and presenting the results. Students will be required to perform several forensics analyses in a controlled lab environment.

**Prerequisite:** ITE 372 Minimum Grade of C and ITE 373 Minimum Grade of C

**ITE 474 Human Computer Interface 3 cr**

Students will study the concepts of human-computer interaction and interface design. Topics include: detailed human-computer interaction concepts, modern graphical user interface models, and interface usability testing. Students will use rapid-prototyping tools to develop and test a typical user interface. Credit cannot be received for both ITE 474 and ISC 474.

**Prerequisite:** (ISC 285 Minimum Grade of C or ITE 285 Minimum Grade of C)

**Cross-Listed:** ISC 474

**ITE 475 IT Project Management 3 cr**

This course examines the principles and techniques of project management from an information technology perspective. Major topics include project context, project selection, and project planning. Students work in collaborative teams and are instructed in the use of a project software tool. Credit cannot be received for both ITE 475 and ISC 475.

**Prerequisite:** CIS 324 Minimum Grade of C

**Cross-Listed:** ISC 475

**ITE 476 Network Security Management 3 cr**

This course examines network and web security issues including: risks and threats, system access points, hardware and software defense methods, and organizational security policies. Labs will require students to analyze systems for potential threats, implement security procedures, monitor systems for security breaches, and institute recovery or repairs.

**Prerequisite:** ITE 382 Minimum Grade of C and ITE 384 Minimum Grade of C

**ITE 480 Needs Assess-Tech Eval - W 3 cr**

This course presents methodologies for assessing technological needs in support of organizational information requirements. Students learn the next logical step is a formal means of evaluating a given technology. Major topics of the course are specifying organizational needs, identifying potential technologies, evaluating potential benefits, assessing the organization's ability to utilize the technology. Students will examine planning for technological change and strategic implementation of the change.

**Prerequisite:** EH 102 Minimum Grade of C and ITE 271 Minimum Grade of C and ITE 285 Minimum Grade of C

**ITE 482 Adv Web Development 3 cr**

This is an advanced course in web programming and development. This course provides a hands-on approach using high-level development tools to learning advanced web programming concepts including server-side and database processing. Students will implement usability and security features into the development of modern web applications.

**Prerequisite:** CIS 324 Minimum Grade of C and ITE 375 Minimum Grade of C

**ITE 484 Advanced Network Management 3 cr**

This course explores advanced network management issues including: developing/designing network implementation strategies, managing users and data, providing operational support and help-desk, developing network use policies, developing network recovery procedures. Labs will require that students manage an operational network that provides typical network services and experience the day-to-day problems that network administrators encounter.

**Prerequisite:** ITE 382 Minimum Grade of C and ITE 384 Minimum Grade of C

**ITE 485 ITE Senior Demo Project 3 cr**

A senior capstone individual project course working from problem requirements and specifications to produce a solution. This requires exploration of suitable information technologies to produce a solution that improves the problem situation. Students will analyze, plan, and report on the project and implement a prototype. Prerequisites: ITE 370 Minimum Grade of C, ITE 480 Minimum Grade of C, and permission of the ITE coordinator.

**Prerequisite:** ITE 370 Minimum Grade of C and ITE 480 Minimum Grade of C

**ITE 490 Special Topics 3 cr**

Advanced selected topics in information technology. Prerequisite: Permission of the ITE coordinator.

**Prerequisite:** CSPC 30 or CSGD 030

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
BLACK, MICHAEL EUGENE (mblack@southalabama.edu)	Information & Systems Tech	Assistant Professor	BS, University of South Alabama MS, University of South Alabama PHD, Capella University
BOURRIE, DAVID M (dbourrie@southalabama.edu)	Information & Systems Tech	Associate Professor	BA, Michigan State University PHD, Auburn University
CAMPBELL, AMY ASHE (amycampbell@southalabama.edu)	Information & Systems Tech	Assistant Professor	BSN, Tennessee Technological U MSN, University of South Alabama DNP, University of South Alabama
CAMPBELL, STEPHEN MATTHEW (mattcampbell@southalabama.edu)	Information & Systems Tech	Associate Professor	BS, Tennessee Technological U MBA, Tennessee Technological U PHD, University of NC- Charlotte
CHAPMAN, DEBRA LAIER (dchapman@southalabama.edu)	Information & Systems Tech	Assistant Professor	BS, University of Southern Miss MS, University of South Alabama PHD, University of Southern Miss
CLARK, ANGELA MONTGOMERY (amclark@southalabama.edu)	Information & Systems Tech	Senior Instructor	BS, University of South Alabama MS, University of South Alabama
COBB, DAVID ANDREW (dacobb@southalabama.edu)	Information & Systems Tech	Instructor	AH, Remington College BS, University of South Alabama MS, University of South Alabama
GREEN, RICKY ELDON (rgreen@southalabama.edu)	Information & Systems Tech	Instructor	BSITE, University of South Alabama MSCIS, University of South Alabama
HOLIFIELD, JEFFREY (jholifield@southalabama.edu)	Information & Systems Tech	Senior Instructor	AAS-AT, Community College Of Air Force BS, Southern Illinois U-Carbondale MA, George Washington University MMOAS, Air University MSCIS, University of South Alabama
KIBBY, HANNAH VICTORIA (kibby@southalabama.edu)	Information & Systems Tech	Assistant Professor	BS, University of South Alabama MS, University of South Alabama PHD, University of South Alabama
LANDRY, JEFFREY P. (jlandry@southalabama.edu)	Information & Systems Tech	Professor	BS, University of New Orleans MBA, University of New Orleans PHD, Florida State University
OVERSTREET, PAUL R. (poverstreet@southalabama.edu)	Information & Systems Tech	Instructor	BS, University of Alabama MS, University of Alabama
ROBINSON, OCLLO PARKS (orobinson@southalabama.edu)	Information & Systems Tech	Instructor	BS, Auburn University MS, University of South Alabama

SHROPSHIRE, JORDAN D. (jshropshire@southalabama.edu)	Information & Systems Tech
SMITH, MELISSA E. (mesmith@southalabama.edu)	Information & Systems Tech
VAN DEVENDER, MAUREEN STAKELUM (mvandevender@southalabama.edu)	Information & Systems Tech

Professor	BBA, University of Florida PHD, Mississippi State University
Senior Instructor	BS, Troy University-Main MS, University of South Alabama
Senior Instructor	BS, University of South Alabama MBA, Spring Hill College PHD, University of South Alabama

## Cybersecurity (MS)

### Degree Requirements

#### Requirements for Master's Degree in Cybersecurity

Students must satisfactorily complete all prescribed prerequisite courses, a comprehensive examination, and thirty six (36) graduate credit hours for the Cybersecurity Master of Science degree. Required prerequisite courses are prescribed by the Cybersecurity Coordinator after reviewing prior academic work and results from any required School of Computing Foundation Placement Examinations. Cybersecurity majors must complete their Cybersecurity program with a minimum grade of "B" in all core courses, a minimum grade of "C" in CIS 518, and an overall program GPA of 3.0. The thirty six (36) graduate hours consist of twelve (12) hours of CORE courses, twelve (12) hours of REQUIRED courses, and twelve (12) semester hours of approved elective courses according to the selected concentration option as follows:

Code	Title	Hours
<b>Core Courses</b>		
All core courses must be completed with a minimum grade of "B"		
CIS 530	Information Assurance/IT Audit	3
CYB 570	Cybersecurity Ethics	3
and pick two of the following		
CIS 535	Digital Forensic Analysis	3
CIS 540	Network Security Management	3
ISC 590	IS Sp Top -	3
<b>Required Courses</b>		
CIS 518	CIS Research Methodologies	3
CIS 538	OS Concepts and Security	3
CYB 555	Data Security	3
ISC 565	IS Project-Change Management	3
<b>Total Hours</b>		<b>27</b>

### Concentrations

(12 Semester Hours)

Three concentrations of study are available. These are **thesis**, **project**, and **course-only** concentrations.

#### Thesis Concentration

For the Thesis Concentration, twelve (12) semester hours of required and elective course work are required.

#### Research Development

A minimum of three (3) semester credit hours of CIS 595, Computer and Information Sciences Research Development, are required. A Thesis Concentration student may only enroll in CIS 595 after successfully completing CIS 518 and their core courses. A Thesis Concentration student must be enrolled in CIS 595 in the semester during which they

defend their thesis prospectus. A grade of "C" or lower in CIS 595 will result in the dismissal of the student from the Thesis Concentration.

#### Thesis

A minimum of three (3) semester credit hours of CIS 599, Computer and Information Sciences Thesis, must be applied towards the degree for the Thesis Concentration. Students may only enroll in CIS 599 after successfully defending their thesis prospectus (minimum grade of "B" in CIS 595). A Thesis Concentration student must be enrolled in CIS 599 in the semester during which they defend and/or submit their thesis.

#### Elective Course Work

Six (6) semester hours of additional approved electives are required. A maximum of three (3) semester hours of Special Permission courses may be applied to the degree for the Thesis Concentration. A list of Pre-Approved Cybersecurity courses and a list of Special Permission courses are given at the end of this section.

#### Comprehensive Examination

All students in the Thesis Concentration must pass an oral comprehensive examination administered after the thesis committee accepts the thesis. The School of Computing Comprehensive Examination Policies and Procedures document and the Comprehensive Examination Application form are available at <https://www.southalabama.edu/colleges/soc/essentialstudentlinks.html>.

#### Project Concentration

For the Project Concentration, twelve (12) semester hours of required and elective course work are required.

#### Project Proposal Development

A minimum of three (3) semester credit hours of CYB 595, Cybersecurity Project Proposal Development are required. A Project Concentration student must be enrolled in CYB 595 in the semester during which they defend their project prospectus. A grade of "C" or lower in CYB 595 will result in the dismissal of the student from the Project Concentration. Students may only enroll in CYB 595 after successfully completing CIS 518.

#### Project

A minimum of three (3) semester hours credit of CYB 598, Cybersecurity Project, must be applied towards the degree for the Project Concentration. Students may only enroll in CYB 598 after successfully defending their project proposal. A Project Concentration student must be enrolled in CYB 598 in the semester during which they defend and/or submit their project.

#### Elective Course Work

Six (6) semester hours of additional approved electives are required. A maximum of three (3) semester hours of Special Permission courses may be applied to the degree for the Project Concentration. A list of Pre-Approved Cybersecurity courses and a list of Special Permission courses are given at the end of this section.

### Comprehensive Exam

All students in the Project Concentration must pass an oral comprehensive examination administered after the project committee accepts the project. The School of Computing Comprehensive Examination Policies and Procedures document and the Comprehensive Examination Application form are available at <https://www.southalabama.edu/colleges/soc/essentialstudentlinks.html>

### Course Only Concentration

For the Course Only Concentration, twelve (12) semester hours of elective course work are required.

### Elective Course Work

Twelve (12) semester hours of approved electives are required. A maximum of six (6) semester hours of Special Permission courses may be applied to the degree of the Course Only Concentration. No credits from CYB 595, CYB 598, CIS 595, or CIS 599 may be applied to the Course Only Concentration. A list of Pre-Approved Cybersecurity courses and a list of Special Permission courses are given at the end of this section.

### Comprehensive Examination

Students in the Course Only Concentration must pass a written examination. Students wishing to sit for the examination must apply on-line to the Director of SoC Graduate Studies by the Friday of the first week of classes in the semester in which the examination is to be taken. The comprehensive examination is offered twice a year. The School of Computing Comprehensive Examination Policies and Procedures document and the Comprehensive Examination Application form are available at <https://www.southalabama.edu/colleges/soc/essentialstudentlinks.html>

### Cybersecurity Electives

A list of Pre-Approved Cybersecurity elective courses and a list of Special Permission courses are given below. All other courses must be approved by the Cybersecurity Coordinator. A maximum of six (6) credit hours of non-CYB, non-ISC, or non-CIS courses will be allowed.

- CYB 566 – Network Forensics
- CYB 567 – Ethical Hacking
- CYB 568 – Intrusion Analysis and Response
- CYB 569 – SCADA Security
- ISC 553 – IS Website Management
- ISC 590 – Special Topics
- CYB 590 – Special Topics

Approval of the Cybersecurity Coordinator and the Director of the SOC Graduate Studies is required for CIS graduate faculty sponsorship of a Special Permission Course. A maximum of six (6) credit hours of Special Permission/Directed Study (CIS 594) courses may be applied to the degree for the Course Only Concentration.

For additional information about the Cybersecurity graduate program, please contact Dr. Debra Chapman at [cybersecuritygraduate@southalabama.edu](mailto:cybersecuritygraduate@southalabama.edu) ([cybersecuritygraduate@southalabama.edu?subject=](mailto:%20cybersecuritygraduate@southalabama.edu?subject=)) or (251) 460 - 7370

## Graduate Information Systems Cybersecurity Certificate

### Degree Requirements

The School of Computing is responding to its industry need for a skilled workforce in Cybersecurity.

Training cybersecurity professionals to support and defend our nation's critical infrastructure continues to be crucial for the defense and health of our national economy. Continued security breaches against these systems requires advanced educational training to combat these threats.

The goal of the graduate information systems cybersecurity certificate is to ensure educational relevancy in the identification and defense of current cyber threats to critical infrastructure in both the public and private sector. The information systems certificate includes courses in information security, digital forensics, and network security as these have been deemed critical to the advancement of cybersecurity by the National Science Foundation.

This certificate can be completed by both graduate-level degree and non-degree seeking students that have completed an appropriate computing undergraduate degree. All of the courses currently exist within the School of Computing. The proposed information systems cybersecurity graduate certificate requires 15 graduate credits.

All courses must be completed (15 credits).

Code	Title	Hours
CIS 530	Information Assurance/IT Audit	3
CIS 535	Digital Forensic Analysis	3
CIS 538	OS Concepts and Security	3
CIS 540	Network Security Management	3
ISC 565	IS Project-Change Management	3
<b>Total Hours</b>		<b>15</b>

## Health Informatics (BS)

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 962)		41-44
<b>Major Requirements</b>		

*Health Informatics Core (a minimum grade of 'C' is required in all courses)*

A. Complete the following:

HI 300	Health Info Clinical Environme	3
HI 410	Health Informatics	3
HI 450	Health Data Secur/Compliance	3
HI 455	Hlth Data Mgt & Decision Supp	3
HI 460	Consumer Health Informatics	3

*Information Systems Environment (a minimum grade of 'C' is required in all courses)*

A. Complete the following:

CIS 115	Beginning Programming	4
ISC 245	Info Systems in Organizations	3
ISC 272	Systems Architecture	3

ISC 285	Intermediate Programming	3
CIS 321	Data Comm and Networking	3
CIS 324	Database Design-Dev-Mgt	3
ISC 360	Info Sys Analysis and Design-W	3
EH 372	Technical Writing - W	3
ISC 462	IS Strategy and Policy	3
ISC 475	Info Systems Proj Management	3
CIS 496	CIS Internship	0

*Business Environment (a minimum grade of 'C' is required in all courses)*

A. Complete the following:

ACC 211	Financial Accounting	3
CA 275	Decision Making - Small Groups	3

Select one of the following 3

CIS 140	Intro to Tech for Healthcare	
CIS 150	Intro to Computer Applications	
or CIS 010	Computer Proficiency Exam	
MGT 300	Management Theory and Practice	3

Statistics I 3

Statistics II 3

*Health Care Environment (a minimum grade of 'C' is required in all courses)*

A. Complete the following:

BMD 110	Introduction to A & P I	4
BMD 111	Introduction to A & P II	4
EMS 210	Medical Terminology	3
EMS 200	Human Systems/Pathophysiology	3
EMS 401	Seminar in HP	3

#### Minor Requirements

A minor is not required for this degree program. However, students who have completed all required coursework for the Health Informatics degree will also qualify for a minor in Information Systems. 0

**Total Hours 122-125**

## General Education Requirements

Code	Title	Hours
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### Area I - Written Composition

A. Complete the following:

EH 101	English Composition I	3
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B. Complete the following:

EH 102	English Composition II	3
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### Area II - Humanities & Fine Arts

A. Complete the following:

CA 110	Public Speaking	3
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B. Select one of the following: (<http://bulletin.southalabama.edu/programs-az/computing/information-systems-technology/footnote1/>)<sup>1</sup> 3

EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	

C. Select one of the following: 3

ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	

D. Select three hours from the following: 3

AFR 101	Intro to African Amer Studies	
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARH 203	Survey of Non-Western Art	
ARS 101	Art Appreciation	
CLA 110	Intro Anc Greek Roman Culture	
DRA 110	Introduction to Theatre	
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
LG 101	Introductory Latin I	
LG 102	Introductory Latin II	
LG 111	Introductory French I	
LG 112	Introductory French II	
LG 121	Introductory Chinese I	
LG 122	Introductory Chinese II	
LG 131	Introductory Spanish I	
LG 132	Introductory Spanish II	
LG 141	Intro Classical Greek I	
LG 142	Intro Classical Greek II	
LG 151	Introductory German I	
LG 152	Introductory German II	
LG 153	Accelerated Intro German	
LG 171	Introductory Russian I	
LG 172	Introductory Russian II	
LG 173	Accelerated Intro Russian	
LG 201	Intermediate Latin I	
LG 202	Intermediate Latin II	
LG 211	Intermediate French I	
LG 212	Intermediate French II	
LG 213	Accelerated Inter French - H	
LG 221	Intermediate Chinese I	
LG 222	Intermediate Chinese II	
LG 231	Intermediate Spanish I	
LG 232	Intermediate Spanish II	
LG 234	Inter Spanish Accel -H	
LG 241	Interm Classical Greek I	
LG 242	Interm Classical Greek II	
LG 251	Intermediate German I	
LG 252	Intermediate German II	

LG 271	Intermediate Russian I
LG 272	Intermediate Russian II
LG 273	Intensive Second Year Russian
LGS 101	Introductory Japanese I
LGS 102	Introductory Japanese II
LGS 106	Introductory Arabic I
LGS 107	Introductory Arabic II
LGS 110	Intro American Sign Language I
LGS 111	Intro American Sign Lang II
LGS 171	Introductory Korean I
LGS 172	Introductory Korean II
LGS 201	Intermediate Japanese I
LGS 202	Intermediate Japanese II
LGS 206	Intermediate Arabic I
LGS 207	Intermediate Arabic II
LGS 210	Intermediate ASL I
LGS 211	Intermediate ASL II
MUL 101	Introduction to Music
PHL 110	Introduction to Philosophy
PHL 120	Critical Thinking
PHL 121	Introduction to Logic
PHL 131	Introduction to Ethics
PHL 231	Social Ethics
PHL 240	Western Philosophy: Classical
REL 100	Intro to the Study of Religion
REL 200	Old Testament/Hebrew Bible
REL 201	Survey of the New Testament

**Area III – Natural Sciences & Mathematics**

A. Select 3-4 hours from the following: 3-4

MA 112	Precalculus Algebra
MA 113	Precalculus Trigonometry
MA 115	Precal Algebra-Trigonometry
MA 120	Calculus and Its Applications
MA 125	Calculus I
MA 126	Calculus II
MA 227	Calculus III
MA 237	Linear Algebra I
MA 238	Differential Equations I

B. Select 8-10 hours from the following: 8-10

AN 121 & 121L	Biological Anthropology and Biological Anthropology Lab
BLY 101 & 101L	Life Science I and Life Science I Laboratory
or BLY 121 & 121L	General Biology I and General Biology I Lab
BLY 102 & 102L	Life Science II and Life Science II Lab
or BLY 122 & 122L	General Biology II and General Biology II Laboratory
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab
CH 131 & 131L	General Chemistry I and General Chemistry I Lab

CH 132 & 132L	General Chemistry II and General Chemistry II Lab
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab
GY 111 & 111L	Physical Geology and Physical Geology Lab
GY 112 & 112L	Earth History and Earth History Lab
MAS 134 & 134L	Ocean Science and Ocean Science Lab
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab

**Area IV – History, Social & Behavioral Sciences (<http://bulletin.southalabama.edu/programs-az/computing/information-systems-technology/footnote1/>)<sup>1</sup>**

A. Select one of the following: 3

HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 135	US History to 1877
HY 136	US History since 1877

B. Select two of the following: 6

AN 100	Intro to Cultural Anthropology
AN 101	Intro Archaeology-Bio Anthro
CA 100	Intro to Communication
CA 211	Interpersonal Comm
CJ 105	Introduction to Criminal Justice
ECO 215	Prin of Microeconomics
ECO 216	Prin of Macroeconomics
GEO 114	People, Places, Environment
GEO 115	World Regional Geography
GS 101	Intro to Gender Studies
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
IS 100	Global Issues
IST 201	Seasons of Life
NAS 101	Intro Native American Studies
PSC 130	Intro to US Government
PSY 250	Life Span Development
SY 109	Introductory Sociology
SY 112	Social Problems

C. Complete the following:		
PSY 120	Introduction to Psychology	3
<b>Total Hours</b>		<b>41-44</b>

### Footnote

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 135 & HY 136).

## Graduation Plan

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I	3
BLY 101	Life Science I <sup>1</sup>	3
BLY 101L	Life Science I Laboratory <sup>1</sup>	1
HI 300	Health Info Clinical Environme	3
MA 112	Precalculus Algebra	3
CIS 150	Intro to Computer Applications	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
EH 102	English Composition II	3
Natural Science	Area III <sup>2</sup>	3
Natural Sci Lab	Area III <sup>2</sup>	1
History	Area IV <sup>2</sup>	3
HI 410	Health Informatics	3
ISC 245	Info Systems in Organizations	3
<b>Hours</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
BUS 245	Data Analytics I (Area III) <sup>1,2</sup>	3
Literature	Area II <sup>2</sup>	3
CIS 115	Beginning Programming	4
CA 110	Public Speaking	3
BMD 110	Introduction to A & P I	4
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
BUS 255	Data Analytics II (Area III) <sup>1,2</sup>	3
Art, Drama, or Music	Area II <sup>2</sup>	3
ISC 285	Intermediate Programming	3
CIS 324	Database Design-Dev-Mgt	3
BMD 111	Introduction to A & P II	4
<b>Hours</b>		<b>16</b>
<b>Third Year</b>		
<b>Fall</b>		
EMS 210	Medical Terminology	3
MGT 300	Management Theory and Practice	3
ACC 211	Financial Accounting	3
ISC 272	Systems Architecture	3
EH 372	Technical Writing - W <sup>1</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
PSY 120	Introduction to Psychology (Area IV) <sup>2</sup>	3
Social Science elective	Area IV <sup>2</sup>	3
HI 450	Health Data Secur/Compliance	3
CIS 321	Data Comm and Networking	3

CIS 496	CIS Internship	0
<b>Hours</b>		<b>12</b>
<b>Fourth Year</b>		
<b>Fall</b>		
HI 455	Hlth Data Mgt & Decision Supp	3
ISC 360	Info Sys Analysis and Design-W	3
ISC 462	IS Strategy and Policy	3
EMS 401	Seminar in HP	3
Social Science elective	Area IV <sup>2</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
HI 460	Consumer Health Informatics	3
CA 275	Decision Making - Small Groups	3
EMS 200	Human Systems/Pathophysiology	3
ISC 475	Info Systems Proj Management	3
Fine Arts/Humanities elective	Area II <sup>2</sup>	3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>122</b>

<sup>1</sup> Recommended Course

<sup>2</sup> See General Education Requirements

## Health Informatics Certificate

### Degree Requirements

A certificate in health informatics from the School of Computing requires completion of the five courses listed below. All courses must be completed with a minimum grade of "C".

Code	Title	Hours
HI 300	Health Info Clinical Environme	3
HI 410	Health Informatics	3
HI 450	Health Data Secur/Compliance	3
HI 455	Hlth Data Mgt & Decision Supp	3
ISC 475	Info Systems Proj Management	3
or HI 460	Consumer Health Informatics	
<b>Total Hours</b>		<b>15</b>

## Information Systems (BS)

### Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 965)		53-56
<b>Major Requirements</b>		
<i>Information Systems Core (a minimum grade of 'C' is required in all courses)</i>		
A. Complete the following:		
CIS 115	Beginning Programming	3
CIS 300	Information Tech in Society	1
CIS 321	Data Comm and Networking	3
CIS 324	Database Design-Dev-Mgt	3
ISC 245	Info Systems in Organizations	3
ISC 272	Systems Architecture	3
ISC 285	Intermediate Programming	4

ISC 360	Info Sys Analysis and Design-W	3
ISC 361	Advanced Application Development	3
ISC 462	IS Strategy and Policy	3
ISC 475	Info Systems Proj Management	3

*Capstone (a minimum grade of 'C' is required in all courses)*

A. Complete the following:		
CIS 497	Senior Capstone Experience-W	3
or CIS 499	CIS Senior Honors Project - H	

B. Complete the following:		
CIS 498	CIS Senior Seminar	0

*Information Systems Environment (a minimum grade of 'C' is required in all courses)*

A. Complete the following:		
ACC 211	Financial Accounting	3
ECO 215	Prin of Microeconomics	3
MGT 300	Management Theory and Practice	3
B. Select 200-499 approved electives from: ACC, ECO, FIN, MGT, MKT		
		6

*Information Systems Electives (a minimum grade of 'C' is required in all courses)*

A. Select 12 hours of approved electives from the following:		12
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Advanced Application Development:

ISC 472 Advanced Data Management (see footnote table below (p. 965))<sup>1</sup>

ITE 474 Human Computer Interface (see footnote table below (p. 965))<sup>1</sup>

ITE 490 Special Topics (see footnote table below (p. 965))<sup>1</sup>

Health Informatics Core:

HI 300 Health Info Clinical Environme

HI 410 Health Informatics

HI 450 Health Data Secur/Compliance

HI 455 Hlth Data Mgt & Decision Supp

ITE Web:

ITE 375 Publishing for the WWW

ITE 380 Multimedia Production

ITE 453 Web Site Management

ITE 482 Adv Web Development

ITE Networking:

ITE 382 Network Administration

ITE 384 Network Infrastructure Systems

ITE 476 Network Security Management

ITE 484 Advanced Network Management

ITE Digital Forensics:

CJ 223 Intro to Forensic Science

ITE 372 Advanced Operating Systems

ITE 373 File Sys for Digital Forensics

ITE 473 Digital Forensic Analysis

**Minor Requirements**

A minor is not required for this degree program		0
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<b>Total Hours</b>		<b>115-118</b>
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## Footnote

<sup>1</sup> Recommended Course

## General Education Requirements

Code	Title	Hours
<b>Area I - Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Select one of the following:		
EH 102	English Composition II	3
or EH 105	Honors Composition - H	
<b>Area II - Humanities &amp; Fine Arts</b>		
A. Complete the following:		
CA 110	Public Speaking	3
B. Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/computing/information-systems-technology/footnote2/">http://bulletin.southalabama.edu/programs-az/computing/information-systems-technology/footnote2/</a> ) <sup>1</sup>		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
C. Select one of the following:		
ARH 100	Survey of Art	3
ARH 103	Art History I	
ARH 123	Art History II	
ARS 101	Art Appreciation	
DRA 110	Introduction to Theatre	
MUL 101	Introduction to Music	
D. Select three hours from the following:		
AFR 101	Intro to African Amer Studies	3
ARH 100	Survey of Art	
ARH 103	Art History I	
ARH 123	Art History II	
ARH 203	Survey of Non-Western Art	
ARS 101	Art Appreciation	
CLA 110	Intro Anc Greek Roman Culture	
DRA 110	Introduction to Theatre	
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
LG 101	Introductory Latin I	
LG 102	Introductory Latin II	
LG 111	Introductory French I	
LG 112	Introductory French II	
LG 121	Introductory Chinese I	
LG 122	Introductory Chinese II	
LG 131	Introductory Spanish I	

LG 132	Introductory Spanish II
LG 141	Intro Classical Greek I
LG 142	Intro Classical Greek II
LG 151	Introductory German I
LG 152	Introductory German II
LG 153	Accelerated Intro German
LG 171	Introductory Russian I
LG 172	Introductory Russian II
LG 173	Accelerated Intro Russian
LG 201	Intermediate Latin I
LG 202	Intermediate Latin II
LG 211	Intermediate French I
LG 212	Intermediate French II
LG 213	Accelerated Inter French - H
LG 221	Intermediate Chinese I
LG 222	Intermediate Chinese II
LG 231	Intermediate Spanish I
LG 232	Intermediate Spanish II
LG 234	Inter Spanish Accel -H
LG 241	Interm Classical Greek I
LG 242	Interm Classical Greek II
LG 251	Intermediate German I
LG 252	Intermediate German II
LG 271	Intermediate Russian I
LG 272	Intermediate Russian II
LG 273	Intensive Second Year Russian
LGS 101	Introductory Japanese I
LGS 102	Introductory Japanese II
LGS 106	Introductory Arabic I
LGS 107	Introductory Arabic II
LGS 110	Intro American Sign Language I
LGS 111	Intro American Sign Lang II
LGS 171	Introductory Korean I
LGS 172	Introductory Korean II
LGS 201	Intermediate Japanese I
LGS 202	Intermediate Japanese II
LGS 206	Intermediate Arabic I
LGS 207	Intermediate Arabic II
LGS 210	Intermediate ASL I
LGS 211	Intermediate ASL II
MUL 101	Introduction to Music
PHL 110	Introduction to Philosophy
PHL 120	Critical Thinking
PHL 121	Introduction to Logic
PHL 131	Introduction to Ethics
PHL 231	Social Ethics
PHL 240	Western Philosophy: Classical
REL 100	Intro to the Study of Religion
REL 200	Old Testament/Hebrew Bible
REL 201	Survey of the New Testament

**Area III – Natural Sciences & Mathematics**

A. Select 3-4 hours from the following: 3-4

MA 120	Calculus and Its Applications (see footnote table below (p. 967)) <sup>2</sup>
MA 125	Calculus I
MA 126	Calculus II
B. Select 8-10 hours from the following: 8-10	
AN 121 & 121L	Biological Anthropology and Biological Anthropology Lab
BLY 101 & 101L	Life Science I and Life Science I Laboratory
or BLY 121 & 121L	General Biology I and General Biology I Lab
BLY 102 & 102L	Life Science II and Life Science II Lab
or BLY 122 & 122L	General Biology II and General Biology II Laboratory
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab
CH 131 & 131L	General Chemistry I and General Chemistry I Lab
CH 132 & 132L	General Chemistry II and General Chemistry II Lab
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab
GY 111 & 111L	Physical Geology and Physical Geology Lab
GY 112 & 112L	Earth History and Earth History Lab
MAS 134 & 134L	Ocean Science and Ocean Science Lab
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab
<b>Area IV – History, Social &amp; Behavioral Sciences (<a href="http://bulletin.southalabama.edu/programs-az/computing/information-systems-technology/footnote2/">http://bulletin.southalabama.edu/programs-az/computing/information-systems-technology/footnote2/</a>)<sup>1</sup></b>	
A. Select one of the following: 3	
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
B. Select three of the following: 9	
AN 100	Intro to Cultural Anthropology
AN 101	Intro Archaeology-Bio Anthro
CA 100	Intro to Communication
CA 211	Interpersonal Comm

CJ 105	Introduction to Criminal Justice	
ECO 215	Prin of Microeconomics	
ECO 216	Prin of Macroeconomics	
GEO 114	People, Places, Environment	
GEO 115	World Regional Geography	
GS 101	Intro to Gender Studies	
HY 101	HY of Western Civilization I	
HY 102	HY of Western Civilization II	
HY 135	US History to 1877	
HY 136	US History since 1877	
IS 100	Global Issues	
IST 201	Seasons of Life	
NAS 101	Intro Native American Studies	
PSC 130	Intro to US Government	
PSY 120	Introduction to Psychology	
PSY 250	Life Span Development	
SY 109	Introductory Sociology	
SY 112	Social Problems	

**Area V****A. Complete the following:**

BUS 245	Data Analytics I (see footnote table below (p. 967)) <sup>2</sup>	3
	or ST 210	Stat Reason and Application

**B. Complete the following:**

BUS 255	Data Analytics II (see footnote table below (p. 967)) <sup>2</sup>	3
	or ST 340	Design-Analysis of Experiments

**C. Complete the following:**

CA 275	Decision Making - Small Groups	3
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**D. Complete the following:**

EH 372	Technical Writing - W (see footnote table below (p. 967)) <sup>2</sup>	3
	or EH 373	Writing in Professions - W

**Total Hours** 53-56**Footnote**

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 135 & HY 136).

<sup>2</sup> Recommended Course

**Additional Information**

Courses in the Major Requirements must be completed with a minimum grade of “C”.

**Graduation Plan**

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I	3
CA 110	Public Speaking	3
MA 120	Calculus and Its Applications	3

ISC 245	Info Systems in Organizations	3
CIS 101	Freshman Seminar CIS	2

**Hours** 14**Spring**

EH 102	English Composition II	3
CA 275	Decision Making - Small Groups	3
ACC 211	Financial Accounting	3
CIS 115	Beginning Programming	3
Social Science 1	Social Science 1	3

**Hours** 15**Second Year****Fall**

ISC 285	Intermediate Programming	4
ISC 272	Systems Architecture	3
ECO 215	Prin of Microeconomics	3
Statistics 1	Statistics 1	3
Natural Science Elective	Natural Science Elective	4

**Hours** 17**Spring**

CIS 324	Database Design-Dev-Mgt	3
CIS 321	Data Comm and Networking	3
ISC 360	Info Sys Analysis and Design-W	3
Statistics 2	Statistics 2	3
Natural Science Elective	Natural Science Elective	4

**Hours** 16**Third Year****Fall**

ISC 361	Advanced Application Development	3
CIS 300	Information Tech in Society	1
Information Systems Elective 1	Information Systems Elective 1	3
MGT 300	Management Theory and Practice	3
EH 372	Technical Writing - W	3
History	History	3

**Hours** 16**Spring**

ISC 475	Info Systems Proj Management	3
Information Systems Elective 2	Information Systems Elective 2	3
Social Science 2	Social Science 2	3
Art/Drama/Music	Art/Drama/Music	3
Approved General Elective	Approved General Elective	3

**Hours** 15**Fourth Year****Fall**

ISC 462	IS Strategy and Policy	3
IS Elective 3	IS Elective 3	3
Fine & Perf Arts Elective	Fine & Perf Arts Elective	3
Literature	Literature	3
Business Elective 1	Business Elective 1	3

**Hours** 15**Spring**

CIS 497	Senior Capstone Experience-W	3
CIS 498	CIS Senior Seminar	0
IS Elective 4	IS Elective 4	3
Business Elective 2	Business Elective 2	3
Approved General Elective	Approved General Elective	3

**Hours** 12**Total Hours** 120

# Information Systems (MS)

## Degree Requirements

### Requirements for Master's Degree in Information Systems (ISC)

Students must satisfactorily complete any prescribed prerequisite courses, a comprehensive examination, and thirty (30) graduate credit hours for the Master of Science in Information Systems degree. Information Systems majors must complete their Information Systems program with a minimum grade of "B" in all core courses and an overall program GPA of 3.0. The thirty (30) graduate hours consist of twelve (12) hours of **Core** courses, eighteen (18) hours of **required** courses as follows:

Code	Title	Hours
<b>Core Courses</b>		
All core courses must be completed with a minimum grade of "B"		
ISC 501	Programming for IS	3
ISC 507	IS Database Processing	3
ISC 561	IS Database Management	3
ISC 565	IS Project-Change Management	3
<b>Required Courses</b>		
ISC 551	Human-Comp Interface Design	3
ISC 545	Management Information Systems	3
ISC 559	IS App Design-Implementation	3
ISC 560	Info Systems Analysis-Design	3
ISC 567	IS Function Integration	3
ISC 568	IS Enterprise Integration	3
<b>Total Hours</b>		<b>30</b>

- The Master of Science in Information Systems is a software development focused professional degree program. Any substitutions to the required courses must be approved by the Director of Graduate Studies.
- Students in the Master of Science in Information Systems program must pass a written comprehensive examination. Students wishing to sit for the examination must apply on-line to the SoC Director of Graduate Studies by the Friday before the start of classes in the semester in which the examination is to be taken. The comprehensive examination is offered twice a year. The School of Computing Comprehensive Examination Policies and Procedures document and the Comprehensive Examination Application form are available at <https://www.southalabama.edu/colleges/soc/essentialstudentlinks.html>
- F-1 students enrolled in the Master of Science in Information Systems program are eligible to participate in Curricular Practical Training (CPT). CPT is temporary work authorization for F-1 degree-seeking students that is directly related to their academic curriculum, including internships, prior to graduation. Students must receive permission from the Designated School Official (DSO) in the Office of Immigration and International Admissions (OIIA) and a new I-20 is required.

For further information, please contact the Office of Immigration.  
Office of Immigration  
Meisler Hall 2200 • 390 Alumni Circle • Mobile, AL 36688-0002

# Information Systems Minor

## Degree Requirements

A student wishing to obtain a minor in Information Systems has two options: complete the eight recommended courses listed below or contact the Information Systems and Technology Department Chair to prepare a plan compatible with the student's major. All courses must be completed with a minimum grade of "C".

Code	Title	Hours
CIS 115	Beginning Programming	3
ISC 245	Info Systems in Organizations	3
ISC 285	Intermediate Programming	4
ISC 272	Systems Architecture	3
CIS 321	Data Comm and Networking	3
CIS 324	Database Design-Dev-Mgt	3
ISC 360	Info Sys Analysis and Design-W	3
ISC 361	Advanced Application Development	3
<b>Total Hours</b>		<b>25</b>

At least 9 hours of courses in the minor, including all 300 level courses, must be completed at the University of South Alabama.

# Information Technology (BS)

## Degree Requirements

Code	Title	Hours
<b>General Education Requirements</b>		
Select General Education Requirements (p. 969)		53-56
<b>Major Requirements</b>		
<i>Information Technology Core (a minimum grade of 'C' is required in all courses)</i>		
A. Complete the following:		
CIS 115	Beginning Programming	4
CIS 300	Information Tech in Society	1
CIS 321	Data Comm and Networking	3
CIS 324	Database Design-Dev-Mgt	3
CIS 497	Senior Capstone Experience-W	3
CIS 498	CIS Senior Seminar	0
ITE 271	Info Techn in Organizations	3
ITE 272	Systems Architecture	3
ITE 285	Intermediate Programming	3
ITE 370	Adv Application Development	3
ITE 474	Human Computer Interface	3
ITE 475	IT Project Management	3
ITE 480	Needs Assess-Tech Eval - W	3
ITE 485	ITE Senior Demo Project	3
<i>ITE Electives (a minimum grade of 'C' is required in all courses)</i>		
A. Complete 21 credit hours in one of the following Focus Tracks:		21
(http://bulletin.southalabama.edu/programs-az/computing/information-systems-technology/footnote1/) <sup>1</sup>		
Web Publishing Concentration		

## A. Complete the following:

ITE 375	Publishing for the WWW
ITE 380	Multimedia Production
ITE 453	Web Site Management
ITE 482	Adv Web Development

## B. Nine hours of approved electives

## Networking Concentration

## A. Complete the following:

ITE 382	Network Administration
ITE 384	Network Infrastructure Systems
ITE 476	Network Security Management
ITE 484	Advanced Network Management

## B. Nine hours of approved electives

## Digital Forensics Concentration

## A. Complete the following:

CJ 223	Intro to Forensic Science
ITE 372	Advanced Operating Systems
ITE 373	File Sys for Digital Forensics
ITE 473	Digital Forensic Analysis

## B. Nine hours of approved electives

**Minor Requirements**

A minor is not required for this degree program 0

**Total Hours** 112-115**Footnote**

<sup>1</sup> Students complete one of the following Focus Tracks consisting of twelve (12) hours of specified Focus Track courses and nine (9) hours of approved Information Technology support electives.

**General Education Requirements**

Code	Title	Hours
<b>Area I - Written Composition</b>		
A. Complete the following:		
EH 101	English Composition I	3
B. Complete the following:		
EH 102	English Composition II	3
<b>Area II - Humanities &amp; Fine Arts</b>		
A. Complete the following:		
CA 110	Public Speaking	3
B. Select one of the following: ( <a href="http://bulletin.southalabama.edu/programs-az/computing/information-systems-technology/footnote2/">http://bulletin.southalabama.edu/programs-az/computing/information-systems-technology/footnote2/</a> ) <sup>1</sup>		
EH 215	Brit Lit before 1785	
EH 216	Brit Lit after 1785	
EH 225	Am Lit before 1865	
EH 226	Am Lit after 1865	
EH 235	World Lit before 1650	
EH 236	World Lit after 1650	
C. Select one of the following:		
ARH 100	Survey of Art	3
ARH 103	Art History I	
ARH 123	Art History II	

ARS 101	Art Appreciation
DRA 110	Introduction to Theatre
MUL 101	Introduction to Music
D. Select three hours from the following:	
AFR 101	Intro to African Amer Studies
ARH 100	Survey of Art
ARH 103	Art History I
ARH 123	Art History II
ARH 203	Survey of Non-Western Art
ARS 101	Art Appreciation
CLA 110	Intro Anc Greek Roman Culture
DRA 110	Introduction to Theatre
EH 215	Brit Lit before 1785
EH 216	Brit Lit after 1785
EH 225	Am Lit before 1865
EH 226	Am Lit after 1865
EH 235	World Lit before 1650
EH 236	World Lit after 1650
LG 101	Introductory Latin I
LG 102	Introductory Latin II
LG 111	Introductory French I
LG 112	Introductory French II
LG 121	Introductory Chinese I
LG 122	Introductory Chinese II
LG 131	Introductory Spanish I
LG 132	Introductory Spanish II
LG 141	Intro Classical Greek I
LG 142	Intro Classical Greek II
LG 151	Introductory German I
LG 152	Introductory German II
LG 153	Accelerated Intro German
LG 171	Introductory Russian I
LG 172	Introductory Russian II
LG 173	Accelerated Intro Russian
LG 201	Intermediate Latin I
LG 202	Intermediate Latin II
LG 211	Intermediate French I
LG 212	Intermediate French II
LG 213	Accelerated Inter French - H
LG 221	Intermediate Chinese I
LG 222	Intermediate Chinese II
LG 231	Intermediate Spanish I
LG 232	Intermediate Spanish II
LG 234	Inter Spanish Accel -H
LG 241	Interm Classical Greek I
LG 242	Interm Classical Greek II
LG 251	Intermediate German I
LG 252	Intermediate German II
LG 271	Intermediate Russian I
LG 272	Intermediate Russian II
LG 273	Intensive Second Year Russian
LGS 101	Introductory Japanese I

LGS 102	Introductory Japanese II
LGS 106	Introductory Arabic I
LGS 107	Introductory Arabic II
LGS 110	Intro American Sign Language I
LGS 111	Intro American Sign Lang II
LGS 171	Introductory Korean I
LGS 172	Introductory Korean II
LGS 201	Intermediate Japanese I
LGS 202	Intermediate Japanese II
LGS 206	Intermediate Arabic I
LGS 207	Intermediate Arabic II
LGS 210	Intermediate ASL I
LGS 211	Intermediate ASL II
MUL 101	Introduction to Music
PHL 110	Introduction to Philosophy
PHL 120	Critical Thinking
PHL 121	Introduction to Logic
PHL 131	Introduction to Ethics
PHL 231	Social Ethics
PHL 240	Western Philosophy: Classical
REL 100	Intro to the Study of Religion
REL 200	Old Testament/Hebrew Bible
REL 201	Survey of the New Testament
<b>Area III – Natural Sciences &amp; Mathematics</b>	
A. Select 3-4 hours from the following: 3-4	
MA 120	Calculus and Its Applications (see footnote table below (p. 971)) <sup>2</sup>
MA 125	Calculus I
MA 126	Calculus II
B. Select 8-10 hours from the following: 8-10	
AN 121 & 121L	Biological Anthropology and Biological Anthropology Lab
BLY 101 & 101L	Life Science I and Life Science I Laboratory
or BLY 121 & 121L	General Biology I and General Biology I Lab
BLY 102 & 102L	Life Science II and Life Science II Lab
or BLY 122 & 122L	General Biology II and General Biology II Laboratory
CH 101 & 101L	Survey of Inorg and Org Chem and Survey Inorg-Org Chem Lab
CH 131 & 131L	General Chemistry I and General Chemistry I Lab
CH 132 & 132L	General Chemistry II and General Chemistry II Lab
GEO 101 & 101L	Environmental Geography and Environmental Geography Lab
GEO 102 & 102L	Earth and the Environment and Earth and the Environment Lab
GY 111 & 111L	Physical Geology and Physical Geology Lab
GY 112 & 112L	Earth History and Earth History Lab

MAS 134 & 134L	Ocean Science and Ocean Science Lab
PH 101 & 101L	Introduction to Astronomy and Introduction to Astronomy Lab
PH 104 & 104L	Concepts of Physics and Concepts of Physics Laboratory
PH 114 & 114L	Physics with Algebra-Trig I and Alg-Trig Based Physics I Lab
PH 115 & 115L	Physics with Algebra -Trig II and Alg-Trig Based Physics II Lab
PH 201 & 201L	Calculus-Based Physics I and Calculus-Based Physics I Lab
PH 202 & 202L	Calculus-Based Physics II and Calculus-Based Physics II Lab
<b>Area IV – History, Social &amp; Behavioral Sciences (<a href="http://bulletin.southalabama.edu/programs-az/computing/information-systems-technology/footnote2/">http://bulletin.southalabama.edu/programs-az/computing/information-systems-technology/footnote2/</a>)<sup>1</sup></b>	
A. Select one of the following: 3	
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
B. Select three of the following: 9	
AN 100	Intro to Cultural Anthropology
AN 101	Intro Archaeology-Bio Anthro
CA 100	Intro to Communication
CA 211	Interpersonal Comm
CJ 105	Introduction to Criminal Justice
ECO 215	Prin of Microeconomics
ECO 216	Prin of Macroeconomics
GEO 114	People, Places, Environment
GEO 115	World Regional Geography
GS 101	Intro to Gender Studies
HY 101	HY of Western Civilization I
HY 102	HY of Western Civilization II
HY 135	US History to 1877
HY 136	US History since 1877
IS 100	Global Issues
IST 201	Seasons of Life
NAS 101	Intro Native American Studies
PSC 130	Intro to US Government
PSY 120	Introduction to Psychology
PSY 250	Life Span Development
SY 109	Introductory Sociology
SY 112	Social Problems
<b>Area V</b>	
A. Select one of the following: 3	
BUS 245	Data Analytics I (see footnote table below (p. 971)) <sup>2</sup>
ST 210	Stat Reason and Application
ST 315	Applied Probability-Statistics
B. Select one of the following: 3	
BUS 255	Data Analytics II (see footnote table below (p. 971)) <sup>2</sup>

ST 310	Stat Research Techniques	
ST 335	Applied Regression Analysis	
ST 340	Design-Analysis of Experiments	
C. Complete the following:		
CA 275	Decision Making - Small Groups	3
D. Complete the following:		
EH 372	Technical Writing - W	3
or EH 373	Writing in Professions - W	
<b>Total Hours</b>		<b>53-56</b>

**Footnote**

<sup>1</sup> Students must complete a 6 credit hour sequence either in literature (Area II – EH 215 & EH 216, EH 225 & EH 226, or EH 235 & EH 236) or history (Area IV – HY 101 & HY 102 or HY 135 & HY 136).

<sup>2</sup> Recommended Course

**Additional Information**

Courses in the Major Requirements must be completed with a minimum grade of "C".

**Graduation Plan**

(120 Total Hours)

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
EH 101	English Composition I	3
CA 110	Public Speaking	3
MA 120	Calculus and Its Applications	3
ITE 271	Info Techn in Organizations	3
History	Area IV, B <sup>1</sup>	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
EH 102	English Composition II	3
CA 275	Decision Making - Small Groups	3
CIS 115	Beginning Programming	4
Natural Sci Elec. 1	Natural Science Elective 1	4
Approved Gen Elect	Approved General Elective	1
<b>Hours</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
ITE 285	Intermediate Programming	3
ITE 272	Systems Architecture	3
CIS 324	Database Design-Dev-Mgt	3
Statistics I	Statistics I	3
Natural Sci Elect 2	Natural Science Elective 2	4
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
CIS 321	Data Comm and Networking	3
ITE 370	Adv Application Development	3
EH 372	Technical Writing - W	3
Statistics II	Statistics II	3
Social Science I	Social Science I	3
<b>Hours</b>		<b>15</b>
<b>Third Year</b>		
<b>Fall</b>		
CIS 300	Information Tech in Society	1
Focus Track 1	Focus Track 1	3

Focus Track 2	Focus Track 2	3
Art/Drama/Music	Art/Drama/Music Course	3
ITE 480	Needs Assess-Tech Eval - W	3
Literature	Literature	3
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
ITE 474	Human Computer Interface	3
ITE 475	IT Project Management	3
Focus Track 3	Focus Track 3	3
Focus Track 4	Focus Track 4	3
Social Science 2	Social Science 2	3
<b>Hours</b>		<b>15</b>
<b>Fourth Year</b>		
<b>Fall</b>		
Focus Track Support Elective	Focus Track Support Elective	3
Focus Track Support Elective	Focus Track Support Elective	3
Lit/Fine & Perf Art Elective	Lit/Fine & Perf Art Elective	3
Social Science 3	Social Science 3	3
Approved Gen Elective	Approved General Elective	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Focus Track Support Elective	Focus Track Support Elective	3
ITE 485	ITE Senior Demo Project	3
CIS 497	Senior Capstone Experience-W	3
CIS 498	CIS Senior Seminar	0
Approved Gen Elec	Approved General Elective	4
<b>Hours</b>		<b>13</b>
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> See General Education Requirements

**Information Technology Minor Degree Requirements**

A student wishing to obtain a minor in Information Technology must complete each of the following courses with a minimum grade of "C".

Code	Title	Hours
CIS 115	Beginning Programming	3
ITE 271	Info Techn in Organizations	3
ITE 285	Intermediate Programming	4
ITE 272	Systems Architecture	3
CIS 321	Data Comm and Networking	3
CIS 324	Database Design-Dev-Mgt	3
ITE 370	Adv Application Development	3
ITE 382	Network Administration	3
<b>Total Hours</b>		<b>25</b>

At least 9 hours of courses in the minor, including all 300 level courses, must be completed at the University of South Alabama.

# Process Technology Certificate Non-Degree Program

## Degree Requirements

The educational pathway in Industrial Development begins with students completing 28 credit hours of industry-specific training that earns them a certificate indicating they possess the knowledge and skills needed to enter the workforce. The curriculum has been developed by the North American Process Technology Alliance (NAPTA) and the University of South Alabama's Process Technology Industrial Advisory Board. The curriculum is composed of eight core classes and a skills lab. These stackable education programs are aimed at providing a pathway for students, either new or already in the workforce, where each step of the process provides the students with skills that are immediately usable in industry.

Code	Title	Hours
IPT 113	Intro to Process Technology	3
IPT 141	Process Quality	3
IPT 142	Process Technology I - Equip	4
IPT 143	Process Technology II, Systems	3
IPT 151	Safety, Health and Environment	3
IPT 171	Process Instrumentation	3
IPT 231	Process Technology Skills Lab	3
IPT 232	Process Troubleshooting	3
IPT 244	Process Technology III-Ops	4
<b>Total Hours</b>		<b>29</b>

# COURSES A-Z

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## A

- Academic & Student Affairs -MD (ASA) (p. 975)
- Accounting (ACC) (p. 975)
- Adult Health Nursing (AHN) (AHN) (p. 977)
- Aerospace Engineering (AE) (AE) (p. 984)
- African-American Studies (AFR) (AFR) (p. 984)
- Air Force Studies (AS) (AS) (p. 984)
- Allied Health Profs (AHP) (AHP) (p. 985)
- Anesthesiology - MD (ANY) (p. 986)
- Anthropology (AN) (AN) (p. 986)
- Applied Music A (MUA) (MUA) (p. 989)
- Applied Music B (MUB) (MUB) (p. 991)
- Argument (ARG) (ARG) (p. 994)
- Art Education (AED) (AED) (p. 994)
- Art History (ARH) (ARH) (p. 995)
- Art Studio (ARS) (ARS) (p. 997)
- Audiology (AUD) (AUD) (p. 1003)

## B

- Basic Concepts of Hum Struct-MD (BCS) (p. 1006)
- Basic Science (BSC) (BSC) (p. 1006)
- Baugh Biomedical Library - MD (BBL) (p. 1006)
- Biochemistry - MD (BCH) (p. 1006)
- Biology (BLY) (BLY) (p. 1007)
- Biomedical Engineering (BME) (BME) (p. 1015)
- Biomedical Sciences (BMD) (BMD) (p. 1015)
- Biostatistics in Medicine - MD (BIM) (p. 1019)
- Business (BUS) (BUS) (p. 1019)

## C

- Cancer Biology - MD (CB) (p. 1021)
- Cardiorespiratory Care (CRC) (CRC) (p. 1022)
- Cardiovascular - MD (CVR) (p. 1022)
- Career Planning (CP) (CP) (p. 1022)
- Cell Biology/Neuroscience-MD (CBN) (p. 1022)
- Chemical Engineering (CHE) (CHE) (p. 1023)
- Chemistry (CH) (CH) (p. 1026)
- Civil Engineering (CE) (CE) (p. 1029)
- Classics (CLA) (CLA) (p. 1033)
- Clinical Counseling Psy (CCP) (CCP) (p. 1034)
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- College of Arts/Sciences (CAS) (CAS) (p. 1037)
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- Computer Science (CSC) (CSC) (p. 1049)
- Counselor Education (CED) (CED) (p. 1053)
- Criminal Justice (CJ) (CJ) (p. 1056)
- Cybersecurity (CYB) (p. 1058)

## D

- Digestive - MD (DIG) (p. 1059)
- Digital Film/Telev Prod (DFT) (p. 1059)
- Drama (DRA) (DRA) (p. 1059)

## E

- Ear, Nose & Throat - MD (ENT) (p. 1061)
- Earth Sciences (ES) (ES) (p. 1061)
- Economics (ECO) (ECO) (p. 1062)
- Edu-K-6 and 6-12 Teacher (EDU) (EDU) (p. 1063)
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- Environmental & Society (ENS) (<http://bulletin.southalabama.edu/courses-az/ens/>)
- Environmental Sciences & Sustainability (ENV) (<http://bulletin.southalabama.edu/courses-az/env/>)
- Environmental Toxicology (EXT) (EXT) (p. 1099)

## F

- Family Practice - MD (FMP) (p. 1099)
- Film Studies (FS) (<http://bulletin.southalabama.edu/courses-az/fs/>)
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- Foreign Lang Less Taught (LGS) (LGS) (p. 1102)
- Foreign Languages and Lit (LG) (LG) (p. 1103)
- Foundations of Human Health-MD (FHH) (p. 1109)

## G

- Gender Studies (GS) (GS) (p. 1109)
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- Geology (GY) (GY) (p. 1114)
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## H

- Health and Safety (HS) (HS) (p. 1118)
- Health Informatics (HI) (HI) (p. 1119)

- Health Sciences (HSC) (HSC) (p. 1120)
- Hematology and Host Defense-MD (HHD) (p. 1122)
- Higher Education (HED) (HED) (p. 1122)
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- Hospitality/Tourism Mgmt (HTM) (HTM) (p. 1128)

**I**

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**J**

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**K**

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- Museum Studies (MUM) (MUM) (p. 1188)
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- Music Organization (MUO) (MUO) (p. 1192)

- Music Studio (MUS) (MUS) (p. 1196)
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**N**

- Native American Studies (NAS) (NAS) (p. 1197)
- Natural Science Educ (NSE) (NSE) (p. 1197)
- Neurology - MD (NRY) (p. 1198)
- Neuroscience and Behavior - MD (NSB) (p. 1198)
- Neurosurgery - MD (NSY) (p. 1198)
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**O**

- Obstetrics/Gynecology - MD (OGY) (p. 1210)
- Occupational Therapy (OT) (OT) (p. 1211)
- Occupational Therapy Doctorate (OTD) (<http://bulletin.southalabama.edu/courses-az/otd/>)
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**P**

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## Academic & Student Affairs -MD (ASA)

### ASA 102 USMLE Directed Study 6 cr

Assessment and development of individualized plan with concentration on areas of difficulty. Assessment of study and test taking skills used on previous USMLE to determine weak areas. Emphasis on working through practice questions and practice tests on the computer for every course. And if determined to be necessary, students will take a review course in preparation for the examination. This course is elective for students who are taking the USMLE for the second time. Study will be directly supervised by the Assistant Dean for Special Programs and Student Affairs.

### ASA 311 M3 Academic Success 4 cr

Provide M3 students with additional time and support services for success on USMLE licensure exams.

### ASA 400 Senior Coursework - Spring 8 cr

Senior level course work scheduled in OASIS.

## Accounting (ACC)

### ACC 211 Financial Accounting 3 cr

The course provides an understanding of ways in which financial accounting information supports business decision-making. The focus is on the financial statements and the transactions and processes that produce them. ACC 211 and ACC 212 must be taken in sequence.

### ACC 212 Managerial Accounting 3 cr

The course provides an understanding of ways in which managerial accounting information supports business decision-making. The focus is on identifying, measuring, analyzing, interpreting, and communicating financial information to managers for the pursuit of an organization's goals. ACC 211 and ACC 212 must be taken in sequence.

**Prerequisite:** ACC 211 Minimum Grade of C

### ACC 310 Intro to Acc & Bus Software 3 cr

An introductory course in practical application and study of current accounting and business software. The course provides an overview of commonly used business and accounting software with practical applications.

**Prerequisite:** ACC 212 Minimum Grade of C

### ACC 321 Acct for Entrepreneurial Bus 3 cr

A study of the analysis and use of accounting information by entrepreneurial businesses. Among the topic covered are typical financing sources of entrepreneurial businesses and valuation of closely held businesses. In addition, the course includes coverage of how financial statements can be used to: manage a business, monitor an entity's performance, determine credit decisions, manage cash flow, and prepare forecasted financial statements.

**Prerequisite:** ACC 212 Minimum Grade of C

### ACC 331 Taxation of Individuals 3 cr

Basic federal income tax law and tax planning considerations relating to individuals.

**Prerequisite:** ACC 212 Minimum Grade of C

### ACC 341 Accounting Information Systems 3 cr

The study of accounting as a comprehensive information system which provides for planning and control, special reports, and preparation of external financial statements.

**Prerequisite:** ACC 212 Minimum Grade of C and CIS 250 Minimum Grade of D

### ACC 350 Financial Statement Analysis 3 cr

In-depth coverage of the principles and practices of effective analysis of the financial statements of firms for the purpose of understanding (1) the economic and financial characteristics and current conditions of the firm, (2) particular strategies the firm may select with which to compete, and (3) the accounting principles and procedures underlying the financial statements. The course integrates concepts from accounting, economics, finance and management. Credit cannot be received for both ACC 350 and FIN 350.

**Prerequisite:** ACC 212 Minimum Grade of C and (FIN 315 Minimum Grade of D or FIN 340 Minimum Grade of D)

**Cross-Listed:** FIN 350

### ACC 371 Intermediate Accounting 1 3 cr

Accounting theory as related to income measurement; preparation of balance sheets and income statements; recognition, measurement, and reporting of assets.

**Prerequisite:** ACC 212 Minimum Grade of C and (MA 112 Minimum Grade of D or MA 120 Minimum Grade of D or MA 125 Minimum Grade of D or MA 126 Minimum Grade of D) and ACC 212 Minimum Grade of D and ECO 215 Minimum Grade of D and ECO 216 Minimum Grade of D and BUS 255 Minimum Grade of D and BUS 265 Minimum Grade of D and CIS 250 Minimum Grade of D

### ACC 372 Intermediate Accounting II 3 cr

Includes measurement, recognition and reporting of liabilities, equities, investments, and deferred taxes; EPS; and the preparation of cash flow statements. Coverage of selected professional pronouncements.

**Prerequisite:** ACC 313 Minimum Grade of C or ACC 371 Minimum Grade of C

**ACC 380 Cost Accounting for Managers 3 cr**

Managers must use cost and revenue data to make decisions about which products or services to produce. This course teaches managers about cost-accounting theory and practice including job-order and process-cost systems, cost-volume-profit relationships, budgets, standard costs, variance analysis, direct costing, and cost allocation.

**Prerequisite:** ACC 212 Minimum Grade of C

**Cross-Listed:** ACC 381

**ACC 381 Cost Accounting 3 cr**

Includes cost-accounting theory and practice involving such topics as job-order and process-cost systems, cost-volume-profit relationships, budgets, standard costs, variance analysis, direct costing, and cost allocation.

**Prerequisite:** ACC 212 Minimum Grade of C

**ACC 410 Forensic Accounting 3 cr**

An intro to principles for forensic accounting and professional ethics. Civil and criminal procedures and litigation services are covered. The course introduces forensic accounting topics such as fraud, bankruptcy, digital forensics, and financial statement misrepresentation.

**Prerequisite:** ACC 372 Minimum Grade of C

**ACC 415 Data Analytics for Accounting 3 cr**

This course focuses on the use of data analytic tools in the accounting profession. Students will learn the fundamentals of data analysis in a variety of accounting disciplines, how to interpret the output, and ways to communicate the results. Students will work on projects aimed at enhancing their competency in critical thinking, problem-solving, written and oral communication, and data analytic skills.

**Prerequisite:** (ACC 341 Minimum Grade of C and ACC 372 Minimum Grade of C and ACC 381 Minimum Grade of C)

**ACC 416 Int'l and Advanced Accounting 3 cr**

Study of accounting in a global context including standards and issues and the roles and responsibilities of accountants. Additional topics include: business combinations, government accounting, interim and segmented reporting.

**Prerequisite:** ACC 314 Minimum Grade of C or ACC 372 Minimum Grade of C

**ACC 432 Tax of Partnerships and Corps 3 cr**

An examination of the federal tax treatment of partnerships and corporations. Topics include: tax aspects of the formation of the entity, elements of gross income, treatment of property dispositions, allowable deductions and credits, determination of entity and investor basis, and liquidation of the entity.

**Prerequisite:** (ACC 331 Minimum Grade of C or ACC 411 Minimum Grade of D) and (ACC 314 Minimum Grade of C or ACC 372 Minimum Grade of C)

**ACC 451 Auditing - W 3 cr**

Theory and application of the attest function, ethical issues, and written communication for accountants. Includes standards, objectives, review of internal control structures, tests of controls, substantive testing and reporting. Ethical issues and the preparation of written letters and formal reports are covered.

**Prerequisite:** (ACC 314 Minimum Grade of C or ACC 372 Minimum Grade of C) and MGT 305 Minimum Grade of D

**ACC 452 Advanced Auditing & Analytics 3 cr**

Advanced study of the application of auditing standards, internal control evaluations, applications of statistics, audits of information systems, internal and operational auditing, and legal and reporting obligations.

**Prerequisite:** ACC 451 Minimum Grade of C

**ACC 461 Acc for Gov and Not-For-Profit 3 cr**

A study of the concepts and procedures underlying fund accounting, budgetary control, and financial reporting requirements for governmental and not-for-profit entities.

**Prerequisite:** ACC 314 Minimum Grade of C or ACC 372 Minimum Grade of C

**ACC 490 Special Topics 3 cr**

Designed to provide senior students an opportunity to study selected topics of particular interest. A student may count no more than six hours of Special Topics in the concentration. Prerequisite: Approval of Department Chair.

**ACC 494 Directed Studies 3 cr**

Primarily designed to give superior students an opportunity to study some phase of accounting of particular interest. Conferences, a bibliography, and a formal research report are required. Requires permission of Department Chair, 2.5 GPA or better and junior or senior standing.

**ACC 496 Accounting Internship 3 cr**

The internship program is designed to give students practical experience in their field of study. Students complete directed projects under the supervision of Department Chair.

**Prerequisite:** ACC 314 Minimum Grade of C or ACC 372 Minimum Grade of C

**ACC 510 Forensic Acc. & Litig. Svcs. 3 cr**

An intro to forensic accounting from the CPA perspective, focusing on civil and criminal procedures, and litigation services. Includes topics such as fraud, bankruptcy, digital forensics, and financial statement misrepresentations.

**ACC 511 Financial Accounting Theory 3 cr**

The evolution of general accounting theory leading up to and including the Conceptual Framework will be discussed as well as the specific theory underlying certain accounting topics of current interest.

**ACC 516 Advanced Financial Accounting 3 cr**

Study of Business combinations, consolidation issues, interim and segmented reporting, inflation accounting. Coverage of selected professional pronouncements.

**ACC 521 Advanced Managerial Accounting 3 cr**

Advanced managerial and cost accounting topics. Tools for planning and control, development of cost information for decision making, cost allocation, inventory management systems, capital budgeting, performance measurement, transfer pricing and multi-national considerations.

**ACC 531 Tax Planning and Research 3 cr**

An examination of tax research tools, their utilization, and various tax planning considerations. Students are required to conduct research and tax planning upon assigned topics, and write a report on their findings.

**ACC 532 Tax Partnerships/Corporations 3 cr**

An examination of the federal tax treatment of partnerships and corporations. Topics include: tax aspects of the formation of the entity, elements of gross income, treatment of property dispositions, allowable deductions and credits, determination of entity and investor basis, and liquidation of the entity.

**ACC 534 Tax of Gifts, Trusts & Estates 3 cr**

An examination of the federal tax treatment of gratuitous transfers made during life and at death.

**ACC 535 Multi Tax 3 cr**

This course addresses the increased importance of international and multi-jurisdictional taxation in today's global environment. It introduces students to the principles guiding nexus, geographic allocation of income and the avoidance of double taxation. The course helps students develop an understanding of the U.S. tax rules that may apply to income involving the U.S. and other countries. It also helps students understand multistate tax rules. Students will develop an understanding of the tax implications resulting from business that is conducting electronically. Students will apply multi-jurisdictional tax principles and rules to solve case studies.

**ACC 541 Advanced Accounting Systems 3 cr**

Analysis of accounting information system case studies in order to expose students to real-world system problems and applications. Course work includes hands-on work with a variety of computer-based accounting application packages.

**ACC 552 Advanced Auditing & Analytics 3 cr**

Advanced study of the application of auditing standards, internal control evaluations, applications of statistics, audits of information systems, internal and operational auditing, and legal and reporting obligations.

**ACC 561 Acc of Government and NFPE 3 cr**

A study of the concepts and procedures underlying fund accounting, budgetary control, and financial reporting requirements for governmental and not-for-profit entities.

**ACC 570 Professional Accounting I 3 cr**

A study of issues and responsibilities relevant to the public accounting profession, including financial, regulation, assurance, and business considerations.

**ACC 571 Professional Accounting II 3 cr**

A study of contemporary issues and responsibilities relevant to the accounting profession, including ethical, legal and international considerations.

**ACC 572 Fraud Ex 3 cr**

Overview of the nature of occupational fraud and how it is committed included an introduction to the actions that can be taken to determine the presence of occupational fraud and procedures that can be implemented to deter fraud. Students will also learn how financial statement fraud and reporting occur, including investigation and financial fraud prevention techniques.

**ACC 580 Emerging Issues in Accounting 3 cr**

A study of current and emerging issues and responsibilities relevant to the accounting profession, with special emphasis on technology advancements, new services, regulatory changes, and international developments in accounting and business.

**ACC 590 Special Topics 3 cr**

Designed to provide graduate students an opportunity to study selected topics. Prerequisites: Permission of Department Chair. A student may count no more than three hours of Special Topics in the MBA degree program.

**ACC 594 Independent Study in Account 3 cr**

Readings and research on selected topics. Conference and formal research report required. Permission of department chair.

## Adult Health Nursing (AHN) (AHN)

**AHN 447 Adult Gerontological Nursing 4 cr**

Synthesize theories, concepts, research, issues and trends in caring for adult gerontological population with complex multisystem health care needs. Emphasis is on the role of the professional nurse in health promotion and maintenance, illness care, and rehabilitation of adult gerontological population in a variety of acute and community settings. **Prerequisite:** (CMN 350 Minimum Grade of C and CMN 351 Minimum Grade of C and MCN 352 Minimum Grade of C and MCN 353 Minimum Grade of C and MCN 354 Minimum Grade of C and MCN 355 Minimum Grade of C)

**Corequisite:** AHN 448

**AHN 448 Adult Gerontological Nsg Clin 4 cr**

The focus of this course is the application of theories, concepts, evidence, issues and trends in caring for adult gerontological population experiencing complex multisystem health care needs. Emphasis is on the role of the professional nurse and on the use of the nursing process with adult gerontological population experiencing complex multisystem health care needs and their families.

**Prerequisite:** CMN 350 Minimum Grade of C and CMN 351 Minimum Grade of C and MCN 352 Minimum Grade of C and MCN 353 Minimum Grade of C and MCN 354 Minimum Grade of C and MCN 355 Minimum Grade of C

**Corequisite:** AHN 447

**AHN 513 AG/CNS Clinical Progression 1-9 cr**

The purpose of this progression practicum course is to facilitate student independence in the Adult-Gerontological Clinical Nurse Specialist role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses and to develop the necessary skills to progress to the next level of competency in the Adult-Gerontological Clinical Nurse Specialist role. The emphasis is on the three spheres of influence and the continuum of healthcare services from wellness through acute care.

**AHN 515 A/G CNS Shadowing Intensive 1 cr**

This is a clinical practice course in adult health nursing. The focus is on the application of theories, concepts, research, and issues and trends in adult health nursing. The emphasis is on the role of the professional nurse in adult health nursing and on the use of the nursing process with adult/gerontological patients experiencing health concerns in the acute care setting.

**AHN 516 CNS Adult Geron Pract I 3 cr**

The purpose of this precepted practicum course is to provide students an immersion experience in the CNS role in the Acute Care setting through health promotion, wellness, and disease management across the lifespan from adolescent to adult to older adult. The focus of the course is to develop the CNS's ability to assimilate and apply evidence-based information in nursing care activities, to appraise nursing practice standards and norms, and to influence organizations to support the delivery of nursing care and achieve optimal health outcomes. The emphasis is on the CNS core competencies of Direct Care, Consultation, Systems Leadership, Collaboration, Coaching, Research, and Ethical Decision-Making/Moral Agency/Advocacy.

**Prerequisite:** NU 578 Minimum Grade of C

**Corequisite:** NU 515

**AHN 517 CNS Adult Geron Pract II 3 cr**

The purpose of this precepted practicum course is to provide students an immersion experience in the CNS role through health promotion, wellness, and disease management of acute and chronic conditions across the lifespan from adolescent to adult to older adult. The practicum experiences will occur in both the Acute Care setting and either 1) the Emergency or Urgent Care setting or 2) the Primary Care or Specialty Outpatient Clinic setting. The focus of the course is to enhance knowledge of advanced patient management through direct care practices including clinical assessment, differential diagnoses, pharmacological and non-pharmacological treatment, and advanced practice skills. The student should participate in direct interactions with patients and families, consultations, coaching, development of evidenced based policies/guidelines/protocols, educational guidance of other nursing personnel, and implementation of practices that improve quality and promote cost-effective outcomes. The emphasis is on the CNS core competencies of Direct Care, Consultation, Systems Leadership, Collaboration, Coaching, Research, and Ethical Decision-Making/Moral Agency/Advocacy.

**Corequisite:** NU 516

**AHN 518 CNS Adult Geron Pract III 3 cr**

The purpose of this precepted practicum course is to provide an immersion experience in the CNS role through health promotion, disease management, acute and chronic illness care, and exacerbations of chronic illness management across the lifespan from adolescent to adult to older adult. The practicum experiences will occur in both the Acute Care setting and either 1) the Emergency or Urgent Care setting or 2) the Primary Care or Specialty Outpatient Clinic setting. The focus of the course is to develop the CNS's ability to assimilate and apply evidence-based information in nursing care activities, to appraise nursing practice standards and norms, and to influence organizations to support the delivery of nursing care and achieve optimal health outcomes. The emphasis of this course is on the patient, nurse, and organization/system spheres of impact and the CNS core competencies of Direct Care, Consultation, Systems Leadership, Collaboration, Coaching, Research, and Ethical Decision-Making/Moral Agency/Advocacy.

**Prerequisite:** NU 516 Minimum Grade of C and AHN 517 Minimum Grade of C and NU 607 Minimum Grade of C and NU 613 Minimum Grade of C and NU 610 Minimum Grade of C

**Corequisite:** NU 517

**AHN 519 Diagnostic Reasoning and Advanced Patient Management for the Clinical Nurse Specialist 4 cr**

The purpose of this elective course is for the CNS to integrate advanced pharmacology, pathophysiology, and assessment for the diagnosis and management of acute and chronic problems of the adolescent/adult/old adult patients across the continuum of health services. The course focuses on the formulation of differential diagnoses and the development of pharmacologic and no-pharmacologic plans of care for the individual patients rather than aggregates. The emphasis is placed on synthesis and application of evidence-based practice to the development of differential diagnoses as a basis for health promotion and management.

**Corequisite:** NU 516

**AHN 520 AHN MSN Incomplete Extension 1-5 cr****AHN 530 Found Palliative Care/Adv Role 2 cr**

This didactic course prepares the advance practice palliative care student a forum for the evaluation of issues and trends encountered in palliative and end of life care. Students learn to coordinate and develop primary and palliative health care programs for patients and families across the lifespan. Emphasis is on critical analysis and management of issues in an interdisciplinary health care delivery system.

**AHN 531 Adv Palliative Cr/End of Life 2 cr**

This course provides students an in-depth study of the health care management for patients seeking palliative and end of life care. Emphasis is on the interaction among health care providers and psychological/spiritual care of the patient and family.

**Prerequisite:** AHN 530 Minimum Grade of C

**AHN 532 Adv Chronic Illness Care 2 cr**

This course provides a study of the illness trajectories of chronic diseases that are among the leading causes of death in our society. Assessment and management of the illnesses as well as associated pain and symptoms will be examined. The focus is on assisting patients, families, and other health professionals to anticipate/prevent/reduce adverse symptoms from life threatening illnesses to maximize quality of life across the lifespan.

**Prerequisite:** AHN 531 Minimum Grade of C

**AHN 533 Adv Palliative Care Practicum 1-9 cr**

This course provides a preceptor and faculty facilitated experience in which students have the opportunity to become proficient at providing comprehensive care to patients with serious illness by engaging in holistic assessment of pain and quality of life in a variety of settings. Advanced knowledge of palliative/end of life care will be integrated into assessing and managing the complex psychological, ethical, social, spiritual issues, and grief reactions while working as a member of a palliative care team.

**Prerequisite:** AHN 530 Minimum Grade of C

**AHN 538 HPDP Dual Role (FNP/AGACNP) 2 cr**

This didactic course prepares the Dual Role (Family NP/Adult-Gerontological Acute Care NP) student to identify and implement appropriate and culturally sensitive health promotion, health protection, and disease prevention strategies across the lifespan for clients in emergency, urgent, and ambulatory care settings. Emphasis is on health promotion, health protection, and disease prevention with strategic planning at the primary, secondary, and tertiary levels. Effective strategies for life-style behavioral changes will also be evaluated.

**AHN 548 Family Prim Care NP I 4 cr**

The purpose of this didactic course is to prepare (Family NP/Adult-Gerontological Acute Care NP) students to assess, diagnose, and manage selected health care needs of women and childbirth, infants, children, and families in a caring, competent manner. Emphasis is placed on (1) synthesis and application of nursing and related theories and scientific knowledge to the development of differential/nursing diagnoses as a basis for health promotion and management; (2) wellness and the pathophysiology and epidemiology underlying acute and chronic health problems; and (3) collaboration and communication among health care providers in a culturally diverse environment. The focus is on the advanced practice nursing of individuals and families in primary healthcare settings. Co-requisite: AHN 549 Pre-requisite NU 518 Minimum Grade C and NU 545 Minimum Grade of C

**Prerequisite:** (NU 518 (may be taken concurrently) Minimum Grade of C and NU 545 (may be taken concurrently) Minimum Grade of C and AHN 538 Minimum Grade of C)

**Corequisite:** AHN 549

**AHN 549 Family Prim Care NP Prac I 4 cr**

The purpose of this practicum course is to provide opportunities for Dual Role (Family NP/Adult-Gerontological Acute Care NP) students to apply concepts from AHN 548 in selected clinical settings. The emphasis is on culturally competent delivery of health care, diagnostic reasoning, and decision making/critical thinking through communication and collaboration. The focus is continued refinement of cognitive and clinical skills needed to provide comprehensive health assessments, diagnoses, and management of selected health care needs of women and childbirth, infants, children, and families in primary healthcare settings. Co-requisite: AHN 548

**Prerequisite:** (NU 578 Minimum Grade of C and AHN 538 Minimum Grade of C)

**Corequisite:** AHN 548

**AHN 550 Family Prim Care NP II 4 cr**

This didactic course prepares the Dual Role (Family NP/Adult-Gerontological Dual Role) students to identify and implement appropriate and culturally sensitive health promotion and disease prevention strategies across the lifespan for clients in emergency, urgent, and ambulatory care settings. Emphasis is placed on health promotion and disease prevention with strategic planning at the primary, secondary, and tertiary levels. Prevention, early diagnosis, prompt treatment, and in-depth patient education will be emphasized. Effective strategies for life-style behavioral changes will also be evaluated. Co-requisite: AHN 551 Pre-requisite: NU 578 Minimum Grade of C and AHN 548 Minimum Grade of C

**Prerequisite:** NU 578 (may be taken concurrently) Minimum Grade of C and AHN 548 Minimum Grade of C

**Corequisite:** AHN 551

**AHN 551 Family Prim Care NP Pract II 5 cr**

The purpose of this course is to provide a preceptor and faculty facilitated experience for Dual Role (Family NP/Adult-Gerontological Acute Care NP) students to practice within an advanced nursing framework. The focus is on the role of the Family Nurse Practitioner in the health care management of children, adults, and families in primary health care settings with the application and synthesis of knowledge and skills acquired from AHN 550 and previous courses. Emphasis is on leadership, professionalism, and collaboration with other health care providers in a culturally diverse environment. Co-requisite: AHN 550

**Corequisite:** AHN 550

**AHN 552 Adult-Geron Acute Care NP I 4 cr**

The purpose of this course is to prepare Dual Role (Family NP/Adult-Gerontological Acute Care NP) students to assess, diagnose, and manage selected health care needs of young and older adults across the wellness-illness continuum in a caring, competent manner. Emphasis is placed on (1) synthesis of theoretical, scientific, and contemporary clinical knowledge used to develop differential diagnoses as a basis for health promotion, disease prevention, and management; (2) wellness and the pathophysiology and epidemiology underlying complex acute, critical, and chronic illness, disability, and/or injury; and (3) collaboration using appropriate processes for patient-centered, quality care in a culturally diverse system. The focus is on advanced practice nursing with the entire adult-older adult age spectrum and families in emergency, urgent, and ambulatory settings. Co-requisite: AHN 553 Pre-requisite: AHN 538 Minimum Grade of C and AHN 549 Minimum Grade of C and AHN 551 Minimum Grade of C and NU 607 Minimum Grade of C and NU 608 Minimum Grade of C

**Prerequisite:** AHN 538 Minimum Grade of C and AHN 549 Minimum Grade of C and AHN 551 Minimum Grade of C and NU 607 (may be taken concurrently) Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C

**Corequisite:** AHN 553

**AHN 553 Adult-Ger Acute Care NP Prac I 4 cr**

The purpose of this practicum course is to provide opportunities for Dual Role (Family NP/Adult-Gerontological Acute Care NP) students to apply concepts from AHN 552 in selected clinical settings. Emphasis is on critical thinking, diagnostic reasoning, differential diagnosis, communication, and collaboration in a culturally diverse system. The focus is refinement of cognitive and clinical skills needed to provide competent patient-centered care to young adults, adults, and older adults across the wellness-illness continuum with acute, critical and chronic illness, disability, and/or injury in emergency, urgent, and ambulatory care settings. Co-requisite: AHN 552

**Corequisite:** AHN 552

**AHN 554 Adult-Geron Acute Care NP II 4 cr**

The purpose of this didactic course is to (1) provide the Dual Role (Family NP/Adult-Gerontological Acute Care NP) students with an in-depth study of the health care management of young adults, adults, and older adults across the wellness-illness continuum and to (2) provide a forum for the critical analysis and evaluation of issues and trends encountered by the Adult-Gerontology Acute Care Nurse Practitioner in an interdisciplinary health care delivery system. Emphasis is on leadership and professionalism in a culturally diverse system. The focus is on ensuring quality, patient-centered care of the adult-older adult population with selected complex acute, critical and chronic illness, disability, and/or injury to improve health outcomes in emergency, urgent, and ambulatory settings. Co-requisite: AHN 555 Pre-requisite: AHN 552 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C

**Prerequisite:** AHN 552 Minimum Grade of C and NU 610 (may be taken concurrently) Minimum Grade of C and NU 613 (may be taken concurrently) Minimum Grade of C

**Corequisite:** AHN 555

**AHN 555 Adlt-Ger Acute Care NP Prac II 5 cr**

The purpose of this practicum course is to provide a preceptor and faculty facilitated experience for Dual Role (Family NP/Adult-Gerontological Acute Care NP) students to practice within an advanced nursing framework by synthesizing and applying the knowledge and skills required in AHN 554 and previous courses. Emphasis is on leadership, professionalism, and collaboration in a culturally diverse system. The focus is on implementing the role of the Adult-Gerontology Acute Care Nurse Practitioner in the health care management of young adults, adults, and older adults across the wellness-illness continuum with acute, critical and chronic illness, disability, and/or injury in emergency, urgent, and ambulatory health care settings. Co-requisite: AHN 554

**Corequisite:** AHN 554

**AHN 558 Dual Role FNP Clin Progression 1-9 cr**

The purpose of this progression practicum course is to facilitate student independence in the Dual Role Family Nurse Practitioner role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses and to develop the necessary skills to progress to the next level of competency in the Family Nurse Practitioner role of the Dual Role (FNP/AGACNP) program.

**AHN 559 Dual Role-AGAC Cli Progression 1-4 cr**

The purpose of this progression practicum is to facilitate student independence in the Nurse Practitioner role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses and to develop the necessary skills to progress to the next level of competency in the Dual Track AGACNP Nurse Practitioner role.

**AHN 566 AG/ACNP Clinical Progression 1-4 cr**

The purpose of this progression practicum is to facilitate student independence in the Adult-Geron Acute Care Nurse Practitioner role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses and develop the necessary skills to progress to the next level of competency in the Adult-Geron Acute Care Nurse Practitioner role.

**AHN 568 Intro to Adult-Geron Acute NP 3 cr**

The purpose of this first didactic course is to prepare the Adult-Gerontological Acute Care Nurse Practitioner students to assess, diagnose, and manage selected health care needs of adults and geriatrics. Emphasis is placed on synthesis and application of nursing and related theories and scientific knowledge to the development of differential/nursing diagnoses as a basis for health promotion and management.

**Prerequisite:** NU 545 (may be taken concurrently) Minimum Grade of C and NU 518 (may be taken concurrently) Minimum Grade of C

**Corequisite:** AHN 571

**AHN 571 HPDP Adult-Geron Acute Care NP 2 cr**

The purpose of this didactic course is to prepare the Adult-Gerontological Acute Care Nurse Practitioner student to identify and implement appropriate health promotion and disease prevention strategies in the adult and geriatric populations. The focus is on the advanced practice nursing of individuals and families in the acute care setting. Emphasis is placed on health promotion/disease prevention with strategic planning at the primary, secondary and tertiary levels of prevention. Various issues are explored pertinent to the advanced practice role.

**Prerequisite:** NU 578 Minimum Grade of C

**Corequisite:** AHN 568

**AHN 572 Adult-Geron Acute NP I 3 cr**

The purpose of this didactic course is to prepare Adult-Gerontological Acute Care Nurse Practitioner students to assess, diagnose, and manage selected health care needs of adults and geriatrics. The focus is on advanced practice nursing with adults and families in the acute care setting. Emphasis is placed on the wellness and the pathophysiology and epidemiology underlying acute and chronic health problems.

**Prerequisite:** AHN 568 Minimum Grade of C and NU 578 Minimum Grade of C

**Corequisite:** AHN 573

**AHN 573 Adult-Geron Acute NP Prac I 3 cr**

The purpose of this practicum course is to provide opportunities for students to apply concepts in select clinical settings. Focus is on adults and families in the acute care setting. The emphasis is on diagnostic reasoning and decision making/critical thinking.

**Prerequisite:** NU 578 Minimum Grade of C

**Corequisite:** AHN 572

**AHN 574 Adult-Geron Acute NP II 3 cr**

The purpose of this course is provide an in-depth study of the health care management of the Adult Geron Acute Care patient. Emphasis is on the interaction among health care providers in a culturally diverse environment.

**Prerequisite:** AHN 572 Minimum Grade of C

**Corequisite:** AHN 575

**AHN 575 Adult-Geron Acute NP Prac II 3 cr**

The purpose of this course is to provide an opportunity for the Adult Acute Care Nurse Practitioner student to practice within an advanced nursing framework. The focus is on the role of the advanced practice nurse in the health care management of adults. Emphasis is on collaboration with other health care providers in a culturally diverse environment.

**Corequisite:** AHN 574

**AHN 576 Adult Geron Acute NP Prac III 4 cr**

The purpose of this culminating course is to provide a preceptor and faculty facilitated experience in the Adult Geron Acute Care Nurse Practitioner role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses.

**Prerequisite:** (NU 607 Minimum Grade of C and AHN 574 Minimum Grade of C and AHN 575 Minimum Grade of C)

**Corequisite:** AHN 577

**AHN 577 Adult Geron Acute NP III 3 cr**

The purpose of this course is to provide a forum for the evaluation of issues and trends encountered in advanced adult gerontological acute care nursing. Emphasis is on a critical analysis and management of issues by the Adult Geron Acute Care Nurse Practitioner in an interdisciplinary health care delivery system.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and AHN 574 Minimum Grade of C)

**Corequisite:** AHN 576

**AHN 581 HP/DP Adlt-Geron Prim Care NP 3 cr**

The purpose of this didactic course is to prepare the adult-gerontological primary care nurse practitioner (AGPCNP) student with a knowledge base for identifying and implementing appropriate health promotion and disease prevention strategies with adolescents, adults, and older adults. The focus is on the AGPCNP care of adolescents, adults, and older adults in multiple health care settings and with multiple health professionals and disciplines. Emphasis is placed on health promotion/disease prevention and related health issues with collaborative, team-based strategic planning at the primary, secondary, and tertiary levels of prevention to improve patient outcomes. Various issues are explored which are pertinent to the AGPCNP's role in healthcare.

**Corequisite:** AHN 588

**AHN 588 Intro to Adult-Geron Prim NP 2 cr**

The purpose of this course is to expand the Adult-Gerontological Primary Care Nurse Practitioner (AGPCNP) student's knowledge and skills for obtaining, recording, and analyzing a systemic health assessment of the adult and older adult. Emphasis is placed on synthesis and application of nursing and related theories and scientific knowledge to the development of differential/nursing diagnoses as a basis for health promotion and management.

**Prerequisite:** NU 545 (may be taken concurrently) Minimum Grade of C and NU 518 (may be taken concurrently) Minimum Grade of C

**Corequisite:** AHN 581

**AHN 591 Adult-Geron Prim NP I 3 cr**

This didactic course prepares the adult-gerontological primary care nurse practitioner (AGPCNP) student to assess, diagnose, and manage selected health care needs of culturally diverse adolescent, adult, older adult, and frail geriatric populations. The focus is on the adult gerontological practice of nursing and interprofessional healthcare decision-making for adults and their families in a variety of health care settings. Emphasis is placed on wellness, the pathophysiology and epidemiology underlying acute and chronic health problems with a focus on the unique health care needs of the older adult population as well as ethical considerations and quality interactions among healthcare team members.

**Prerequisite:** AHN 588 Minimum Grade of C and NU 578 (may be taken concurrently) Minimum Grade of C

**Corequisite:** AHN 592

**AHN 592 Adlt-Geron Primary NP Pract I 3 cr**

The purpose of this practicum course is to provide opportunities for the Adult-Gerontological Primary Care Nurse Practitioner (AGPCNP) student to apply concepts from AHN 591 in primary and acute care settings with adults and families experiencing health concerns. This clinical course will offer clinical hours for targeting adult health and gerontological health issues. Students will divide clinical hours between young adults, middle aged adults, and elders.

**Prerequisite:** NU 578 Minimum Grade of C

**Corequisite:** AHN 591

**AHN 593 Adult-Gero Prim NP II 3 cr**

The purpose of this course is to provide the Adult-Gerontological Primary Care Nurse Practitioner student an in-depth study of health care management of adults, well and frail elders, and their families within the framework of advanced nursing. The focus is on selected acute and chronic complex health care problems. Emphasis is on the interaction among health care providers in a culturally diverse environment.

**Prerequisite:** AHN 591 Minimum Grade of C

**Corequisite:** AHN 594

**AHN 594 Adult-Geron Prim NP Prac II 3 cr**

The purpose of this course is to provide opportunity for the adult-gerontological primary care nurse practitioner (AGPCNP) to practice within an advanced nursing framework. The focus is on the role of the AGPCNP in the health care management of adult and geriatric patients with physical and psychiatric-mental health concerns. Emphasis is on collaboration with other health care providers in a culturally diverse environment. This clinical course will offer experience with diverse populations including young and middle aged adults and elders in a variety of settings.

**Corequisite:** AHN 593

**AHN 595 Adult-Gero Primary Care NP III 3 cr**

The purpose of this course is to provide a forum for evidence-based, collaborative evaluation of issues and trends encountered in adult and gerontological nursing care. Emphasis is on critical analysis and management of issues by the adult gerontological primary care nurse practitioner (AGPCNP) in an interdisciplinary health care delivery system, including providing care for vulnerable patient populations.

**Prerequisite:** AHN 593 Minimum Grade of C and NU 607 (may be taken concurrently) Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C and NU 610 (may be taken concurrently) Minimum Grade of C and NU 613 (may be taken concurrently) Minimum Grade of C

**Corequisite:** AHN 596

**AHN 596 Adult-Geron Prim NP Prac III 4 cr**

The purpose of this culminating course is to provide a preceptor- and faculty facilitated experience in the Adult-Gerontological Primary Care Nurse Practitioner (AGPCNP) role. The focus is the application and synthesis of knowledge and skills acquired in all previous courses. Students will have clinical experiences with all ages of adults and elders in a variety of settings.

**Prerequisite:** NU 607 (may be taken concurrently) Minimum Grade of C

**Corequisite:** AHN 595

**AHN 598 AG/PCNP Clinical Progression 1-4 cr**

The purpose of this progression practicum is to facilitate student independence in the Adult-Geron Primary Care Nurse Practitioner role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses and to develop the necessary skills to progress to the next level of competency in the Adult-Geron Primary Care Nurse Practitioner role.

**AHN 604 Adult-Geron Acute Care NP PP&D 3 cr**

This course assists the Adult-Gerontological Acute Care Nurse Practitioner DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the Adult-Gerontological Acute Care Nurse Practitioner students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C)

**AHN 617 AG ACNP Residency I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The Adult-Geron Acute Care Nurse Practitioner student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the Adult-Geron Acute Care Nurse Practitioner student will work with the primary faculty advisor to complete projects and advance their selected practice area. The Adult-Geron Acute Care Nurse Practitioner student will have access to and authority for expanded scope of practice to master the DNP competencies. Residency sites will depend upon the Adult-Geron Acute Care Nurse Practitioner student's career trajectory and approval by collaborating faculty. During the residency semester, students must participate in scheduled scholarly seminars online. Direct practice/management is required.

**Prerequisite:** AHN 604 Minimum Grade of S and NU 615 (may be taken concurrently) Minimum Grade of C

**AHN 618 AG ACNP Residency II 3 cr**

Provides Adult-Gerontological Acute Care Nurse Practitioner students the opportunity to fully express all DNP competencies. The Adult-Gerontological Acute Care Nurse Practitioner student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

**Prerequisite:** AHN 617 Minimum Grade of C and NU 616 (may be taken concurrently) Minimum Grade of C

**AHN 619 AG ACNP Residency III 3 cr**

Final course in residency series as Adult-Gerontological Acute Care Nurse Practitioner student continues to implement and evaluate project plan. Provides Adult-Geron Acute Care Nurse Practitioner student the opportunity to fully express all DNP competencies. The Adult-Gerontological Acute Care Nurse Practitioner student, guided by the core faculty and advisor, completes quality improvement evidence-based system's change project.

**Prerequisite:** AHN 618 Minimum Grade of C and NU 612 (may be taken concurrently) Minimum Grade of C

**AHN 630 Dysrhythmias and the Heart 2 cr**

The first of four cardiovascular specialization courses focuses on the development of a methodical approach to dysrhythmia interpretation. Emphasis is on diagnosis and management of the patient with cardiac dysrhythmias via an evidence-based approach.

**AHN 631 Foundations of Cardiac Care 2 cr**

This second of four cardiovascular specialization courses focuses on health promotion, prevention, health disparities and cultural competence for patients with common cardiovascular disorders. Emphasis is on cardiovascular nurse practitioner's role in managing patients as an integral part of the interdisciplinary health care team.

**Prerequisite:** AHN 630 (may be taken concurrently) Minimum Grade of C

**AHN 632 Diag & Mgmt of Acute CVD 2 cr**

The third of four cardiovascular specialization courses focuses on advanced healthcare management of patients with acute cardiovascular disorders. Emphasis is on diagnosis and management, to include assessment, diagnostic procedures, treatment and pharmacological management. Particular attention will be given to cardiovascular health disparities in a culturally diverse environment.

**Prerequisite:** AHN 631 Minimum Grade of C

**AHN 633 Dig/Mgmt Complex CV Disorders 2 cr**

The third of four cardiovascular specialization courses focuses on advanced healthcare management of patients with complex cardiovascular disorders. Emphasis is on diagnosis and management, to include assessment, diagnostic procedures, treatment and pharmacological management. Particular attention will be given to cardiovascular health disparities in a culturally diverse environment.

**Prerequisite:** AHN 632 Minimum Grade of C

**AHN 634 Adult-Geron CNS PP&D 3 cr**

This course assists the Adult-Gerontological Clinical Nurse Specialist DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning development as a preliminary step to the Adult-Gerontological Clinical Nurse Specialist students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C)

**AHN 635 Adult-Geron CNS Residency I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The Adult-Gerontological Clinical Nurse Specialist student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the Adult-Gerontological Clinical Nurse Specialist student will work with the primary faculty advisor to complete projects and advance their selected practice area. The Adult-Gerontological Clinical Nurse Specialist student will have access to and authority for expanded scope of practice to master the DNP competencies. Residency sites will depend upon the Adult-Gerontological Clinical Nurse Specialist student's career trajectory and approval by collaborating faculty. During the residency semester, student must participate in scheduled scholarly seminars online. A total of 180 clinical hours of direct practice/management is required.

**Prerequisite:** AHN 634 Minimum Grade of S and NU 615 (may be taken concurrently) Minimum Grade of C

**AHN 636 Adult-Geron CNS Residency II 3 cr**

Provides Adult-Gerontological Clinical Nurse Specialist students the opportunity to fully express all DNP competencies. The Adult-Gerontological Clinical Nurse Specialist student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

**Prerequisite:** AHN 635 Minimum Grade of C and NU 616 (may be taken concurrently) Minimum Grade of C

**AHN 637 Adult-Geron CNS Residency III 3 cr**

Final course in residency series as Adult-Gerontological Clinical Nurse Specialist student continues to implement and evaluate project plan. Provides Adult-Gerontological Clinical Nurse Specialist student the opportunity to fully express all DNP competencies. The Adult-Gerontological Clinical Nurse Specialist student, guided by the core faculty and advisor completes quality improvement evidence-based system's change project.

**Prerequisite:** AHN 636 Minimum Grade of C and NU 612 (may be taken concurrently) Minimum Grade of C

**AHN 670 AG-ACNP(DR) PP&D 3 cr**

This course assists the DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C)

**AHN 671 AG/ACNP (DR) Residency I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. In this course, students will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the student will work with the primary faculty advisor to develop a project to advance system's change in their selected practice area. The student will have access to and authority for expanded scope of practice to master all DNP competencies. Residency sites will depend upon the student's career trajectory and approval by collaborating faculty. During the residency semester, student must participate in scheduled scholarly seminars online. A total of 180 clinical hours of direct practice/management is required.

**Prerequisite:** (NU 608 Minimum Grade of C and AHN 670 Minimum Grade of S and NU 615 (may be taken concurrently) Minimum Grade of C)

**AHN 672 AG-ACNP (DR) Residency II 3 cr**

In this mentored and supervised experience, students will work with the primary faculty advisor to implement a scholarly project to advance system's change in their selected practice area. The student will have access to and authority for expanded scope of practice to master all DNP competencies. Residency sites will depend upon the student's career trajectory and approval by collaborating faculty. During the residency semester, students must participate in scheduled scholarly seminars online. A total of 180 clinical hours of direct/practice management is required.

**Prerequisite:** (NU 616 (may be taken concurrently) Minimum Grade of C and AHN 671 Minimum Grade of C)

**AHN 673 AG-ACNP(DR) Residency III 3 cr**

Final course in residency series as student continues to implement and evaluate project plan. Provides the student the opportunity to fully express all DNP competencies. The student, guided by the core faculty advisor, completes a quality improvement, evidence-based system's change project.

**Prerequisite:** (NU 612 (may be taken concurrently) Minimum Grade of C and AHN 671 Minimum Grade of C and AHN 672 Minimum Grade of C)

**AHN 680 Family NP (DR) PP&D 3 cr**

This course assists the DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, and a plan for evaluation and dissemination.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C)

**AHN 681 Family NP (DR) Residency I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. In this course, students will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the student will work with the primary faculty advisor to develop a project to advance system's change in their selected practice area. The student will have access to and authority for expanded scope of practice to master all DNP competencies. Residency sites will depend upon the student's career trajectory and approval by collaborating faculty. During the residency semester, student must participate in scheduled scholarly seminars online. A total of 180 clinical hours of direct practice/management is required.

**Prerequisite:** (AHN 680 Minimum Grade of S and NU 608 Minimum Grade of C and NU 615 (may be taken concurrently) Minimum Grade of C)

**AHN 682 FNP (DR) Residency II 3 cr**

In this mentored and supervised experience, students will work with the primary faculty advisor to implement a scholarly project to advance system's change in their selected practice area. The student will have access to and authority for expanded scope of practice to master all DNP competencies. Residency sites will depend upon the student's career trajectory and approval by collaborating faculty. During the residency semester, students must participate in scheduled scholarly seminars online. A total of 180 clinical hours of direct practice/management is required.

**Prerequisite:** (AHN 681 Minimum Grade of C and NU 616 (may be taken concurrently) Minimum Grade of C)

**AHN 683 FNP (DR) Residency III 3 cr**

Final course in residency series as student continues to implement and evaluate project plan. Provides the student the opportunity to fully express all DNP competencies. The student, guided by the core faculty and advisor, completes a quality improvement, evidence-based system's change project.

**Prerequisite:** (AHN 682 Minimum Grade of C and NU 612 (may be taken concurrently) Minimum Grade of C)

**AHN 692 AHN DNP Incomplete Extension 3 cr**

Students will register for this course to complete residency course work under supervision of faculty. Students must remain continuously enrolled until all residency requirements are completed.

**AHN 693 Adult-Geron Primary NP PP&D 3 cr**

This course assists the Adult-Geron Primary Care Nurse Practitioner student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the Adult-Geron Primary Care Nurse Practitioner students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C)

**AHN 694 Adult-Gero Primary Cr NP Res I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The Adult-Geron Primary Care Nurse Practitioner student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the Adult-Geron Primary Care Nurse Practitioner student will work with the primary faculty advisor to complete projects and advance their selected practice area. The Adult-Geron Primary Care Nurse Practitioner student will have access to and authority for expanded scope of practice to master the DNP competencies. Residency sites will depend upon the Adult-Geron Primary Care Nurse Practitioner student's career trajectory and approval by collaborating faculty. During the residency semester, student must participate in scheduled scholarly seminars online. Clinical hours of direct practice/management is required.

**Prerequisite:** AHN 693 Minimum Grade of S and NU 615 (may be taken concurrently) Minimum Grade of C

**AHN 695 Adlt-Gero Primary Cr NP Res II 3 cr**

Provides Adult-Geron Primary Care Nurse Practitioner students the opportunity to fully express all DNP competencies. The Adult-Geron Primary Care Nurse Practitioner student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

**Prerequisite:** AHN 694 Minimum Grade of C and NU 616 (may be taken concurrently) Minimum Grade of C

**AHN 696 Adlt-Gero Prim Care NP Res III 3 cr**

Final course in residency series as Adult-Geron Primary Care Nurse Practitioner student continues to implement and evaluate project plan. Provides Adult-Geron Primary Care Nurse Practitioner student the opportunity to fully express all DNP competencies. The Adult-Geron Primary Care Nurse Practitioner student, guided by the core faculty and advisor completes quality improvement evidence-based system's change project.

**Prerequisite:** AHN 695 Minimum Grade of C and NU 612 (may be taken concurrently) Minimum Grade of C

## Aerospace Engineering (AE) (AE)

**AE 361 Fundamentals of Aerodynamics 3 cr**

Conservation laws, potential flow, airfoil and wing analysis. Boundary layer theory and pressure gradients on plates and airfoils. Introduction to turbulent and vortex-dominated flows.

**Prerequisite:** (EG 360 Minimum Grade of C and MA 227 Minimum Grade of C and PH 202 Minimum Grade of C)

**AE 464 Principles of Spacecraft Design 3 cr**

Introduction to space launch vehicle and spacecraft design, including an understanding of the various subsystems and how the overall vehicle's optimization leads to good conceptual designs. Introduction to parameters in aerospace analysis and how they effect the design.

**Prerequisite:** (ME 228 Minimum Grade of C and EG 360 Minimum Grade of C)

**AE 466 Principles of Aerospace Propulsion 3 cr**

Airbreathing engines course. Apply fluids, thermodynamics, and heat transfer to analysis of air breathing engines. Topics to include: ideal cycle analysis, component performance, non-ideal cycle analysis, and blade aerodynamics.

**Prerequisite:** ME 312 Minimum Grade of D and EG 360 Minimum Grade of D and ME 317 (may be taken concurrently) Minimum Grade of D

**AE 468 Principles of Aircraft Design 3 cr**

Introduction to aircraft design, including an understanding of the various components leading to a good conceptual design. Introduction to parameters in aerospace analysis and how they may impact a design. Application of design concepts to an RFP (request for proposal) for design competition.

**Prerequisite:** (ME 328 (may be taken concurrently) Minimum Grade of C and EG 360 Minimum Grade of C)

**Cross-Listed:** ME 468

**AE 469 Aircraft Stability and Control 3 cr**

Introduction to flight dynamics of aerospace vehicles. Basic overview of stability analysis and linear feedback control.

**Prerequisite:** ME 328 Minimum Grade of D and EG 360 Minimum Grade of D

**AE 470 Aircraft Structural Analysis 3 cr**

Introduction to elasticity. Torsion, bending and shearing of thin-walled skin-stringer structures. Failure mechanisms. Buckling of beams and plates. Introduction to finite element analysis and composite structural analysis.

**Prerequisite:** EG 284 Minimum Grade of C and EG 315 Minimum Grade of C and ME 328 (may be taken concurrently) Minimum Grade of C

**Cross-Listed:** ME 470

## African-American Studies (AFR) (AFR)

**AFR 101 Intro to African Amer Studies 3 cr**

An interdisciplinary investigation of the origins, experiences, conditions, accomplishments and contributions of people of African ancestry in the United States.

## Air Force Studies (AS) (AS)

**AS 101 Foundations of USAF I 1 cr**

AS 101 is a survey course designed to introduce students to the United States Air Force and encourage participation in Air Force Reserve Officer Training Corps. Featured topics include: overview of ROTC, special programs offered through ROTC, mission and organization of the Air Force, brief history of the Air Force, introduction to leadership and leadership related issues, Air Force Core Values, Air Force officer opportunities, and an introduction to communication studies. Leadership Laboratory is mandatory for AFROTC cadets and complements this course by providing cadets with followership experiences.

**Corequisite:** AS 101L

**AS 101L Foundation of USAF I Lab 0 cr**

Provides an introduction to the military profession, including applications in leadership, drill and ceremony, customs and courtesies and community service.

**Corequisite:** AS 101

**AS 102 Heritage and Values II 1 cr**

AS 102 is a survey course designed to introduce students to the United States Air Force and encourage participation in Air Force Reserve Officer Training Corps. Featured topics include: overview of ROTC, special programs offered through ROTC, mission and organization of the Air Force, brief history of the Air Force, introduction to leadership and leadership related issues, Air Force Core Values, Air Force officer opportunities, and an introduction to communication studies. Leadership Laboratory is mandatory for AFROTC cadets and complements this course by providing cadets with followership experiences.

**Corequisite:** AS 102L

**AS 102L Heritage and Values II Lab 0 cr**

Provides an introduction to the military profession, including applications in leadership, drill and ceremony, customs and courtesies and community service.

**Corequisite:** AS 102

**AS 201 Team/Leadership Fund I 1 cr**

AS 201 is designed to provide a fundamental understanding of both leadership and team building. Students will apply leadership perspectives when completing team building activities and discussing things like conflict management. Students should demonstrate basic verbal and written communication skills. Cadets will apply these lessons at Field Training, which follows AS 201 and AS 202. Co-requisite: AS 201L

**Corequisite:** AS 201L

**AS 201L Team/Leadership Fund I lab 0 cr**

Provides an introduction to the military profession, including applications in leadership, drill and ceremony, customs and courtesies and community service.

**Corequisite:** AS 201

**AS 202 Team/Leadership Fund II 1 cr**

AS 202 is designed to provide a fundamental understanding of both leadership and team building. Students will apply leadership perspectives when completing team building activities and discussing things like conflict management. Students should demonstrate basic verbal and written communication skills. Cadets will apply these lessons at Field Training, which follows AS 201 and 202L. Co-requisite: AS 202L

**Corequisite:** AS 202L

**AS 202L Team/Leadership Fund II Lab 0 cr**

Provides an introduction to the military profession, including applications in leadership, drill and ceremony, customs and courtesies and community service.

**Corequisite:** AS 202

**AS 301 Lead People/Effect Comm I 3 cr**

AS 301 is a study of leadership, management fundamentals, professional knowledge, Air Force personnel and evaluation systems, leadership ethics, and communication skills required of an Air Force junior officer. Case studies are used to examine Air Force leadership and management situations as a means of demonstrating and exercising practical application of the concepts being studied. A mandatory Leadership Laboratory complements this course by providing advanced leadership experiences in officer-type activities, giving students the opportunity to apply leadership and management principles of this course.

**Corequisite:** AS 301L

**AS 301L Leading People/Effective Communication I Lab 0 cr**

Provides an introduction to the military profession, including applications in leadership, drill and ceremony, customs and courtesies and community service.

**Corequisite:** AS 301

**AS 302 Leading People/Eff Comm II 3 cr**

AS 302 is designed to build on the leadership fundamentals taught in AS 200. Cadets will have the opportunity to utilize their skills as they begin more of a leadership role in the detachment. The course continues into advanced skills and ethics training that will prepare them for becoming an officer and supervisor. Case studies are used to examine Air Force leadership and management situations as a means of demonstrating and exercising practical application of the concepts being studied. A mandatory Leadership Laboratory complements this course by providing advanced leadership experiences in officer type activities, giving student the opportunity to apply leadership and management principles of the course. Co-requisite: AS 301L

**Corequisite:** AS 302L

**AS 302L Lead People/Eff Comm II Lab 0 cr**

Provides an introduction to the military profession, including applications in leadership, drill and ceremony, customs and courtesies and community service.

**Corequisite:** AS 302

**AS 401 Sec/Lead/Comm Prep I 3 cr**

AS 401 examines the national security process, regional studies, advanced leadership ethics, and Air Force doctrine. Special topics of interest focus on the military as a profession, 'officership', military justice, civilian control of the military, preparation for active duty, and current issues affecting military professionalism. Within this structure, continued emphasis is given to refining communication skills.

**Corequisite:** AS 401L

**AS 401L Sec/Lead/Comm Prep I Lab 0 cr**

Provides an introduction to the military profession, including applications in leadership, drill and ceremony, customs and courtesies and community service.

**Corequisite:** AS 401

**AS 402 Sec/Lead/Comm Prep II 3 cr**

Course examines the national security process, regional studies, advanced leadership ethics, and Air Force doctrine. Special topics of interest focus on the military as a profession, officership, military justice, civilian control of the military, preparation for active duty, and current issues affecting military professionalism. Within this structure, continued emphasis is given to refining communication skills.

**Corequisite:** AS 402L

**AS 402L Sec/Lead/Comm Prep II Lab 0 cr**

Provides an introduction to the military profession, including applications in leadership, drill and ceremony, customs and courtesies and community service.

**Corequisite:** AS 402

## Allied Health Profs (AHP) (AHP)

**AHP 101 Freshman Sem in Allied Health 2 cr**

A course for first-time students that assists with maximizing the student's potential to achieve academic success and to adjust responsibly to the individual and interpersonal challenges presented by college life. Taught in small groups, the course provides an introduction to the nature of higher education with special emphasis on health-related disciplines. Appropriate reading and writing assignments will be required.

**Cross-Listed:** HSC 101

**AHP 201 Service Learning in Allied Health Professions 1 cr**

A course for students majoring in the College of Allied Health Professions that assists with maximizing students' potential to holistically embrace their majors and all that their future careers entail. The course introduces students to the concept of service learning and how to process experiences that may or may not immediately align with their own previous experiences. At the end of the course, the student will understand what it means to serve and how learning occurs in the most unlikely situations and environments.

**AHP 390 Special Topics 1-9 cr**

The purpose of this course for the undergraduate student is to develop an improved understanding of culture, to recognize any cultural practices that affect health care, and to incorporate this understanding into the provision of care. Culture will be examined through writing, cultural experiences, and through collaboration.

**AHP 401 Seminar in HP 3 cr**

This course is designed to provide students with an overview of different health professions and their scope of practice and also to provide information about health administration.

**AHP 510 IPE Autism Spectrum Disorders 1 cr**

This foundational course is designed to prepare graduate students in OT, PT, SLP, MD and ED to provide high-quality services to individuals with autism spectrum disorder and other developmental disabilities. The emphasis will be on interprofessional education using team-based instruction to support effective interprofessional practice in both educational and health care settings. **ADDITIONAL RESTRICTION:** Students can only be enrolled following successful application and admission. Contact the course instructor for information on application.

**AHP 550 IPE for Inclusive Pract in AHP 1-3 cr**

This course will focus on advancing the ideals of diversity, equity, and inclusion in future allied health providers to develop inclusive practices, and will support the development of interprofessional collaborative practice skills. The course will provide students with opportunities to engage with members of various healthcare-focused graduate programs through both interprofessional education modules and interprofessional clinical laboratory experiences.

**Cross-Listed:** AHP 650

**AHP 590 Special Topics 1-9 cr**

Selected topics in Health Sciences. Requires special permission.

**AHP 650 IPE for Inclusive Pract in AHP 1-3 cr**

This course will focus on advancing the ideals of diversity, equity, and inclusion in future allied health providers to develop inclusive practices, and will support the development of interprofessional collaborative practice skills. The course will provide students with opportunities to engage with members of various healthcare-focused graduate programs through both interprofessional education modules and interprofessional clinical laboratory experiences.

**Cross-Listed:** AHP 550

## Anesthesiology - MD (ANY)

**ANY 400 Anesthesiology Externship 1-6 cr**

Audition Away Electives allow medical students to visit and participate in clinical training at a residency program outside their home institution.

**ANY 401 Anesthesiology Elec/In-House 4 cr**

To become proficient in the management of the adult airway. This includes mask ventilation, endotracheal intubations, and laryngeal mask placement.

**ANY 444 Spec Elec - Anesthesiology 1-4 cr**

To be prepared by the student in conjunction with the Course Director and approved by the Vice Dean before course can be added to schedule. This course is designed to offer students and faculty/clinical faculty an opportunity to develop electives which are not offered in the Electives Manual. Such an elective may be made permanent and printed in the next edition of the Elective Manual at the request of the Course Director and with the approval of the Curriculum Committee. At the discretion of the Vice Dean, this elective may count as the required "in-house" elective.

## Anthropology (AN) (AN)

**AN 100 Intro to Cultural Anthropology 3 cr**

Introduces culture as a set of integrated behaviors and meanings learned in a social environment. Explores the diversity of human cultural practices in terms of kinship, gender, religion, subsistence, and politics. Language is emphasized as the means by which culture is transmitted from one generation to the next.

**AN 101 Intro Archaeology-Bio Anthro 3 cr**

The place of people in nature; the origin, development, and differentiation of people as biological organisms; archaeological evidence of early human cultures; basic concepts and principles for understanding human cultures. Introduces students to the topics of evolution, genetics, and primates and integrates cultural aspects associated with early human development. The fundamental orientation and methods of archaeology are introduced and an overview of world prehistory presented.

**AN 121 Biological Anthropology 3 cr**

This course asks students to explore what it means to be human, focusing on humanity's biological roots and modern variation between populations. To understand our present condition, we must understand our evolutionary past. We reconstruct this past utilizing data from the fossil record, as well as comparative evidence from modern monkeys and apes. This course discussed the following topics: evolutionary theory, natural selection, population genetics, primate behavior, and human evolution.

**Corequisite:** AN 121L

**AN 121L Biological Anthropology Lab 1 cr**

The lab section of this course is designed to provide a more in-depth understanding of biological anthropology through a variety of exercises and hands-on learning opportunities. Topics covered parallel those in lecture (AN 121) and include evolutionary theory, living primates, primate origins, human evolution, and modern human variation.

**Corequisite:** AN 121

**AN 190 Special Topics - 3 cr**

Different topics of anthropological importance will be studied as announced. This course may be taken twice for credit when content varies, but not for more than six credits.

**AN 200 Language and Culture 3 cr**

Brief introduction to descriptive and structural linguistics, language universals, classification and processes of change in language, language and thought, social cultural factors as expressed in language, origin of language, child language and non-verbal communication.

**Prerequisite:** AN 100 Minimum Grade of D or AN 101 Minimum Grade of D

**AN 250 Forensic Anthropology 3 cr**

This course will introduce students to the field of forensic anthropology. Specifically, it will survey the basic methods employed by forensic anthropologists to recover and analyze human skeletal remains, including the construction of a biological profile and the analysis of skeletal trauma.

**AN 256 Anthropology of Food 3 cr**

Explores the complex ways that food and food-related activities are woven into the human experience. Considers "food and culture" at several critical junctions of human history, as well as contemporary issues relating to food systems, cuisine, identity, and food justice.

**AN 265 Anthropology of Food 3 cr**

Explores the complex ways that food and food-related activities are woven into the human experience. Considers "food and culture" at several critical junctions of human history, as well as contemporary issues relating to food, cuisine, identity, and food justice.

**AN 290 Special Topics - 1-3 cr**

Different topics of anthropological importance will be studied as announced. This course may be taken twice for credit when content varies, but not for more than 6 credits. Prerequisites: AN 100 or AN 101 or permission of instructor.

**Prerequisite:** AN 100 Minimum Grade of D or AN 101 Minimum Grade of D

**AN 300 Thinking Anthropologically 1 cr**

This one-credit hour course is designed to expose anthropology majors to important applied concepts in our field, with a particular emphasis on scientific literacy and professional development. Through short lectures, guided activities, facilitated discussions, and student presentations, this course will help our majors identify and engage in practical skills to enhance their success as students as well as in their chosen post-graduation career paths.

**Prerequisite:** AN 100 Minimum Grade of C and AN 101 Minimum Grade of C and AN 121 Minimum Grade of C and AN 121L Minimum Grade of C

**AN 305 Arch Method and Theory 3 cr**

The theoretical basis of archaeology, and the various methods used to discover and interpret the human past from material evidence.

**Prerequisite:** AN 100 Minimum Grade of D or AN 101 Minimum Grade of D

**AN 314 North American Archaeology 3 cr**

This course explores over 10,000 years of North American archaeological record, primarily investigating the unwritten histories of Native American people through archaeological remains including architecture, art, foodways, and the tools of everyday life.

**Prerequisite:** AN 100 Minimum Grade of D or AN 101 Minimum Grade of D

**AN 315 Maya, Aztec, & Inca 3 cr**

This course explores the human cultures of Mesoamerica and the Andes region of South America through archaeological remains including architecture, art, foodways, and the tools of everyday life.

**Prerequisite:** AN 100 Minimum Grade of D or AN 101 Minimum Grade of D

**AN 335 Field Work in Archaeology 4 cr**

Archaeological field and laboratory techniques include excavation, site survey, artifact processing and analysis.

**Prerequisite:** AN 101 Minimum Grade of D

**AN 340 Native American Cultures-W 3 cr**

An ethnographic and ethnohistorical survey of native cultures of North America, including historical and modern groups, with an emphasis on Indians of the Southeast.

**Prerequisite:** AN 100 Minimum Grade of D or AN 101 Minimum Grade of D

**AN 342 Applied Anthropology 3 cr**

Issues surrounding theory and method of applied anthropology. Presentation and analysis of case studies concerning problems in areas such as development, both domestic and in foreign settings, community health, homelessness, drug and alcohol abuse, and others. Prerequisites: AN 100 or permission of instructor.

**Prerequisite:** AN 100 Minimum Grade of D

**AN 345 Research Methods Anthropology 3 cr**

A survey course designed for students majoring in Anthropology and other social science disciplines. The course explores the logic of scientific inquiry with special emphasis on the measurement of theoretical concepts, data analysis, and data collection techniques. Qualitative and quantitative approaches to understanding are presented as both are essential elements of Anthropology's holistic approach to understanding human diversity. Prerequisite: AN 100.

**Prerequisite:** (AN 100 Minimum Grade of D or AN 105 Minimum Grade of D)

**AN 347 Latin Amer Cultures-Societies 3 cr**

A survey of Latin American society and culture from the pre-contract period to the present. Pre-Columbian antecedents, colonial use of land and labor, patterns of race, class and ethnicity, and problems of development are examined. Prerequisite: AN 100 or permission of instructor.

**Prerequisite:** AN 100 Minimum Grade of D

**AN 355 Gender and Anthropology 3 cr**

This course provides an introduction to anthropological themes and debates in gender theory, including an ethnographic survey of women and men in a variety of cultures. Prerequisites: AN 100 or permission of instructor.

**Prerequisite:** AN 100 Minimum Grade of D

**AN 357 Political Anthropology 3 cr**

Authority, power, and conflict are examined cross-culturally and in evolutionary perspective. Particular emphasis is placed on the origins of stratification and the state.

**Prerequisite:** AN 100 Minimum Grade of D

**AN 365 Human Osteology 3 cr**

This hands-on course focuses on the identification of the bones of the human skeleton and its application to specialties within biological anthropology, including bioarchaeology and forensic anthropology. Topics to be covered include human skeletal and dental anatomy, skeletal growth and development, skeletal pathology and anomalies, and the biological profile.

**Prerequisite:** AN 121 Minimum Grade of B or AN 250 Minimum Grade of B

**AN 370 Human Origins and Evolution 3 cr**

This lecture, discussion, and lab-based seminar will examine the fossil, genetic, and archaeological evidence for human evolution - from the origins of primates to anatomically modern humans - with particular attention given to our hominid ancestors. Students will learn about the nature and timing of these developments, current theoretical models used to explain such changes, and the implications of these evolutionary trends for understanding modern human adaptations. Important fossil sites and associated material culture will also be used to provide insight into hominid biocultural behavior. Students must take AN 121/L (formerly AN 210/L) as a prerequisite for this course, or receive permission of the instructor.

**Prerequisite:** AN 210 Minimum Grade of C and AN 210L Minimum Grade of C or AN 121 Minimum Grade of C and AN 121L Minimum Grade of C

**AN 390 Special Topics 1-3 cr**

Different topics of anthropological importance will be studied as announced. This course may be taken twice for credit when content varies, but not for more than 6 credits.

**Prerequisite:** AN 100 Minimum Grade of D or AN 101 Minimum Grade of D

**AN 394 Directed Studies - 1-3 cr**

Supervised readings or projects. No more than a total of six hours may be taken for credit. Requires prior approval of instructor.

**Prerequisite:** AN 100 Minimum Grade of D or AN 101 Minimum Grade of D

**AN 435 Museum Methods in Archaeology 3 cr**

Archaeology as practiced in museums, including the registration and curation of archaeological collections; artifact conservation; public interpretation of the past; and exhibit design, composition, construction, and evaluation.

**Prerequisite:** AN 100 Minimum Grade of D or AN 101 Minimum Grade of D

**AN 440 Adv Archaeological Field Meth 4 cr**

This course involves participant instruction in archaeological field and laboratory techniques, including advanced excavation and survey methods, soils analysis, site mapping with electronic instruments, sampling strategy, and site interpretation. Requires permission of instructor.

**AN 442 Cultural Resource Management 3 cr**

This course examines the interaction between archaeologists, architectural historians, historic preservationists, state and federal governments, and the public with regard to cultural resources. The focus of the course is identification, evaluation, and mitigation of cultural resources. Related topics discussed include public perceptions of the past, ethics, and being a professional in historical preservation.

**AN 454 Anthropological Theory - W 3 cr**

An advanced historical survey of anthropological ideas, with primary emphasis on contemporary theoretical orientations and debates. Examines anthropology's often contested status as a science or humanity.

**Prerequisite:** AN 100 Minimum Grade of D

**AN 456 Health and Culture - W 3 cr**

This course provides an overview of a broad range of subjects in the fields of medical anthropology and medical sociology. It analyzes the ways in which health, illness and healing are embedded in their cultural and social contexts. And it investigates healing practices and meanings attributed to health and illness in a variety of cultures and social settings.

**Prerequisite:** AN 100 or permission of instructor.  
**Prerequisite:** (AN 100 Minimum Grade of D or AN 105 Minimum Grade of D)

**AN 470 Bioarchaeology - W 3 cr**

This class introduces students to the field of bioarchaeology, the study of human remains in archaeological contexts. Through lectures, readings, activities, and discussions, students will examine how skeletal remains are used to reconstruct life in the past, including patterns of subsistence, diet, disease, demography, biological relatedness, and physical activity.

**Prerequisite:** AN 250 Minimum Grade of B or AN 365 Minimum Grade of B

**AN 490 Special Topics 3 cr**

Different topics of anthropological importance will be studied as announced. This 3 hour course may be repeated for credit as long as the content varies up to a maximum of 6 credit hours. Requires junior or senior standing; or permission of instructor.

**Prerequisite:** (AN 100 Minimum Grade of D or AN 101 Minimum Grade of D)

**AN 492 Senior Seminar - 3 cr**

Course specifically designed for majors in their senior year. Some topical aspect of the discipline will be analyzed.

**Prerequisite:** AN 100 Minimum Grade of D or AN 101 Minimum Grade of D

**AN 496 Anthropology Internship 3-6 cr**

Provides an opportunity to combine academic principles with practical experiences in an agency dealing with human relationships, cultural resources, or primate research. Specifics of the assignment result from mutual agreement among student, course director and agency. Course may be repeated for a maximum of six hours of credit. Requires advanced standing in Anthropology major and permission of course instructor.

**AN 498 Senior Thesis 3 cr**

With the guidance and advice of a faculty mentor, student will identify and carry out an in-depth, year-long, field research project in anthropology. The Senior Thesis will be judged and graded by a committee of three faculty, chaired by the faculty mentor. This course will be repeated to continue the thesis during a second semester. This is a 3 hour course that is expected to be repeated once for a total of six hours. Must be an Anthropology major; senior status; permission of a faculty mentor through an AN 394 Directed Studies course taken during the junior year.

**Prerequisite:** AN 394 Minimum Grade of D

**AN 499 Honors Senior Thesis - H 3 cr**

With the guidance and advice of a faculty mentor, honors students will identify and carry out an in-depth, year-long field research project in anthropology. The Honors Senior Thesis will be judged and graded by a committee of three faculty, chaired by the faculty mentor. This is a 3 hour course that can be repeated once for a total of six hours. Must be an Anthropology major; senior status; permission of a faculty mentor; grade point average of 3.5; and completion of a thesis prospectus prepared in consultation with the faculty mentor through an AN 394 Directed Studies course taken during the junior year.

**Prerequisite:** AN 394 Minimum Grade of D

**AN 535 Museum Methods in Archaeology 3 cr**

Archaeology as practiced in museums, including the registration and curation of archaeological collections; artifact conservation; public interpretation of the past; and exhibit design, composition, construction, and evaluation.

**AN 542 Adv. Cultural Resource Mgmt. 3 cr**

This course examines the interaction between archaeologists, architectural historians, historic preservationists, state and federal governments, and the public with regard to cultural resources. The focus of the course is identification, evaluation, and mitigation of cultural resources. Related topics discussed include public perceptions of the past, ethics, and being a professional in historical preservation.

**AN 594 Directed Studies - 1-3 cr**

Field or library projects through which special interests of the student may be pursued on a tutorial basis with a graduate faculty member. Arrangements must be made prior to registration. Permission of the Department Chair is required.

## Applied Music A (MUA) (MUA)

**MUA 100 Recital Class 0 cr**

A convocation required each term of all full-time music majors meeting each week in laboratory session to hear performances, perform, and discuss performing techniques, plus ten evening public programs. Six semesters of successful participation required for graduation with adjustments for transfer students.

**MUA 101 Piano - Elective 1 cr**

Private study at the elective level.

**MUA 102 Piano - Elective 2 cr**

Private study at the elective level.

**MUA 111 Organ - Elective 1 cr**

Private study at the elective level.

**MUA 112 Organ - Elective 2 cr**

Private study at the elective level.

**MUA 121 Applied Voice - Elective 1 cr**

Applied Voice - Elective is designed for students who are neither music majors or minors to learn basic techniques of singing. Fundamentals of breath, tone, pitch, and musicianship will be explored through appropriate exercises and repertoire.

**MUA 122 Applied Voice - Elective 2 cr**

Applied Voice - Elective is designed for students who are neither music majors or minors to learn basic techniques of singing. Fundamentals of breath, tone, pitch, and musicianship will be explored through appropriate exercises and repertoire.

**MUA 124 Group Applied - Elective Voice 1 cr**

Applied voice lessons taught in groups of 4, consisting of individual instruction in technique and performance. Two 1-hour sessions per week TBA (MW or TR). This course is for non-majors. Majors and minors in music should take other applied courses. Special fee applies. Prerequisite: Admission by audition. Registration through the Department of Music.

**MUA 131 Violin - Elective 1 cr**

Private study at the elective level.

**MUA 132 Violin - Elective 2 cr**

Private study at the elective level.

**MUA 141 Viola - Elective 1 cr**

Private study at the elective level.

**MUA 142 Viola - Elective 2 cr**

Private study at the elective level.

**MUA 151 Violoncello - Elective 1 cr**

Private study at the elective level.

**MUA 152 Violoncello - Elective 2 cr**

Private study at the elective level.

**MUA 161 String Bass - Elective 1 cr**

Private study at the elective level.

**MUA 162 String Bass - Elective 2 cr**

Private study at the elective level.

**MUA 171 Harp - Elective 1 cr**

Private study at the elective level.

**MUA 172 Harp - Elective 2 cr**

Private study at the elective level.

**MUA 181 Guitar - Elective 1 cr**

Private study at the elective level.

**MUA 182 Guitar - Elective 2 cr**

Private study at the elective level.

**MUA 186 Percussion - Elective 1 cr**

Private study at the elective level.

**MUA 187 Percussion - Elective 2 cr**

Private study at the elective level.

**MUA 201 Piano Major-Lower Division 1 cr**

Private study at the secondary level.

**MUA 202 Piano Major-Lower Division 2 cr**

Private study at the secondary level.

**MUA 211 Organ Major-Lower Division 1 cr**

Private study at the secondary level.

**MUA 212 Organ Major-Lower Division 2 cr**

Private study at the secondary level.

**MUA 221 Voice Major-Lower Division 1 cr**

Private study at the secondary level.

**MUA 222 Voice Major-Lower Division 2 cr**

Private study at the secondary level.

**MUA 231 Violin Major-Lower Division 1 cr**

Private study at the secondary level.

**MUA 232 Violin Major-Lower Division 2 cr**

Private study at the secondary level.

**MUA 241 Viola Major-Lower Division 1 cr**

Private study at the secondary level.

**MUA 242 Viola Major-Lower Division 2 cr**

Private study at the secondary level.

**MUA 251 Violoncello Major-Lower Div 1 cr**

Private study at the secondary level.

**MUA 252 Violoncello Major-Lower Div 2 cr**

Private study at the secondary level.

**MUA 261 String Bass Major-Lower Div 1 cr**

Private study at the secondary level.

**MUA 262 String Bass Major-Lower Div 2 cr**

Private study at the secondary level.

**MUA 271 Harp Major-Lower Division 1 cr**

Private study at the secondary level.

**MUA 272 Harp Major-Lower Division 2 cr**  
Private study at the secondary level.

**MUA 281 Guitar Major-Lower Division 1 cr**  
Private study at the secondary level.

**MUA 282 Guitar Major-Lower Division 2 cr**  
Private study at the secondary level.

**MUA 286 Percussion Major-Lower Div 1 cr**  
Private study at the secondary level.

**MUA 287 Percussion Major-Lower Div 2 cr**  
Private study at the secondary level.

**MUA 300 Junior Recital 0 cr**  
Performance concentration junior recital. To be taken with a 400 level applied music course.

**MUA 301 Piano Major-Upper Division 1 cr**  
Private study at the concentration level.

**MUA 302 Piano Major-Upper Division 2 cr**  
Private study at the concentration level.

**MUA 311 Organ Major-Upper Division 1 cr**  
Private study at the concentration level.

**MUA 312 Organ Major-Upper Division 2 cr**  
Private study at the concentration level.

**MUA 321 Voice Major-Upper Division 1 cr**  
Private study at the concentration level.

**MUA 322 Voice Major-Upper Division 2 cr**  
Private study at the concentration level.

**MUA 331 Violin Major-Upper Division 1 cr**  
Private study at the concentration level.

**MUA 332 Violin Major-Upper Division 2 cr**  
Private study at the concentration level.

**MUA 341 Viola Major-Upper Division 1 cr**  
Private study at the concentration level.

**MUA 342 Viola Major-Upper Division 2 cr**  
Private study at the concentration level.

**MUA 351 Violoncello Major-Upper Div 1 cr**  
Private study at the concentration level.

**MUA 352 Violoncello Major-Upper Div 2 cr**  
Private study at the concentration level.

**MUA 361 String Bass Major-Upper Div 1 cr**  
Private study at the concentration level.

**MUA 362 String Bass Major-Upper Div 2 cr**  
Private study at the concentration level.

**MUA 371 Harp Major-Upper Division 1 cr**  
Private study at the concentration level.

**MUA 372 Harp Major-Upper Division 2 cr**  
Private study at the concentration level.

**MUA 381 Guitar Major-Upper Division 1 cr**  
Private study at the concentration level.

**MUA 382 Guitar Major-Upper Division 2 cr**  
Private study at the concentration level.

**MUA 386 Percussion Major-Upper Div 1 cr**  
Private study at the concentration level.

**MUA 387 Percussion Major-Upper Div 2 cr**  
Private study at the concentration level.

**MUA 400 Senior Recital 0 cr**  
The Senior Recital provides a culminating performance experience of professional quality required of all concentrations of Bachelor of Music students. Committee approval needed to pass the course. To be taken in conjunction with the appropriate 300 or 400 level applied music course.

**MUA 401 Piano Major-Performance 1 cr**  
Private study in Piano at the major level

**MUA 402 Piano Major-Performance 2 cr**  
Private study at the major level

**MUA 403 Piano Major-Performance 3 cr**  
Private study at the major level

**MUA 411 Organ Major-Performance 1 cr**  
Private study at the major level

**MUA 412 Organ Major-Performance 2 cr**  
Private study at the major level

**MUA 413 Organ Major-Performance 3 cr**  
Private study at the major level

**MUA 421 Voice Major-Performance 1 cr**  
Private study at the major level

**MUA 422 Voice Major-Performance 2 cr**  
Private study at the major level

**MUA 423 Voice Major-Performance 3 cr**  
Private study at the major level

**MUA 431 Violin Major-Performance 1 cr**  
Private study at the major level

**MUA 432 Violin Major-Performance 2 cr**  
Private study at the major level

**MUA 433 Violin Major-Performance 3 cr**  
Private study at the major level

**MUA 441 Viola Major-Performance 1 cr**  
Private study at the major level

**MUA 442 Viola Major-Performance 2 cr**  
Private study at the major level

**MUA 443 Viola Major-Performance 3 cr**  
Private study at the major level

**MUA 451 Violoncello Major-Performance 1 cr**  
Private study at the major level

**MUA 452 Violoncello Major-Performance 2 cr**  
Private study at the major level

**MUA 453 Violoncello Major-Performance 3 cr**  
Private study at the major level

**MUA 461 String Bass Major-Performance 1 cr**  
Private study at the major level

**MUA 462 String Bass Major-Performance 2 cr**  
Private study at the major level

**MUA 463 String Bass Major-Performance 3 cr**  
Private study at the major level

**MUA 471 Harp Major-Performance 1 cr**  
Private study at the major level

**MUA 472 Harp Major-Performance 2 cr**  
Private study at the major level

**MUA 473 Harp Major-Performance 3 cr**

Private study at the major level

**MUA 481 Guitar Major-Performance 1 cr**

Private study at the major level

**MUA 482 Guitar Major-Performance 2 cr**

Private study at the major level

**MUA 483 Guitar Major-Performance 3 cr**

Private study at the major level

**MUA 486 Percussion Major-Performance 1 cr**

Private study at the major level

**MUA 487 Percussion Major-Performance 2 cr**

Private study at the major level

**MUA 488 Percussion Major-Performance 3 cr**

Private study at the major level

**MUA 500 Graduate Recital 1 cr**

Graduate recital. To be taken in conjunction with a 500- level applied music course.

**MUA 501 Piano 1 cr**

Private study at the graduate level.

**MUA 502 Piano 2 cr**

Private study at the graduate level.

**MUA 503 Piano 3 cr**

Private study at the graduate level.

**MUA 507 Applied Collaborative Piano 1 cr**

The Director for Collaborative Keyboard studies will meet with the student enrolled in Applied Collaborative Piano to assign literature, which will be studied during the semester. For MUA 507, the student meets with the instructor 30 minutes each week to study vocal music and at least 1 collaborative assignment with strings, winds or brass. The goal of the course is to learn standard repertoire for piano with voice and various instruments.

**MUA 508 Applied Collaborative Piano 2 cr**

The Director for Collaborative Keyboard studies will meet with the student enrolled in Applied Collaborative Piano to assign literature, which will be studied during the semester. For MUA 508, the student meets with the instructor 60 minutes each week to study vocal music and collaborates with at least 2 different instrument types (string, woodwinds, brass). The goal of the course is to learn standard repertoire for piano with voice and various instruments.

**MUA 509 Applied Collaborative Piano 3 cr**

The Director for Collaborative Keyboard studies will meet with the student enrolled in Applied Collaborative Piano to assign literature, which will be studied during the semester. For MUA 509, the student meets with the instructor 60 minutes each week to study vocal music and collaborates with 3 different instrument types (string, woodwinds, brass). The goal of the course is to learn standard repertoire for piano with voice and various instruments.

**MUA 511 Organ 1 cr**

Private study at the graduate level.

**MUA 512 Organ 2 cr**

Private study at the graduate level.

**MUA 513 Organ 3 cr**

Private study at the graduate level.

**MUA 521 Voice 1 cr**

Private study at the graduate level.

**MUA 522 Voice 2 cr**

Private study at the graduate level.

**MUA 523 Voice 3 cr**

Private study at the graduate level.

**MUA 531 Violin 1 cr**

Private study at the graduate level.

**MUA 532 Violin 2 cr**

Private study at the graduate level.

**MUA 533 Violin 3 cr**

Private study at the graduate level.

**MUA 541 Viola 1 cr**

Private study at the graduate level.

**MUA 542 Viola 2 cr**

Private study at the graduate level.

**MUA 543 Viola 3 cr**

Private study at the graduate level.

**MUA 551 Violoncello 1 cr**

Private study at the graduate level.

**MUA 552 Violoncello 2 cr**

Private study at the graduate level.

**MUA 553 Violoncello 3 cr**

Private study at the graduate level.

**MUA 561 String Bass 1 cr**

Private study at the graduate level.

**MUA 562 String Bass 2 cr**

Private study at the graduate level.

**MUA 563 String Bass 3 cr**

Private study at the graduate level.

**MUA 581 Guitar 1 cr**

Private study at the graduate level.

**MUA 582 Guitar 2 cr**

Private study at the graduate level.

**MUA 583 Guitar 3 cr**

Private study at the graduate level.

**MUA 586 Percussion 1 cr**

Private study at the graduate level.

**MUA 587 Percussion 2 cr**

Private study at the graduate level.

**MUA 588 Percussion 3 cr**

Private study at the graduate level.

**MUA 599 Curr, Ped & Instrct Techniques 2 cr**

This is an integrated study concentrating on the following subjects: literature, pedagogy, studio performance and master class. Studies focus on pedagogy, both private and group teaching methods, and instructional techniques grounded in research.

## Applied Music B (MUB) (MUB)

**MUB 101 Flute Elective 1 cr**

Private study at the elective level.

**MUB 102 Flute Elective 2 cr**

Private study at the elective level.

**MUB 111 Oboe - Elective 1 cr**  
Private study at the elective level.

**MUB 112 Oboe - Elective 2 cr**  
Private study at the elective level.

**MUB 121 Clarinet - Elective 1 cr**  
Private study at the elective level.

**MUB 122 Clarinet - Elective 2 cr**  
Private study at the elective level.

**MUB 131 Bassoon - Elective 1 cr**  
Private study at the elective level.

**MUB 132 Bassoon - Elective 2 cr**  
Private study at the elective level.

**MUB 141 Saxophone-Elective 1 cr**  
Private study at the elective level.

**MUB 142 Saxophone-Elective 2 cr**  
Private study at the elective level.

**MUB 151 Trumpet-Cornet Elective 1 cr**  
Private study at the elective level.

**MUB 152 Trumpet-Cornet Elective 2 cr**  
Private study at the elective level.

**MUB 161 French Horn - Elective 1 cr**  
Private study at the elective level.

**MUB 162 French Horn - Elective 2 cr**  
Private study at the elective level.

**MUB 171 Trombone - Elective 1 cr**  
Private study at the elective level.

**MUB 172 Trombone - Elective 2 cr**  
Private study at the elective level.

**MUB 181 Baritone-Euphonium - Elective 1 cr**  
Private study at the elective level.

**MUB 182 Baritone-Euphonium - Elective 2 cr**  
Private study at the elective level.

**MUB 186 Tuba - Elective 1 cr**  
Private study at the elective level.

**MUB 187 Tuba - Elective 2 cr**  
Private study at the elective level.

**MUB 201 Flute Major-Lower Division 1 cr**  
Private study at the secondary level.

**MUB 202 Flute Major-Lower Division 2 cr**  
Private study at the secondary level.

**MUB 211 Oboe Major-Lower Division 1 cr**  
Private study at the secondary level.

**MUB 212 Oboe Major-Lower Division 2 cr**  
Private study at the secondary level.

**MUB 221 Clarinet Major-Lower Division 1 cr**  
Private study at the secondary level.

**MUB 222 Clarinet Major-Lower Division 2 cr**  
Private study at the secondary level.

**MUB 231 Bassoon Major-Lower Division 1 cr**  
Private study at the secondary level.

**MUB 232 Bassoon Major-Lower Division 2 cr**  
Private study at the secondary level.

**MUB 241 Saxophone Major-Lower Division 1 cr**  
Private study at the secondary level.

**MUB 242 Saxophone Major-Lower Division 2 cr**  
Private study at the secondary level.

**MUB 251 Trumpet-Cornet Major-Lower Div 1 cr**  
Private study at the secondary level.

**MUB 252 Trumpet-Cornet Major-Lower Div 2 cr**  
Private study at the secondary level.

**MUB 261 French Horn Major - Lower Div 1 cr**  
Private study at the secondary level.

**MUB 262 French Horn Major - Lower Div 2 cr**  
Private study at the secondary level.

**MUB 271 Trombone Major-Lower Division 1 cr**  
Private study at the secondary level.

**MUB 272 Trombone Major-Lower Division 2 cr**  
Private study at the secondary level.

**MUB 281 Baritone-Euphonium Maj-Low Div 1 cr**  
Private study at the secondary level.

**MUB 282 Baritone-Euphonium Maj-Low Div 2 cr**  
Private study at the secondary level.

**MUB 286 Tuba Major - Lower Division 1 cr**  
Private study at the secondary level.

**MUB 287 Tuba Major - Lower Division 2 cr**  
Private study at the secondary level.

**MUB 301 Flute Major-Upper Division 1 cr**  
Private study at the concentration level.

**MUB 302 Flute Major-Upper Division 2 cr**  
Private study at the concentration level.

**MUB 311 Oboe Major-Upper Division 1 cr**  
Private study at the concentration level.

**MUB 312 Oboe Major-Upper Division 2 cr**  
Private study at the concentration level.

**MUB 321 Clarinet Major-Upper Division 1 cr**  
Private study at the concentration level.

**MUB 322 Clarinet Major-Upper Division 2 cr**  
Private study at the concentration level.

**MUB 331 Bassoon Major-Upper Division 1 cr**  
Private study at the concentration level.

**MUB 332 Bassoon Major-Upper Division 2 cr**  
Private study at the concentration level.

**MUB 341 Saxophone-Major Upper Division 1 cr**  
Private study at the concentration level.

**MUB 342 Saxophone-Major Upper Division 2 cr**  
Private study at the concentration level.

**MUB 351 Trumpet-Cornet Major-Upper Div 1 cr**  
Private study at the concentration level.

**MUB 352 Trumpet-Cornet Major-Upper Div 2 cr**  
Private study at the concentration level.

**MUB 361 French Horn-Major Upper Div 1 cr**  
Private study at the concentration level.

**MUB 362 French Horn-Major Upper Div 2 cr**  
Private study at the concentration level.

**MUB 371 Trombone-Major Upper Division 1 cr**  
Private study at the concentration level.

**MUB 372 Trombone-Major Upper Division 2 cr**  
Private study at the concentration level.

**MUB 381 Baritone-Euphonium Maj-Upp Div 1 cr**  
Private study at the concentration level.

**MUB 382 Baritone-Euphonium Maj-Upp Div 2 cr**  
Private study at the concentration level.

**MUB 386 Tuba-Major Upper Division 1 cr**  
Private study at the concentration level.

**MUB 387 Tuba-Major Upper Division 2 cr**  
Private study at the concentration level.

**MUB 401 Flute Major-Performance 1 cr**  
Private study at the major level.

**MUB 402 Flute Major-Performance 2 cr**  
Private study at the major level.

**MUB 403 Flute Major-Performance 3 cr**  
Private study at the major level.

**MUB 411 Oboe Major-Performance 1 cr**  
Private study at the major level.

**MUB 412 Oboe Major-Performance 2 cr**  
Private study at the major level.

**MUB 413 Oboe Major-Performance 3 cr**  
Private study at the major level.

**MUB 421 Clarinet Major-Performance 1 cr**  
Private study at the major level.

**MUB 422 Clarinet Major-Performance 2 cr**  
Private study at the major level.

**MUB 423 Clarinet Major-Performance 3 cr**  
Private study at the major level.

**MUB 431 Bassoon Major-Performance 1 cr**  
Private study at the major level.

**MUB 432 Bassoon Major-Performance 2 cr**  
Private study at the major level.

**MUB 433 Bassoon Major-Performance 3 cr**  
Private study at the major level.

**MUB 441 Saxophone-Major Performance 1 cr**  
Private study at the major level.

**MUB 442 Saxophone-Major Performance 2 cr**  
Private study at the major level.

**MUB 443 Saxophone-Major Performance 3 cr**  
Private study at the major level.

**MUB 451 Trumpet-Cornet-Major Perform 1 cr**  
Private study at the major level.

**MUB 452 Trumpet-Cornet-Major Perform 2 cr**  
Private study at the major level.

**MUB 453 Trumpet-Cornet-Major Perform 3 cr**  
Private study at the major level.

**MUB 461 French Horn-Major Performance 1 cr**  
Private study at the major level.

**MUB 462 French Horn-Major Performance 2 cr**  
Private study at the major level.

**MUB 463 French Horn-Major Performance 3 cr**  
Private study at the major level.

**MUB 471 Trombone-Major Performance 1 cr**  
Private study at the major level.

**MUB 472 Trombone-Major Performance 2 cr**  
Private study at the major level.

**MUB 473 Trombone-Major Performance 3 cr**  
Private study at the major level.

**MUB 481 Baritone-Euphonium-Maj Perform 1 cr**  
Private study at the major level.

**MUB 482 Baritone-Euphonium Maj Perform 2 cr**  
Private study at the major level.

**MUB 483 Baritone-Euphonium-Maj Perform 3 cr**  
Private study at the major level.

**MUB 486 Tuba-Major Performance 1 cr**  
Private study at the major level.

**MUB 487 Tuba-Major Performance 2 cr**  
Private study at the major level.

**MUB 488 Tuba-Major Performance 3 cr**  
Private study at the major level.

**MUB 501 Flute 1 cr**  
Private study at the graduate level.

**MUB 502 Flute 2 cr**  
Private study at the graduate level.

**MUB 503 Flute 3 cr**  
Private study at the graduate level.

**MUB 511 Oboe 1 cr**  
Private study at the graduate level.

**MUB 512 Oboe 2 cr**  
Private study at the graduate level.

**MUB 513 Oboe 3 cr**  
Private study at the graduate level.

**MUB 521 Clarinet 1 cr**  
Private study at the graduate level.

**MUB 522 Clarinet 2 cr**  
Private study at the graduate level.

**MUB 523 Clarinet 3 cr**  
Private study at the graduate level.

**MUB 531 Bassoon 1 cr**  
Private study at the graduate level.

**MUB 532 Bassoon 2 cr**  
Private study at the graduate level.

**MUB 533 Bassoon 3 cr**  
Private study at the graduate level.

**MUB 541 Saxophone 1 cr**  
Private study at the graduate level.

**MUB 542 Saxophone 2 cr**  
Private study at the graduate level.

**MUB 543 Saxophone 3 cr**  
Private study at the graduate level.

**MUB 551 Trumpet-Cornet 1 cr**  
Private study at the graduate level.

**MUB 552 Trumpet-Cornet 2 cr**  
Private study at the graduate level.

**MUB 553 Trumpet-Cornet 3 cr**  
Private study at the graduate level.

**MUB 561 French Horn 1 cr**  
Private study at the graduate level.

**MUB 562 French Horn 2 cr**  
Private study at the graduate level.

**MUB 563 French Horn 3 cr**  
Private study at the graduate level.

**MUB 571 Trombone 1 cr**  
Private study at the graduate level.

**MUB 572 Trombone 2 cr**  
Private study at the graduate level.

**MUB 573 Trombone 3 cr**  
Private study at the graduate level.

**MUB 581 Baritone Horn 1 cr**  
Private study at the graduate level.

**MUB 582 Baritone Horn 2 cr**  
Private study at the graduate level.

**MUB 583 Baritone Horn 3 cr**  
Private study at the graduate level.

**MUB 586 Tuba 1 cr**  
Private study at the graduate level.

**MUB 587 Tuba 2 cr**  
Private study at the graduate level.

**MUB 588 Tuba 3 cr**  
Private study at the graduate level.

## Argument (ARG) (ARG)

**ARG 120 Critical Thinking 3 cr**  
This course will examine complex types of reasoning, including statistical judgment, decision making, and causal and analogical thinking. Emphasis will be placed on the analysis of concrete examples of reasoning in various fields. Students will learn how to evaluate arguments, fallacies, common errors, and biases in reasoning and decision making. Identical with PHL 120. Credit cannot be received for both ARG 120 and PHL 120. Fulfills the General Education requirement.

**Cross-Listed:** PHL 120

**ARG 210 Argumentation 3 cr**  
Examines the role of argumentation in a democratic society and aims to develop critical thinking and reasoned advocacy. Course makes functional a knowledge of tests of evidence and the modes of logical reasoning. Students participate in various forms of argumentation and debating. Identical with ARG 210. Students cannot receive credit for both ARG 210 and CA 210.

**Cross-Listed:** CA 210

**ARG 222 Rhetoric, Culture and Society 3 cr**

**Cross-Listed:** CA 222

**ARG 321 Symbolic Logic 3 cr**  
A study of sentential and predicate logics and related topics. Identical with 321. Credit cannot be received for both ARG 321 and PHL 321.

**Cross-Listed:** PHL 321

**ARG 371 Approaches to English Grammar 3 cr**  
A course designed primarily to help education majors translate between the languages of conventional grammar and the syntactical grammar relevant to the teaching of English at Precollege levels. Consideration will also be given to the rationales basic to the formation of different grammars and to methods of presenting grammatical material in a classroom situation. Non-education majors interested in a sophisticated approach to the study of grammar might also benefit from this course. Identical with EH 371. Credit cannot be received for both ARG 371 and EH 371.

**Prerequisite:** EH 101 Minimum Grade of C and EH 102 Minimum Grade of C

**Cross-Listed:** EH 371

**ARG 390 Special Topics - 3 cr**  
Different figures, periods, or topics of significance in Argument will be studied as announced. May be repeated, when content varies, for a total of six hours. Requires Sophomore, Junior or Senior standing.

**ARG 402 Rhetoric: Ancient and Modern 3 cr**  
Readings in rhetorical theory, ancient and modern, are applied in specific writing assignments with encourage students to adopt a point of view and address a specific audience. Identical to EH 402. If credit for ARG 402 is received, then credit cannot be received for EH 402.

**Prerequisite:** EH 101 Minimum Grade of C and EH 102 Minimum Grade of C

**Cross-Listed:** EH 402

**ARG 481 Studies in Rhetoric 3 cr**  
Seminar in specific topics dealing with writing, rhetoric, or language studies. May be repeated once for credit when course content varies. Identical with EH 481. Credit cannot be received for both ARG 481 and EH 481 when it is on the same specific topic. Junior standing required.

**Prerequisite:** EH 101 Minimum Grade of C and EH 102 Minimum Grade of C

**Cross-Listed:** EH 481

**ARG 490 Special Topics - 3 cr**  
An investigation of issues and concepts in Argument for advanced undergraduate students. May be repeated, when content varies, for a total of six hours. Prerequisites: Junior or Senior standing.

**ARG 492 Seminar 3 cr**

**ARG 494 Directed Studies- 1-3 cr**  
Directed research in Argument under the guidance of a member of the department. Credit according to the magnitude of the individual project. May be repeated, if content varies, for a total of six hours. Prerequisites: Junior or Senior standing and approval of directing professor and department chair.

## Art Education (AED) (AED)

**AED 301 Visual Arts for Young Children 3 cr**  
Exploration of knowledge and skills in the arts appropriate for young children. Art techniques and media are explored.

**AED 440 Arts for Learning 3 cr**  
Using the arts to promote physical, social, emotional, and cognitive development.

**Prerequisite:** SED 340 Minimum Grade of C and SED 341 Minimum Grade of C

**Corequisite:** AED 441

**AED 441 Art in the N-12 Program 3 cr**

Art and the intellectual, creative, and emotional growth of adolescents and youth. The study of appropriate techniques and materials for teaching studio art and crafts, art history, appreciation and aesthetics, and participation in humanities programs at the secondary level. Laboratory practice in the secondary school. Restricted to N-12 art majors. Prerequisites: Completion of two-thirds of teaching field.

**Prerequisite:** SED 340 Minimum Grade of C and SED 341 Minimum Grade of C

**Corequisite:** AED 440

**AED 494 Dir St - 1-3 cr**

No more than two directed study courses can be counted toward the Bachelor's degree and Class B Certificate. Prerequisite: Permission of department chair.

**AED 501 Trn-Prac Tch Art Elem Sc 3 cr**

Orients the student toward the artistic interests and creative abilities of children in the elementary school, and developing attitudes of respect for individuality and creativity. Included are laboratory experiences with art materials and research into appropriate techniques of teaching art

**AED 502 Trn-Prac Tch Art Sec Sch 3 cr**

Current trends and practices in curriculum, instruction, selection of materials, and derivation of procedures for guiding learning in art in the secondary school.

**AED 540 Art in the N-12 Program 3 cr**

Art and the intellectual, creative, and emotional growth of children. The role of art in the instructional program, examination of objectives in an art program, and the study of appropriate techniques and materials for teaching art and crafts at the elementary level. Restricted to N-12 art majors.

**Prerequisite:** SED 555 Minimum Grade of B and SED 559 Minimum Grade of B and EPY 525 Minimum Grade of B

**AED 560 Grad Research Seminar 3 cr**

Research in problems confronting American education. Selected topics are explored by students which provide the basis for seminar discussions. A seminar paper is presented by each student. This course also includes a field-based practicum. Prerequisite: Permission of department chair.

**AED 590 Sp Top - 3 cr**

Current topics of special concern to secondary educators. A different topic will be used each time the course is offered. No more than 6 hours can be applied toward a graduate degree. Prerequisite: Permission of department chair.

**AED 594 Dir St - Research 1-3 cr**

Students explore through directed study problems and issues of special interest or significance in Art Education. No more than 3 hours of any departmental 594 courses can be applied toward a degree program. Prerequisite: Permission of department chair.

**AED 595 Internship 1-6 cr**

The internship is a supervised learning experience in a work setting similar to that in which the educator will eventually be employed. The internship provides the students with an opportunity to apply the theories and concepts learned during the graduate program of study.

**Prerequisite:** (P134 158 or 5134 158)

## Art History (ARH) (ARH)

**ARH 100 Survey of Art 3 cr**

A survey of major periods of artistic development from prehistoric times to the present. Note: this course cannot be counted toward fulfilling degree requirements for majors in Studio Art, Art, or Art History. Core course

**ARH 103 Art History I 3 cr**

An examination of the history of the Western tradition of art from cave painting through the Middle Ages including but not limited to Ancient Egypt, Ancient Greece, Ancient Rome, and Romanesque, and Gothic Europe. Students will be introduced to the descriptive and critical analysis of works of art and architecture as well as their cultural, economic, religious, and historical context.

**Cross-Listed:** CLA 103

**ARH 123 Art History II 3 cr**

An examination of the history of the Western tradition of art from the late Middle Ages to the 20th century including but not limited to the periods of the Renaissance, the Baroque, Neo-Classicism, Romanticism, Impression, Cubism, and Pop Art. Students will be introduced to the descriptive and critical analysis of works of art and architecture as well as their cultural, economic, religious, and historical context.

**ARH 203 Survey of Non-Western Art 3 cr**

Survey of the visual arts from five broad geographic areas of the world outside of Europe: Asia, Middle East, Africa, Oceania (the islands of the Pacific Ocean), and the Americas (North, Central, and South).

**ARH 245 History of Graphic Design 3 cr**

A survey of graphic design from the ancient Sumerians to the present day.

**Prerequisite:** ARH 123 Minimum Grade of D

**ARH 248 History of Photography 3 cr**

A comprehensive study of the medium of photography. The course traces chronologically and thematically the evolution of an independent art form. The focus of the course is the growth of this contribution to the visual arts, through the inseparable aspects of science and art.

**Prerequisite:** ARH 123 Minimum Grade of D

**ARH 250 African Art 3 cr**

This course is designed as a basic orientation to the arts of Africa and the interpretation of experience as witnessed in various African visual art forms. The course will focus on the major civilization and/or nations south of the Sahara Desert and their stylistic developments. Emphasis will be placed on the aesthetic approach of African artists and the influence of their art on western culture.

**ARH 290 Special Topics - 3 cr**

Different subjects or themes in art or architectural history as announced. This course may be repeated twice when content varies, for a maximum of nine credit hours.

**ARH 304 Ancient Grk Art and Architect 3 cr**

Architecture, sculpture, and painting in Ancient Greece and the expansion and influence of Greek culture in the Ancient World. Identical to CLA 304. Credit cannot be received for both ARH 304 and CLA 304.

**Prerequisite:** (ARH 103 Minimum Grade of D or CLA 103 Minimum Grade of D) or CLA 110 Minimum Grade of D

**Cross-Listed:** CLA 304

**ARH 306 Roman Art 3 cr**

Architecture, sculpture, and painting in Ancient Rome and its empire. Identical to CLA 306. Credit cannot be received for both ARH 306 and CLA 306.

**Prerequisite:** (ARH 103 Minimum Grade of D or CLA 103 Minimum Grade of D) or CLA 110 Minimum Grade of D

**Cross-Listed:** CLA 306

**ARH 312 Medieval Art and Architecture 3 cr**

This course is a survey of the art and architecture of the Medieval world from the legalization of Christianity in AD 313 to the end of the Gothic Period.

**Prerequisite:** (ARH 103 Minimum Grade of D or CLA 103 Minimum Grade of D)

**ARH 320 Renaissance Art & Arch. 3 cr**

A study of the art and architecture of Italy, Flanders, Germany, and France in the 14th, 15th, and 16th centuries. Prerequisite: ARH 123.

**Prerequisite:** ARH 123 Minimum Grade of C

**ARH 322 Northern Renaissance Art 3 cr**

Art of Flanders, Germany, and France in the 14th, 15th, and 16th centuries.

**Prerequisite:** ARH 123 (may be taken concurrently) Minimum Grade of D

**ARH 324 Italian Early Renaissance 3 cr**

Art of 14th and 15th century Italy. Fee

**Prerequisite:** ARH 123 (may be taken concurrently) Minimum Grade of D

**ARH 326 16th Century Italian Art 3 cr**

Art of the Italian High Renaissance and Mannerist Periods.

**Prerequisite:** ARH 123 (may be taken concurrently) Minimum Grade of D

**ARH 330 Baroque Art of Southern Europe 3 cr**

A study of painting, sculpture, and architecture in Italy and Spain during the 17th and early 18th centuries.

**Prerequisite:** ARH 123 (may be taken concurrently) Minimum Grade of D

**ARH 332 Baroque Art and Architecture 3 cr**

This course is a survey of the art and architecture of Seventeenth Century Europe.

**Prerequisite:** ARH 123 Minimum Grade of D

**ARH 335 18th Century Art and Arch 3 cr**

Survey of the art and architecture of the Eighteenth Century.

**Prerequisite:** ARH 123 Minimum Grade of D

**ARH 340 Early Modern Art 3 cr**

A study of art developments in the 19th and early 20th centuries.

**Prerequisite:** ARH 123 Minimum Grade of D

**ARH 343 African-American Art 3 cr**

Investigation of the art of African-Americans and the historical and social contexts in which the works were produced. Major periods of concentration include slavery, post-slavery, and the 20th century.

**ARH 344 Contemporary Art 3 cr**

A study of art developments since 1960.

**ARH 345 American Arts 1600 - 1940 3 cr**

American painting, graphics and sculpture from the Colonial period to 1940.

**Prerequisite:** ARH 123 Minimum Grade of D

**ARH 346 Amer Architecture 1600-1940 -W 3 cr**

American architecture from the colonial period to 1940.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and ARH 123 Minimum Grade of D

**ARH 348 Native American Art 3 cr**

This class will address key issues in Native American Art including symbolism and spirituality, the role of patronage and museum practices, and the politics of art criticism.

**ARH 360 Traineeship in Museum Work 3 cr**

This course is evaluated experience in museum work at an accredited institution of art. It may be repeated once if the experience differs.

**Prerequisites:** Fifteen hours of Art History with a grade of C or above and permission of the course director.

**ARH 362 Internshp Architect Preservatn 3 cr**

Evaluated experience in architectural preservation at the Mobile Historic Development Commission. Cannot be used to fulfill requirements for the Art History major or minor. The course may not be repeated.

**Prerequisite:** ARH 304 (may be taken concurrently) Minimum Grade of D or ARH 346 (may be taken concurrently) Minimum Grade of D or ARH 406 (may be taken concurrently) Minimum Grade of D or ARH 415 (may be taken concurrently) Minimum Grade of D

**ARH 370 Philosophy of Art 3 cr**

Acquaints students with main issues in aesthetics. Includes such issues as the nature and function of art and the criteria of aesthetic judgment.

Identical with PHL 370. Credit cannot be received for both ARH 370 and PHL 370.

**Cross-Listed:** PHL 370

**ARH 390 Special Topics - 3 cr**

Different subjects or themes in art or architectural history as announced. This course may be repeated twice when content varies, for a maximum of nine credit hours.

**ARH 415 Gothic Architecture 3 cr**

A study of art, architecture and sculpture during the Gothic Age, with special emphasis on France, Germany, England, Italy, and Scandinavia.

**Prerequisite:** ARH 103 (may be taken concurrently) Minimum Grade of D

**ARH 434 Baroque Art Flanders-Holland 3 cr**

A study of the painting of the major artists of Baroque Flanders and Holland; the work of Rubens, Hals, Rembrandt, Vemeer, and others will be studied.

**Prerequisite:** ARH 123 (may be taken concurrently) Minimum Grade of D

**ARH 480 Women in Art-W 3 cr**

A study of women throughout art history as both the subject and the creator of art. Prerequisite: Nine hours of Art History above the 200 level.

**Prerequisite:** (EH 101 Minimum Grade of D or EH 102 Minimum Grade of D)

**ARH 492 Seminar - W - 3 cr**

This seminar will treat variable subjects. This course may be repeated twice when content varies, for a maximum of nine credit hours.

**Prerequisite:** (ARH 103 Minimum Grade of D or CLA 103 Minimum Grade of D) and ARH 123 Minimum Grade of D and (ARH 344 Minimum Grade of D or ARH 244 Minimum Grade of D) and (EH 102 Minimum Grade of D or EH 105 Minimum Grade of C)

**ARH 493 Methodology of Art History-W 3 cr**

An investigation of methodologies used by art historians in their examination of artistic production. Prerequisite: 9 hours of ARH courses above the 200 level.

**ARH 494 Directed Studies 3 cr**

Research in a selected topic in art or architectural history under the direction of a faculty member, resulting in a scholarly paper. Prerequisites: Nine hours in Art History numbered 300 or higher and permission of the instructor. This course may be repeated twice for a total of nine credit hours.

**ARH 498 Art History Senior Thesis 3 cr**

Art History B.F.A. students will identify and carry out independent scholarly research on an art history topic over two semesters with the guidance of a faculty committee. At the end of the second semester, the project will be concluded with submission of the polished thesis and a thesis defense presented through a formal session given to the Visual Arts faculty. This course is to be taken as two sequential, three-credit units.

**Prerequisite:** ARH 493 (may be taken concurrently) Minimum Grade of C

**ARH 499 Honors Senior Thesis - H (W) 3 cr**

Honors students will identify and carry out independent scholarly research on an art history topic over two semesters with the guidance of a faculty mentor. At the end of the first semester, the project will be concluded with a formal oral presentation to the Visual Arts Faculty. At the end of the second semester, the students will submit the senior thesis. The work from both semesters will be graded by a three-member faculty committee, chaired by the mentor. This course is to be taken as two sequential, three-credit course units.

**Prerequisite:** HON 301 Minimum Grade of D

**ARH 544 Graduate Contemporary Art 3 cr**

A survey of art developments since 1960.

**Cross-Listed:** ARH 344

**ARH 560 Graduate Museum Internship 3 cr**

This course is evaluated experience in museum work at an accredited institution of art. It may be repeated once if the experience differs.

**Prerequisites:** ARH 103 or ARH 123 as relevant and Instructor Permission.

**Prerequisite:** ARH 103 Minimum Grade of C or ARH 123 Minimum Grade of C

**ARH 590 Special Topics - 3 cr**

Different subjects or themes in art or architectural history as announced. This course may be repeated twice when content varies, for a maximum of nine credit hours.

**Prerequisite:** ARS 103 (may be taken concurrently) Minimum Grade of D and ARS 123 (may be taken concurrently) Minimum Grade of D

**ARH 594 Directed Study 3 cr**

Directed individual study. A maximum of nine credit hours of ARH 594 may count toward degree requirements. Must have permission of instructor.

## Art Studio (ARS) (ARS)

**ARS 101 Art Appreciation 3 cr**

A broad introduction to the nature, vocabulary, and media of the visual arts of drawing, painting, prints, the camera arts, graphic design, sculpture, crafts, and architecture.

**ARS 121 Perceptual Drawing I 3 cr**

An introductory course with emphasis on the development of drawing skills to realistically represent natural and man-made forms using dry drawing media.

**ARS 122 Perceptual Drawing II 3 cr**

A continuation of ARS 121 using wet and mixed drawing media.

**Prerequisite:** ARS 121 Minimum Grade of D

**ARS 123 Two-Dimensional Design 3 cr**

The study and application of art elements and principles, and principles of perception, for the purpose of increasing the student's skill in communicating visually with paints and other two-dimensional media.

**ARS 124 Three-Dimensional Design 3 cr**

A study and application of art principles to three-dimensional problems.

**ARS 155 Introduction to Print Media 3 cr**

This course will provide students with an introductory education in the materials, methods, and history of the varied printmaking techniques. Students will gain a basic knowledge of the print processes and issues through the development of a body of original work.

**ARS 200 Intro to Animation 3 cr**

This course introduces the student to the basic concepts of animation. Emphasis will be on the processes involved in creation of animation stressing teamwork, storyboarding, hand drawing, clay animation, motion, and balance. Digital camera, scanning and computer editing are critical skills that make the foundation for this class. Study of the history of animation and terminology will be included in this curriculum.

**Prerequisite:** ARS 121.

**Prerequisite:** ARS 121 Minimum Grade of C

**ARS 201 Two Dimensional Animation I 3 cr**

This course will offer skill development in the use of software to develop storyboards and 2-dimensional animation including creating, importing and sequencing media elements to create interactive motion graphics. Emphasis will be on conceptualization, creativity, and visual aesthetics. This course takes the students through various aspects of animation using 2 dimensional software. Developing concepts, storyboarding and production of several 2 dimensional animations will be accomplished.

**Prerequisite:** ARS 122 Minimum Grade of D and ARS 121 Minimum Grade of D and ARS 123 Minimum Grade of D and ARS 200 Minimum Grade of D

**ARS 202 Three Dimensional Animation I 3 cr**

This course focuses on storytelling techniques through animation and the principles of animation. It covers the fundamentals of scene navigation, modeling, cameras, and lighting. Students will be introduced to 3D technology and how it is used to film and video game production.

**Prerequisite:** ARS 200 Minimum Grade of D and ARS 201 Minimum Grade of D

**ARS 204 Experimental Animation 3 cr**

This course offers a framework in which students will explore and develop aesthetically progressive concepts and professional practices in their personal animation art-making. The students will develop a unique artistic voice in the creation of visually based animation using experimentation, exploration, traditional and non-traditional mediums.

**Prerequisite:** ARS 200 Minimum Grade of C and ARS 122 Minimum Grade of C and ARS 123 Minimum Grade of C

**ARS 211 Glass Art, Science, History 3 cr**

A survey of glass objects from 5,000 years ago, leads to a focus on the contemporary and international Studio Glass Movement in art. Methodologies of glass making and the work of artists utilizing the medium will be explored. The physical properties of glass including coloration and transition range (heating and cooling) will be discussed and demonstrated with hands-on instruction.

**ARS 212 Intro to Glass Blowing 3 cr**

The manipulation, construction, and experimentation with glass as a sculptural and craft medium. Emphasis will be on glass blowing. Other investigations may include surface design, sandblasting, painting, and enameling on glass. 3 hours minimum of additional lab time beyond class time are required per week.

**ARS 222 Figure Drawing I 3 cr**

A study of the human figure using various drawing (dry) media.

**Prerequisite:** ARS 122 Minimum Grade of D and ARS 123 Minimum Grade of D

**ARS 225 Conceptual Drawing I 3 cr**

An introduction to the developmental process of drawing as an art form using various subject matter and drawing media.

**Prerequisite:** ARS 122 Minimum Grade of D and ARS 123 Minimum Grade of D

**ARS 231 Painting I 3 cr**

An introduction to the techniques and concepts of oil painting using various subject matter.

**Prerequisite:** ARS 122 Minimum Grade of D and ARS 123 Minimum Grade of D

**ARS 232 Painting II 3 cr**

A continuation of ARS 231 with an emphasis on color, composition and technical facility in oil paint.

**Prerequisite:** ARS 231 Minimum Grade of D

**ARS 241 Intro to Ceramics 3 cr**

Introduction to the exploration of basic hand building and wheel techniques of working with clay. Included will be basic design considerations for traditional pottery forms as well as simple sculptural forms. There will be exposure to techniques for glazing and basic firing.

**ARS 250 Lithography 3 cr**

An introduction to lithography. Technical skills related to processing and printing an edition will be studied. The course will consist of studio practice, lectures, quizzes, and critiques.

**Prerequisite:** ARS 121 Minimum Grade of D and ARS 123 Minimum Grade of D

**ARS 251 Intaglio/Etching 3 cr**

An introduction to Intaglio printing techniques also known as etching. Technical skills related to drawing, processing, and printing the metal plates will be studied. The class will consist of studio problems in plate making and printing along with lectures, quizzes, and critiques.

**Prerequisite:** ARS 122 (may be taken concurrently) Minimum Grade of D and ARS 123 (may be taken concurrently) Minimum Grade of D

**ARS 252 Woodcut/Relief 3 cr**

A study of relief printmaking. Techniques may include and are not limited to relief, linoleum cut, and wood engraving. The course will consist of studio practice, lectures, quizzes, and critiques. Emphasis will be given to the skills involved in the use of hand tools to cut the image and skills used in printing and editioning the block.

**Prerequisite:** ARS 121 Minimum Grade of D and ARS 123 Minimum Grade of D

**ARS 253 Silkscreen/Serigraphy 3 cr**

An introduction to silkscreen printing as a fine art form. The class will explore various techniques used in water-based screen printing, from simple stencils of hand drawn and cut paper designs to advanced photo processes. The course will consist of studio practice, lectures, quizzes, and critiques. Technical methods involved in color use, processing, and printing will be studied.

**Prerequisite:** ARS 121 Minimum Grade of C and ARS 123 Minimum Grade of C

**ARS 255 Beginning Printmaking 3 cr**

This course will provide students with a fundamental education in the materials, methods, and history of the varied printmaking techniques. Students will gain a basic knowledge of the print processes and issues through the development of a body of original work.

**Prerequisite:** ARS 122 (may be taken concurrently) Minimum Grade of C and ARS 123 Minimum Grade of C and ARS 121 Minimum Grade of C

**ARS 261 Sculpture I 3 cr**

A basic course with additive sculpture materials dealing with problems of mass, volume, and form.

**Prerequisite:** ARS 124 Minimum Grade of D

**ARS 262 Sculpture II 3 cr**

An introduction to basic metal fabrication, including cutting, brazing, and welding both ferrous and non-ferrous materials.

**Prerequisite:** ARS 261 (may be taken concurrently) Minimum Grade of D

**ARS 271 Introduction to Graphic Design 3 cr**

An introduction to skills and techniques used in graphic design, problems in visual priorities, and use of selected materials. Restricted to Majors.

**Prerequisite:** ARS 121 Minimum Grade of D and ARS 122 Minimum Grade of D and ARS 123 Minimum Grade of D

**ARS 272 Typography 3 cr**

This class will examine typography as a visual communication tool.

Course must be completed or in progress to participate in the Sophomore Review. Restricted to majors.

**Prerequisite:** ARS 271 Minimum Grade of C and ARS 273 (may be taken concurrently) Minimum Grade of C

**ARS 273 Graphic Design Foundations 3 cr**

An introduction to skills and design principles used in graphic design, problems in visual priorities, and use of selected materials. Course must be completed or in progress to participate in the Sophomore Review. Restricted to Majors.

**Prerequisite:** ARS 122 Minimum Grade of D and ARS 121 Minimum Grade of D and ARS 123 Minimum Grade of D

**ARS 281 Intro to Photography 3 cr**

An introduction to the technical and aesthetic aspects of photography. Investigation of picture-making problems and control of photographic media. Involves the use of color transparency materials and an introduction to black and white processing enlarging. Students must have 35 mm single lens reflex cameras capable of being operated in the manual exposure mode.

**ARS 290 Special Topics - 3-6 cr**

A lower level studio, lecture, or seminar course treating a special medium, subject, or theme, as announced. This course may be repeated when the topic varies for a maximum of 6 credit hours.

**ARS 301 2D Animation II 3 cr**

This course will continue to develop skills in the use of traditional mediums as well as digital software to create storyboards and 2-dimensional animation including creating, importing and sequencing media elements. Emphasis will be on conceptualization, creativity, and visual aesthetics. This course takes the students through various aspects of animation using 2 dimensional software. Developing concepts, storyboarding and the production of several dimensional animations will be accomplished.

**Prerequisite:** ARS 201 Minimum Grade of C

**ARS 302 3D animation II 3 cr**

This course focuses on storytelling techniques through animation and the principles of animation. It will reinforce the fundamentals of scene navigation, modeling, cameras, and lighting. Students will become proficient in the use of 3D technology and how it is used for film and video game production.

**Prerequisite:** ARS 202 Minimum Grade of C

**ARS 304 Digital Modeling 3 cr**

This course introduces the concepts and techniques used in the creation of three dimensional form in a digital space. Emphasis will be on the practical use and creation of three dimensional models for animation and texturing. The course will also explore how formal choices impact meaning, and discuss contemporary artists who incorporate digital modeling into their work.

**Prerequisite:** ARS 122 Minimum Grade of C and ARS 124 Minimum Grade of C and ARS 200 Minimum Grade of C

**ARS 311 Kiln Formed Glass 3 cr**

The exploration of glass formed through a variety of kiln working methods including fusing, slumping, pate de verre, and casting.

**ARS 312 Intermediate Glass Blowing 3-6 cr**

A continuation of ARS 212 focusing on refinement of form and investigation of complex techniques in order to develop proficiency in glass blowing as a means to service individual creativity. The use of glass color is explored. A minimum of 3 additional hours of lab time outside of class time are required weekly.

**Prerequisite:** ARS 212 Minimum Grade of D and ARS 124 (may be taken concurrently) Minimum Grade of D

**ARS 322 Figure Drawing II 3 cr**

Further study of the human figure using various drawing (wet and dry) media.

**Prerequisite:** ARS 222 Minimum Grade of D

**ARS 325 Conceptual Drawing II 3 cr**

A continuation of ARS 225 with emphasis on concept driven work.

**Prerequisite:** ARS 225 Minimum Grade of D

**ARS 331 Painting III 3-12 cr**

A continuation of ARS 231 and 232 with emphasis on conceptual exploration in oil and/or water media paint. May be repeated for a maximum of 12 hours.

**Prerequisite:** ARS 231 (may be taken concurrently) Minimum Grade of D and ARS 232 (may be taken concurrently) Minimum Grade of D

**ARS 341 Intermediate Ceramics 3-9 cr**

A continuation of ARS 241 with emphasis on hand building or wheel techniques. May be repeated for a total of 9 semester hours credit.

**Prerequisite:** ARS 122 (may be taken concurrently) Minimum Grade of D and ARS 124 (may be taken concurrently) Minimum Grade of D and ARS 241 (may be taken concurrently) Minimum Grade of D

**ARS 351 Intermediate Printmaking 3-12 cr**

Further work in printmaking. Students may work in one or more of the following print media: Intaglio, lithography, relief, screen printing. Students must have taken the 200 level of the appropriate print media to move to intermediate level of that same media. The course may be repeated for a maximum of 9 semester hours.

**Prerequisite:** ARS 250 Minimum Grade of D or ARS 251 Minimum Grade of D or ARS 252 Minimum Grade of D or ARS 253 Minimum Grade of D

**ARS 352 Relief/Woodcut 3 cr**

Building on the relief techniques covered in ARS 255 Beginning Printmaking, this course will provide students with a deeper education in the materials, methods, and history of Relief/Woodcut printing. Students will gain knowledge of the print processes and issues through the development of a body of original work.

**Prerequisite:** ARS 155 Minimum Grade of C or ARS 255 Minimum Grade of C

**ARS 353 Intaglio/Etching 3 cr**

Building on the intaglio techniques covered in ARS 255 Beginning Printmaking, this course will provide students with an education in the materials, methods, and history of Intaglio/Etching. Students will gain knowledge of the print processes and issues through the development of a body of original art work.

**Prerequisite:** ARS 155 Minimum Grade of C or ARS 255 Minimum Grade of C

**ARS 354 Screenprint/Serigraphy 3 cr**

Building on the Screenprint/Serigraphy techniques covered in ARS 255 Beginning Printmaking, this course is an introductory course in water-based screen printing, designed to present the basic techniques and concepts of the medium as a fine art form.

**Prerequisite:** ARS 155 Minimum Grade of C or ARS 255 Minimum Grade of C

**ARS 355 Lithography 3 cr**

Building on the lithography techniques covered in ARS 255 Beginning Printmaking, this course will provide students with an intermediate education in the materials, methods, and history of lithography. Students will gain a knowledge of the print processes and issues through the development of a body of original art work.

**Prerequisite:** ARS 155 Minimum Grade of C or ARS 255 Minimum Grade of C

**ARS 361 Sculpture III 3-6 cr**

An introduction to direct carving processes with wood and stone. This course may be repeated for a total of 6 semester hours credit.

**Prerequisite:** ARS 262 (may be taken concurrently) Minimum Grade of D

**ARS 362 Sculpture IV 3-6 cr**

Advanced mold making techniques. This course may be repeated for a total of 6 semester hours credit.

**Prerequisite:** ARS 361 (may be taken concurrently) Minimum Grade of D

**ARS 372 Graphic Design Production 3 cr**

Design, typography, page layout, paper selection, pre-press techniques and the preparation of art for reproduction using both traditional and digital means. Prerequisites: Must have a C or above in ARS 272, ARS 273.

**Prerequisite:** ARS 272 Minimum Grade of C and ARS 273 Minimum Grade of C

**ARS 373 Graphic Design Identity Systems 3 cr**

An intermediate course developing design skills used in the production of printed materials for visual communications with an emphasis on logos, letterheads, brochures and posters.

**Prerequisite:** ARS 272 Minimum Grade of C and ARS 273 Minimum Grade of C

**ARS 374 Publication Design 3 cr**

An intermediate course developing design skills used in the production of printed materials for visual communications with an emphasis on newsletters, magazines, and newspaper graphics.

**Prerequisite:** ARS 272 Minimum Grade of C and ARS 273 Minimum Grade of C

**ARS 375 Digital Graphic Design 3 cr**

An advanced level course utilizing computers to produce graphic design work for printed and digital media.

**Prerequisite:** ARS 373 Minimum Grade of C and ARS 374 Minimum Grade of C

**ARS 376 Illustration 3 cr**

Conceptual approaches, materials and techniques used to solve problems in illustration, emphasizing developing rendering skills.

**Prerequisite:** (ARS 222 Minimum Grade of C or ARS 225 Minimum Grade of C) or (ARS 373 Minimum Grade of C or ARS 374 Minimum Grade of C)

**ARS 381 Intermediate Photography I 3 cr**

This course is designed to allow you to begin to communicate your own vision and artistic voice. This course is intended to take your technical skills to the next level, by reading, writing and thinking about photography.

**Prerequisite:** ARS 281 Minimum Grade of D

**ARS 382 Intermediate Photography II 3 cr**

The three main objectives of this course is to further your knowledge of the fine art photography, learn how to conceptualize ideas through the medium of photography, and to treat photography primarily as a creative medium for discussing personal, political, and social concerns. Since photography is tied to many technical processes, these concerns will also be acknowledged in this class.

**Prerequisite:** ARS 281 Minimum Grade of C and ARS 381 Minimum Grade of C

**ARS 387 Digital Silver Photography 3 cr**

This studio course examines the intersecting theories and practices of photography with digital cameras and computer imaging.

**Prerequisite:** ARS 382 Minimum Grade of D

**ARS 390 Special Topics 3 cr**

An upper level studio, lecture, or seminar course treating a special medium, subject, or theme, as announced.

**ARS 396 Professional Practices - W 3 cr**

This course prepares students for employment, graduate school, or a professional career in the visual arts. Restricted to majors.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**ARS 400 Topics in Animation 3 cr****ARS 404 Studies in Animation 3 cr**

Independent work in an approved Animation topic under the direction of a studio faculty member. This course may be repeated for a maximum of 6 credit hours.

**Prerequisite:** ARS 201 Minimum Grade of D and ARS 301 Minimum Grade of D

**ARS 408 Pre-Thesis in Animation - W 3 cr**

This course focuses on the creation of pre-production materials, concept art, storyboards, animatics, as well as research design documents and supplements, to be used in ARS 409 Senior Thesis in Animation course.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (ARS 301 Minimum Grade of C or ARS 302 Minimum Grade of C)

**ARS 409 Senior Thesis in Animation 3-6 cr**

An Independent project of creative work in the area of Animation with the guidance of one to three faculty advisors. The student is required to work at least 9 hours a week in the studio. The thesis must be publicly exhibited. This course should be taken twice in consecutive semesters for a total of 6 credit hours.

**Prerequisite:** ARS 404 Minimum Grade of C

**ARS 410 Topics in Glass 3 cr**

An upper level Glass course treating a special subject or theme as announced. This course may be repeated when the topic varies for a maximum of 6 credit hours.

**ARS 411 Advanced Kiln Formed Glass 3 cr**

Advanced kiln forming requires investigation into conceptual and technical problems in glass. The student becomes increasingly self-directed through further exploration of fusing, slumping, of casting. The development of firing schedules is emphasized.

**Prerequisite:** ARS 311 Minimum Grade of D and ARS 123 (may be taken concurrently) Minimum Grade of D

**ARS 412 Advanced Glassblowing 3 cr**

Advanced techniques in hot glass will be explored for the development of refined sculpture and/or craft in glass. Course assignments will emphasize personal creativity and exploration. Instruction includes advanced finishing techniques and cold working techniques. A minimum of 3 additional weekly lab hours outside of class time are required.

**Prerequisite:** ARS 312 Minimum Grade of D and ARS 121 (may be taken concurrently) Minimum Grade of D

**ARS 414 Studies in Glass 3 cr**

Independent work in an approved Glass topic under the direction of a studio faculty member. This course may be repeated for a maximum of 6 credit hours.

**ARS 418 Pre-Thesis in Glass 3 cr**

Independent work in an approved Glass topic under the direction of a studio faculty member. This course may be repeated for a maximum of 6 credit hours.

**Prerequisite:** (ARS 212 Minimum Grade of C and ARS 312 Minimum Grade of C and ARS 412 (may be taken concurrently) Minimum Grade of C) or (ARS 311 Minimum Grade of C and ARS 411 (may be taken concurrently) Minimum Grade of C) or ARS 490 (may be taken concurrently) Minimum Grade of C

**ARS 422 Figure Drawing III 3 cr**

Individual problems with the human figure as subject, emphasizing concept, composition, and media.

**Prerequisite:** ARS 322 (may be taken concurrently) Minimum Grade of D

**ARS 425 Conceptual Drawing III 3 cr**

A continuation of ARS 325 with emphasis on exploration of personal concepts.

**Prerequisite:** ARS 325 (may be taken concurrently) Minimum Grade of D

**ARS 426 Color Theory 3 cr**

A studio course on the nature, theory and application of color in an aesthetic context.

**Prerequisite:** (ARS 222 Minimum Grade of D or ARS 225 Minimum Grade of D)

**Cross-Listed:** ARS 326

**ARS 427 Advanced Color Theory 3 cr**

A studio course continuing the study of the nature, theory and application of color in an aesthetic context.

**Prerequisite:** ARS 426 Minimum Grade of C

**ARS 430 Topics in Painting 3 cr**

An upper level Painting course treating a special subject or theme as announced. This course may be repeated when the topic varies for a maximum of 12 credit hours.

**ARS 431 Painting IV 3-6 cr**

This class is a continuation of ARS 331 with emphasis on personal development of conceptual approaches in oil paint and/or water media paintings. Students with Primary Concentrations in Painting will use this course to prepare for thesis. This course may be repeated for a total of 6 semester hours credit.

**Prerequisite:** ARS 331 (may be taken concurrently) Minimum Grade of D or ARS 332 Minimum Grade of D

**ARS 434 Studies in Painting 3 cr**

Independent work in an approved Painting topic under the direction of a studio faculty member. This course may be repeated for a maximum of 6 credit hours.

**ARS 438 Pre-Thesis in Painting 3 cr**

Independent creative production and preliminary work in an approved Painting topic under the direction of a studio faculty member.

**Prerequisite:** ARS 431 Minimum Grade of C

**ARS 439 Senior Thesis in Painting 6 cr**

An Independent project of creative work in the area of Painting with the guidance of one to three faculty advisors. The student is required to work at least 18 hours a week in the studio. The thesis must be publicly exhibited. This course may be repeated once for credit.

**ARS 440 Topics in Ceramics 3 cr**

An upper level Ceramics course treating a special subject or theme as announced. This course may be repeated when the topic varies for a maximum of 6 credit hours.

**ARS 441 Advanced Ceramics 3-12 cr**

A continuation of ARS 341 with emphasis on hand building or wheel processes. May be repeated for a total of 12 semester hours credit.

**Prerequisite:** ARS 341 (may be taken concurrently) Minimum Grade of D or ARS 342 Minimum Grade of D

**ARS 444 Studies in Ceramics 3 cr**

Independent work in an approved Ceramics topic under the direction of a studio faculty member. This course may be repeated for a maximum of 6 credit hours.

**ARS 448 Pre-Thesis in Ceramics 3 cr**

This course will focus on developing conceptual, technical and professional presentation skills in preparation for the capstone course, ARS 498 Senior Thesis in Ceramics.

**Prerequisite:** ARS 441 Minimum Grade of C

**ARS 449 Senior Thesis in Ceramics 6 cr**

An independent project of creative work in the area of the Primary Concentration or one or more Secondary Concentrations, with the guidance of one to three faculty advisors. The student is required to work at least 18 hours a week in the studio. The thesis must be publicly exhibited.

**Prerequisite:** ARS 448 Minimum Grade of C

**ARS 450 Topics in Printmaking 3 cr****ARS 451 Advanced Printmaking 3-6 cr**

A continuation of ARS 351 with emphasis on each student's developing and refining an individual approach to creative work. For students with a Primary Concentration in Printmaking, this course is preparation for Thesis.

**Prerequisite:** ARS 351 (may be taken concurrently) Minimum Grade of D

**ARS 454 Studies in Printmaking 3 cr**

Independent work in an approved Printmaking topic under the direction of a studio faculty member. This course may be repeated for a maximum of 6 credit hours.

**ARS 458 Pre-Thesis in Printmaking 3 cr**

Independent creative production and preliminary work in an approved Printmaking topic in preparation for the capstone course.

**Prerequisite:** ARS 451 Minimum Grade of C

**ARS 459 Senior Thesis in Printmaking 6 cr**

An Independent project of creative work in the area of Printmaking with the guidance of one to three faculty advisors. The student is required to work at least 18 hours a week in the studio. The thesis must be publicly exhibited. This course may be repeated once for credit.

**ARS 460 Topics in Sculpture 3 cr**

An upper level Sculpture course treating a special subject or theme as announced. This course may be repeated when the topic varies for a maximum of 6 credit hours.

**ARS 461 Sculpture V 3-6 cr**

Experimental work with synthetic materials. This course may be repeated for a total of 6 semester hours credit. Requires permission of instructor.

**Prerequisite:** ARS 362 (may be taken concurrently) Minimum Grade of D

**ARS 464 Studies in Sculpture 3 cr**

Independent work in an approved Sculpture topic under the direction of a studio faculty member. This course may be repeated for a maximum of 6 credit hours.

**ARS 468 Pre-Thesis in Sculpture 3 cr**

This course focuses on the exploration and production of sculpture in materials such as metal, resin, clay, wood and concept to be taken prior to ARS 469 Senior Thesis in Sculpture. This course may be repeated for a maximum of 6 credit hours. \$200.00.

**Prerequisite:** ARS 362 Minimum Grade of C

**ARS 469 Senior Thesis in Sculpture 6 cr**

An independent project of creative work in the area of Sculpture with the guidance of one to three faculty advisors. The student is required to work at least 18 hours a week in the studio. The thesis must be publicly exhibited. This course may be repeated once for credit.

**ARS 470 Topics in Graphic Design 3 cr**

An upper level Graphic Design course treating a special subject or theme as announced. This course may be repeated when the topic varies for a maximum of 6 credit hours.

**ARS 472 Senior Graphic Design 3 cr**

An advanced workshop that addresses issues of visual communication using graphic design as a problem-solving tool.

**Prerequisite:** ARS 373 Minimum Grade of C and ARS 374 Minimum Grade of C

**ARS 473 Web Design 3 cr**

An introduction to interactive applications. This course provides instruction in innovative, artistic design and development of visual communication skills related to interactive applications.

**Prerequisite:** ARS 373 Minimum Grade of C

**ARS 474 Studies in Graphic Design 3 cr**

Independent work in an approved Graphic Design topic under the direction of a studio faculty member. This course may be repeated for a maximum of 6 credit hours.

**ARS 479 Design Business Practices-W 3 cr**

A study of the business principles of Graphic Design. Projects encourage both collaborative and independent study. Students explore design as a commercial art and develop the skills to coordinate projects through all phases of a professional, business relationship.

**Prerequisite:** ARS 373 Minimum Grade of C and ARS 374 Minimum Grade of C and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**ARS 480 Topics in Photography 3 cr**

An upper level Photography course treating a special subject or theme as announced. This course may be repeated when the topic varies for a maximum of 6 credit hours.

**ARS 481 Advanced Photography 3 cr**

This course will strive to help further develop each student's artistic strength in their use of the photographic medium. Each student will be required to write a statement explaining the body of work that they will create and what particular processes they might be interested in exploring.

**Prerequisite:** ARS 281 Minimum Grade of C and ARS 381 Minimum Grade of C and ARS 382 Minimum Grade of C

**ARS 483 Color Photography 3 cr**

This is an introduction to color photography. The goals are to become familiar with all aspects of color photography including film selection, processing, printing, theory, and criticism.

**Prerequisite:** ARS 281 Minimum Grade of D and ARS 381 Minimum Grade of D and ARS 382 Minimum Grade of D

**ARS 484 Studies in Photography 3 cr**

Independent work in an approved Photography topic under the direction of a studio faculty member. This course may be repeated for a maximum of 6 credit hours.

**ARS 485 Alternative Photo Processes 3 cr**

This is an advanced studio art course designed for students with a background in photography (primarily black and white) who want to expand their image making vocabulary through the use of early photographic techniques.

**Prerequisite:** ARS 481 Minimum Grade of D

**ARS 486 Pre-Thesis in Photography 3 cr**

This course is designed for students to communicate their own artistic vision by creating one large body of work. Students will be required to write a statement explaining the body of work that they wish to create and what particular processes they might be interested in exploring. This course is designed to prepare students for senior thesis and to help individuals think independently as artists, to formulate ideas based on aspects of their work, interests, and passions.

**Prerequisite:** ARS 481 Minimum Grade of C

**ARS 487 Photo Bookmaking 3 cr**

This class will focus on the design and construction of artist books. We will explore structure and form and how they support and influence the content of a book.

**Prerequisite:** ARS 481 Minimum Grade of D

**ARS 488 Graphic Design Thesis 3 cr**

A self-directed creative project in the area of graphic design with the guidance of a faculty member. Evaluation of the project is by faculty committee.

**Prerequisite:** ARS 472 Minimum Grade of C and ARS 479 Minimum Grade of C

**ARS 489 Senior Thesis in Photography 6 cr**

An independent project of creative work in the area of Photography with the guidance of one to three faculty advisors. The student is required to work at least 18 hours a week in the studio. The thesis must be publicly exhibited. This course may be repeated once for credit.

**ARS 490 Special Topics 1-12 cr**

An advanced studio, lecture, or seminar course treating a special medium, subject, or theme, as announced. This course may be repeated for a maximum of twelve (12) credit hours. Requires junior standing and permission of the instructor.

**ARS 494 Directed Studies 3-6 cr**

Independent work in an approved studio medium or topic under the direction of a studio faculty member.

**ARS 496 Professional Studies Internship 3 cr**

Students intern in a specialized area of interest. Written report required.

**ARS 497 Senior Thesis in Glass 6 cr**

An independent project of creative work in the area of the Glass Concentration, with the guidance of one to three faculty advisors. The student is required to work at least 18 hours a week in the studio. The thesis must be publicly exhibited.

**ARS 498 Senior Thesis 6 cr**

An independent project of creative work in the area of the Primary Concentration or one or more Secondary Concentrations, with the guidance of one to three faculty advisors. The student is required to work at least 18 hours a week in the studio. The thesis must be publicly exhibited. This course may be repeated once for credit.

**ARS 499 Honors Senior Thesis - H 3 cr**

Honors student, the first semester, will identify and carry out independent scholarly research on a topic with the guidance of a faculty mentor. The second semester, students will produce a body of work that incorporates and exemplifies the ideas explored in the research paper. The project will be concluded with a formal presentation to the Visual Arts faculty. The Honors Project will be graded by a three-member faculty committee, chaired by the mentor. This course is to be taken as two, sequential, three-credit course units.

**Prerequisite:** HON 301 Minimum Grade of D

**ARS 500 Graduate Animation 3 cr**

Intensive course structured as an exploration of the practice and production of animation. May be repeated for a total of 36 credit hours.

**ARS 504 Digital Modeling 3 cr**

This course introduces the concepts and techniques used in the creation of three dimensional form in a digital space. Emphasis will be on the practical use and creation of three dimensional models for animation and texturing. The course will also explore how formal choices impact meaning, and discuss contemporary artists who incorporate digital modeling into their work.

**ARS 510 Graduate Glass 3 cr**

Intensive investigation of visual, expressive or technical problems in glass. May be repeated for a total of 18 credit hours. Pre-requisite: bachelor's degree in art or art education.

**Prerequisite:** ARS 411 Minimum Grade of C and ARS 412 Minimum Grade of C

**ARS 520 Graduate Drawing 3-9 cr**

Intensive course in drawing as both a set of skills and as a creative medium of expression. May be repeated for a total of 36 credit hours. Pre-requisites: complete either appropriate pre-requisites or bachelor's degree in art or art education.

**Prerequisite:** ARS 422 (may be taken concurrently) Minimum Grade of C or ARS 425 (may be taken concurrently) Minimum Grade of C

**ARS 526 Graduate Color Theory 3 cr**

A studio course continuing a study of the nature, theory and application of color in an aesthetic context.

**Prerequisite:** ARS 326 Minimum Grade of C

**ARS 530 Graduate Painting 3-9 cr**

Intensive course in painting with traditional or contemporary media, subjects and concepts. May be repeated for a total of 36 credit hours. Pre-requisites: complete either appropriate pre-requisites or bachelor's degree in art or art education. Fee

**Prerequisite:** ARS 431 (may be taken concurrently) Minimum Grade of C

**ARS 540 Graduate Ceramics 3-9 cr**

A study of clay as a creative medium of expression. Problems of form, volume, space, texture, decoration, and function will be investigated in their relation to selected ceramics processes and building techniques. May be repeated for a total of 36 semester hours. Pre-requisites: complete either appropriate pre-requisites or bachelor's degree in art or art education.

**Prerequisite:** ARS 441 (may be taken concurrently) Minimum Grade of C

**ARS 550 Graduate Printmaking 3-9 cr**

Intensive investigation of visual, expressive or technical problems in one or more printmaking media. This course may be repeated for a total of 36 hours credit. Pre-requisites: complete either appropriate pre-requisites or bachelor's degree in art or art education.

**Prerequisite:** ARS 451 (may be taken concurrently) Minimum Grade of C

**ARS 551 Photomechanical Technologies 3 cr**

This course will provide students with an education in the materials, methods, history, contemporary technologies of photomechanical processes. Students will gain a knowledge of photographic print processes and issues through the development of a body of original work. Through critiques students will be expected to develop a familiarity with techniques and materials. Concurrent enrollment in ARS 591. Lab fee.

**Cross-Listed:** ARS 591

**ARS 552 Artist Book Seminar 3 cr**

This course will provide students with an education in the materials, methods, and contemporary strategies for artist books. Students will gain knowledge of several artist book strategies and forms through the development of a body of original work. Through critiques students will be expected to develop a familiarity with techniques and materials. Concurrent enrollment in ARS 591. Lab fee.

**Cross-Listed:** ARS 591

**ARS 560 Graduate Sculpture 3-9 cr**

Intensive investigation of problem of mass, volume, form, and space using one or more sculptural media. This course may be repeated for a total of 36 hours credit. Pre-requisites: complete either appropriate pre-requisites or bachelor's degree in art or art education.

**Prerequisite:** ARS 461 (may be taken concurrently) Minimum Grade of C

**ARS 570 Graduate Graphic Design 3 cr**

An intensive workshop that investigates advanced issues of visual communication using graphic design as both a problem-solving tool and as a medium for creative expression and communication. Emphasis on trending technology and/or professional practice. May be repeated for a total of 36 credit hours.

**Prerequisite:** ARS 488 Minimum Grade of B

**ARS 571 Advanced Typography and Layout 3-6 cr**

Intensive workshop that investigates and explores advanced typography and layout and/or format techniques both in digital and analog forms. Issues of visual communication using graphic design as both a problem-solving tool and a medium for creative expression and communication will also be investigated and explored. Emphasis on trending technology, research methods, and professional practice. May be repeated for a total of 6 credits hours.

**Prerequisite:** ARS 488 Minimum Grade of B

**ARS 572 Divergent Thinking Research 3-6 cr**

Introduction to the fundamental and varied methodologies of research, theories of design and human behavior, and discipline-related history in order to work with a variety of design products and users. Emphasis will be placed on application of research findings to the creative process, design, and visual solutions. May be repeated for a total of 6 credit hours.

**Prerequisite:** ARS 488 Minimum Grade of B

**ARS 576 Build Your online & Social Media Brand 3-6 cr**

An intensive workshop that investigates advanced uses and techniques for growing an audience through social media and online content marketing using visual communication, graphic design, and copy writing techniques. Emphasis on trending technology and/or professional practice as a medium for creative expression and communication.

This graduate course focuses on growing an audience online with an emphasis on personal branding, social media branding and marketing, and content marketing on your website and social media channels. May be repeated for a total of 6 credit hours.

**Prerequisite:** ARS 488 Minimum Grade of B

**ARS 580 Graduate Photography 3 cr**

Emphasizing theory, concept, and critical thinking, while expanding knowledge of the photographic medium. May be repeated for a total of 18 credit hours. Prerequisite: ARS 387 Minimum Grade of D or ARS 481 Minimum Grade of a D or bachelor's degree in art or education.

**Prerequisite:** ARS 387 Minimum Grade of C or ARS 481 Minimum Grade of C

**ARS 590 Special Topics - 3-9 cr**

A graduate course treating a special medium, subject, or theme, as announced. This course may be repeated twice when the content varies, for a maximum of 9 credit hours.

**ARS 591 Graduate Seminar 3 cr**

A detailed examination of selected topics in art. Topics announced prior to registration. This course includes scholarly research, writing, and creative work. May be repeated up to five times for a total of 18 credit hours when course content changes. Prerequisite: Graduate standing in the Visual Art Department.

**ARS 592 Graduate Thesis 1-3 cr**

An independent project of creative work, with the guidance of a faculty committee. The thesis must be an original project/production and have a visual component. May be repeated for a total of 6 credit hours. Prerequisite: Must have completed or be concurrently enrolled in 9 hours of graduate courses.

## Audiology (AUD) (AUD)

**AUD 590 Seminar in Audiology 1-6 cr**

This course is designed to provide the opportunity for in-depth study of special interest in Audiology. Requires approval of Department Chair.

**AUD 612 Anatomy-Physio Hearing Mech 4 cr**

Study of the anatomy and physiology of the nervous system, the anatomy and physiology of the outer, middle, inner ear, including the vestibular system, and the central auditory nervous system.

**AUD 613 Psychoacoustics 3 cr**

Study of the principles, procedures and research involved in the field of psychoacoustics and of the relationships between the physical dimensions of auditory stimuli and the resultant perceptual experience as well as the relationships among psychoacoustic testing and both auditory physiology and the audiologic evaluation process. Participation in laboratory assignments will be required.

**AUD 614 Instrumentation and Acoustics 3 cr**

Study of basic electricity, acoustics and measurement of sound properties, wave analysis, transducers, measuring and calibration systems, speech processing systems, and system interaction and integration.

**AUD 615 Speech and Language Science 3 cr**

Study of the acoustical, perceptual, physiological aspects of speech, as well as the phenomena of communication and language development. These are discussed as they relate to the field of audiology.

**AUD 616 Resrch Design Hearing Sci 3 cr**

Research designs utilized in the hearing sciences; elements of research proposals and studies; how to critique a research study; how to conduct a literature review; APA format; students will be required to write precis of research articles and write a research proposal. Elements of modern statistics including sets and functions, probability theory, hypothesis testing, analysis of variance models, correlation, and regression.

**AUD 621 Professional Issues 3 cr**

This course will address a variety of professional issues such as organizations, societies, and their histories; codes of ethnics; scopes of practice; credentialing and licensure; the development of the AUD; guidelines and position statements generated by ASHA and AAA; standards and best practices; methods and models of service delivery; and audiology practice management.

**AUD 622 Medical Audiology 4 cr**

This course will address acquired and congenital diseases and disorders of the outer, middle, and inner ear and the central auditory nervous system occurring across the lifespan; imaging techniques; non-audiologic medical and surgical interventions for these conditions; and cerumen management techniques; and appropriate methods for monitoring of patients prescribed potentially ototoxic medications.

**AUD 623 Pharma & Ototox Monitoring 3 cr**

This course will provide the basic science background necessary to understand the effects of medications on the auditory and balance systems. This course will also address drug treatment strategies for hearing loss and balance disorders. Topics will include mechanisms of drug actions, side effects, how age and disease affect these mechanisms, and specific effects of certain drugs on the hearing and balance system. This course will additionally address appropriate methods for identification and monitoring of patients prescribed potentially ototoxic medications.

**AUD 630 Acoustics & Amp Technol 3 cr**

This course covers basic acoustics, measurement of sound, sound transmission, amplification technologies, hearing aid styles, basic hearing aid components, advanced hearing aid components, ear molds and styles, compression, advanced signal processing, electroacoustic properties of hearing aids, assistive listening devices, and use of ANSI standards.

**AUD 631 Sel, Fit & Verif of Amp Sys 3 cr**

This course will address the principles of selection, fitting, and verification of amplification systems, including hearing aids and assistive listening devices; subjective and objective audiologic assessments used to determine need for, select, and fit appropriate amplification systems for patients of all ages; and techniques used to select and fit amplification systems. The course will also address subjective and objective verification procedures, specifically addressing the importance of including Real-Ear Measures and subjective self-assessment measures in the amplification process.

**AUD 632 Hearing Aid Lab 1 cr**

This course will address the principles of verification and validation; tools used to verify appropriate fitting of amplification systems (such as real-ear probe-mic equipment) and techniques used to validate fitting (such as software packages, and subjective and objective audiologic measures); cochlear implant remapping.

**AUD 633 Advanced Sensory Aids 3 cr**

This course will address advanced technologies for individuals with hearing-impairment such as cochlear and brainstem implants, vibrotactile aids, and implantable devices, as well as the selection and fitting of these technologies.

**AUD 640 Basic Audiologic Assessment 3 cr**

This course will address the principles of cross-check, the test battery approach, differential diagnosis, relevant test equipment, instruments, and transducers, administration and interpretation of the pure-tone testing, clinical masking, case history, otoscopy, and tuning-fork tests, speech audiometry; tests for pseudo-hypoacusis, ototoxicity, site-of-lesion testing and historical assessments; and informal assessment procedures.

**AUD 641 Immit & Otoacous Emission Meas 3 cr**

This course will address administration and interpretation of acoustic immittance and otoacoustic emission measures across the lifespan. Topics will address standard and multi-frequency tympanometry, acoustic reflex testing, and eustachian tube function testing; spontaneous, transient and distortion-product OAE measurement; and the influence of intrinsic and extrinsic variables, including cochlear and retro-cochlear pathology, on outcomes and differential diagnosis.

**AUD 642 Pediatric Audiology 4 cr**

This course addresses the issues associated with providing audiology diagnostic and rehabilitative services to pediatric and developmentally delayed populations. Topics will include gestational development, genetic transmission of hearing loss, risk factors for hearing loss, universal newborn hearing screening programs, early hearing loss detection and intervention programs, behavioral test administration and interpretation, communication development and needs of children with hearing loss and other special needs, communication approaches for children with hearing loss, pediatric aural (re)habilitation, and counseling to children and families.

**AUD 643 Audiology and Aging 3 cr**

This course will address the issues associated with providing audiologic services to older adults. Issues will include effects of aging on anatomy, physiology, and function, and test administration and interpretation issues specific to older adults.

**AUD 645 Evoked Potential Measures 3 cr**

This course will address instrumentation (transducers and electrode types); application and interpretation of evoked potential (EP) measures including ENOG, ECoG, ABR, middle and late potentials, across the lifespan; sedation protocols; assessment protocols associated with different EP measures and the populations to which they are applied; population norms; intrinsic and extrinsic variables affecting EP results; differential diagnosis of auditory neuropathy; troubleshooting.

**AUD 646 Pediatric Audio Habilitation 3 cr**

This course will address issues associated providing audiologic services to pediatric and developmentally delayed populations. Issues will include gestational development, test administration and interpretation; genetic transmission of hearing loss, risk factors for hearing loss; principles of screening and the development and construction of a screening program; universal newborn hearing screening and early hearing detection and intervention programs.

**AUD 647 Adult Audiologic Rehab & Aging 3 cr**

This course will address the implications of hearing loss in adulthood including the educational, vocational, social and legislative concerns of adults with hearing loss; assessment tools and intervention techniques used to maximize communication skills, including communication strategy training, speechreading, and group therapy approaches. Issues specific to older adults and aging will be particularly emphasized in this course.

**AUD 648 Counseling Hear Imp-Families 3 cr**

This course will address various theories, principles and techniques associated with the social and psychological aspects of disability as well as issues specific to and techniques used when counseling patients with hearing loss and their families.

**AUD 649 Educational Audiology 2 cr**

This course will address the role of educational audiology, as well as the development, management, and utilization of hearing screening programs, classroom acoustics, selection and fitting of classroom-based amplification, and federal law associated with children with special needs.

**AUD 650 Vestibular Assess-Treatment 3 cr**

This course will address assessment approaches utilized in the diagnosis of vestibular disorders (such as ENG) and procedures used in the management of these disorders (such as vestibular rehabilitation techniques).

**AUD 651 Assess-Treatmnt Cent Aud Proc 3 cr**

This course will address the development, assessment, and interpretation of an auditory processing test battery across the lifespan, as well as intervention approaches.

**AUD 652 Educational Audiology 2 cr**

This course will address the delivery of audiology services to a school-based population. Issues to be addressed will include the development, management and utilization of hearing and middle ear system screening programs, classroom acoustics, selection and fitting of classroom-based amplification, and federal law associated with children with special needs.

**AUD 653 Industrial-Forensic Audiology 3 cr**

This course will address federal noise standards, effects of noise exposure on the auditory system, sound measurement and instrumentation, development and implementation of a hearing conservation program, hearing protection devices and forensic audiology.

**AUD 654 Tinnitus and Hyperacusis 3 cr**

This course will address assessment and intervention approaches used in the management of tinnitus and hyperacusis.

**AUD 655 Spch-Lang Path for Audiologist 3 cr**

This interprofessional education (IPE) course will address the foundational knowledge and skills necessary for audiologists to work together with speech-language pathologists in interprofessional collaborative teams. Specifically, this course will address the scope of practice in audiology, speech-language screening, speech-language report literacy and special topics.

**AUD 656 Vestibular Assessment 4 cr**

This course will include a discussion of the peripheral and central anatomy and physiology of the balance system and the test measures used to assess the function of this complex system. Topics will include case history and screening measures, as well as test protocols and analysis of results on electronystagmography/videonystagmography, rotational testing, posturography, and vestibular evoked myogenic potentials. Taught Spring Semester.

**AUD 657 Management of Vestibular Disor 2 cr**

This course will focus on peripheral and central disorders of the vestibular system and the interpretation of results on diagnostic tests in disordered patients. Pharmacological and surgical treatments of dizziness will be discussed, as well as rehabilitative techniques to manage the vestibular pathology.

**AUD 658 Advanced Neurophys Measures 3 cr**

This course will address advanced electrophysiological techniques, including ENOG, ALR, ERPs (i.e. P300, etc), and neuroimaging techniques (fMRI and PET) with an emphasis on auditory and cognitive processing, across the lifespan; source localization techniques; instrumentation; stimulus and acquisition parameters; measurement procedures; analysis and interpretation.

**AUD 661 Developmnt-Managemnt Aud Prac 3 cr**

This course will address issues associated with audiology practice management including techniques involved in developing a mission statement and a business plan; working with an accountant; determining type, location, and name of practice; regulation, licensure, and hiring a legal advisor; equipment and service delivery decisions; establishing accounts with suppliers, paying bills and budgeting; third-party reimbursement, Medicaid, and Medicare; hiring and supervision; demographics and marketing; use of outcome data; and professional writing.

**AUD 674 Special Projects in Audiology 3 cr**

Student will be required to develop a variety of projects during their academic training, some of which will be further developed and completed during this course.

**AUD 675 Special Topics in Audiology 1 cr**

Student will identify cases or service delivery issues of clinical or professional interest and present these cases or issues to fellow students, clinical supervisors, and faculty via chat room in a grand rounds format.

**AUD 680 Clinical Methods in Audiology 1-3 cr**

Students will become familiar with and conduct basic audiologic procedures with non-clinical populations by completing various lab assignments. Students will also observe clinical activities in the USA Speech & Hearing Center.

**AUD 681 Clinical Practicum I 1-3 cr**

Discussion of instrumentation, procedures, and approaches to assessment and intervention in audiology.

**Corequisite:** AUD 681L

**AUD 681L Clinical Practicum I-Lab 1-3 cr**

Students will obtain experience administering audiologic assessments and intervention techniques with clinical populations in the USA Speech and Hearing Center or in off-campus clinical practicum sites under direct supervision.

**Corequisite:** AUD 681

**AUD 682 Clinical Practicum II 1-3 cr**

Discussion of instrumentation, procedures, and approaches to assessment and intervention in audiology.

**Corequisite:** AUD 682L

**AUD 682L Clinical Practicum II-Lab 1-3 cr**

Students will obtain experience administering audiologic assessments and intervention techniques with clinical populations in the USA Speech and Hearing Center or in off-campus clinical practicum sites under direct supervision.

**Corequisite:** AUD 682

**AUD 683 Clinical Practicum III 1-3 cr**

Discussion of instrumentation, procedures, and approaches to assessment and intervention in audiology.

**Corequisite:** AUD 683L

**AUD 683L Clinical Practicum III-Lab 1-3 cr**

Students will obtain experience administering audiologic assessments and intervention techniques with clinical populations in the USA Speech and Hearing Center or in off-campus clinical practicum sites under direct supervision.

**Corequisite:** AUD 683

**AUD 684 Clin Externship in Audiology 1-12 cr**

Off-campus opportunity to obtain clinical experience in a full-time setting. In addition, student may be required to identify cases or service delivery issues of clinical or professional interest and present these cases or issues to fellow students, clinical supervisors, and faculty via an online forum in a grand rounds format.

**AUD 699 Thesis 1-3 cr**

Under the advice and guidance of a faculty member, students will identify and complete a research project relevant to the field of Audiology. Requires approval of the Department Chair.

## Basic Concepts of Hum Struct-MD (BCS)

**BCS 160 Basic Concepts of Human Struct 10 cr**

This module uses an integrated curriculum of basic science and clinical material to develop the student's knowledge and ability to describe and diagnose conditions of the skin and the musculoskeletal systems. In order to cultivate this ability in the student, team based and active learning exercises, lectures, anatomy labs, hands on clinical skills labs, independent learning, clinical experiences, and the study of anatomic and radiological images will be utilized. The module will begin with an introduction to dermatology, muscle and connective tissue. This will include illustrative cases that portray these tissues in normal physiology, development and aging, and disease. In this module, students will study the anatomical structures of the thorax, abdomen pelvis, perineum, upper and lower extremity, in both the normal and diseased states. At the end of the module, the students will have learned how to apply their emerging knowledge of normal and abnormal structure, and function of these tissues and systems in order to recognize, and ultimately treat conditions associated with injury and/or illness. Given the nature and frequency of abnormal musculoskeletal conditions within our society, especially in geriatrics and sports, a comprehensive, inter-disciplinary, and holistic approach to the professional care for these individuals will be emphasized.

## Basic Science (BSC) (BSC)

**BSC 407 Teaching Assistantship Anatomy 4 cr**

The objective is for the students to develop specific skills that will allow them to teach more effectively in anatomy.

**BSC 440 Elective: Teaching In Medicine 4 cr**

The objective is for the students to develop specific skills that will allow them to teach more effectively in various clinical and classroom settings (such as work rounds, grand round, morning report) that they will experience during residency.

**BSC 444 Spec Elec - Basic Sciences 4 cr****BSC 480 Reflection on Basic Science 4 cr****BSC 481 Clinical Anatomy 4 cr**

## Baugh Biomedical Library - MD (BBL)

**BBL 099 Medical Information Consult 3 cr**

Provide students literature/information seeking skills for time saving during medical school, residency programs, and life-long learning. Each session will have a discussion period covering previous assignments, lecture, or instructional session on new material, and instructions on new assignments. Lectures and assignments will focus on resources available to students for the effective use of library and internet resources focusing on medical informatics. Resources covered will include OVID databases (MEDLINE, HEALTHSTAR, CINAHL, etc.) PubMed, Science Citation Index, Current Contents, OnLine Harrison's Principles of Internal Medicine, MDConsult, Science Direct, Cochrane Database, and other resources of the Biomedical Library. regarding searching/use of information resources. Tutorials as assigned. Evaluation of web sites, search engines, and basic PC skills, email, basic internet as needed.

**BBL 480 Intro to Medical Informatics 1-4 cr**

This is primarily a ?hands on? course taught in the computer lab at the Baugh Biomedical Library on campus. Essential skills will be taught to each student in a personal and interactive manner. Projects will be done with all applications and reviewed by the instructor. Informal discussion will take place on a daily basis regarding student interest and observations.

## Biochemistry - MD (BCH)

**BCH 121 Medical Biochemistry 9 cr**

This course provides the basic biochemical knowledge essential to the student's subsequent medical education experience. In addition, this course is intended to provide insight, where possible, into the mechanisms of disease at the molecular level. Finally, the course gives an adequate foundation to interpret and evaluate the current medical biochemical literature and stimulate continued education beyond the formal experience.

**BCH 400 Biochemistry Externship 4 cr**

To be determined.

**BCH 410 Research in Biochem & Mol Biol 4 cr**

: To carry out research under the supervision of a sponsoring faculty member. The student will help design experiments, learn and apply established techniques, record and evaluate data and make a final report both written and oral that describes the overall experimental results. The faculty member will assist the student in the project. This rotation is highly recommended for the student considering a career in academic medicine. Research areas include the biochemistry and molecular biology of cancer, lung diseases, and RNA viruses.

**BCH 471 Res-Biochem and Molec Biology 1-4 cr**

To carry out research under the supervision of a sponsoring faculty member. The student will help design experiments, learn and apply established techniques, record and evaluate data and make a final report both written and oral that describes the overall experimental results. The faculty member will assist the student in the project. This rotation is highly recommended for the student considering a career in academic medicine. Research areas include the biochemistry and molecular biology of cancer, malaria, lung diseases, lysosomal storage diseases, aging, RNA viruses, and drug design/synthesis.

**BCH 520 Medical Biochemistry 7 cr**

A basic course in biochemistry with emphasis on the physiochemical properties and intermediary metabolism of proteins, carbohydrates, lipids, and nucleic acids. The regulation and integration of metabolic pathways for energy transfer and biosynthesis of major cellular constituents are presented in detail. Enzymes, vitamins, hormones, biochemical genetics, and nutrition are included in the course material.

**BCH 526 Biochemistry Lit Reports 1 cr**

Students and faculty participate in a supervised reading of current literature and meet once a week to interact in a discussion of the selected article. The goal of this course is to maintain the student's level of information at a "state of the art" in both methods and theory in the discipline and to develop critical skills in reviewing the literature. Student presentation is required to receive credit.

**BCH 527 Dir Studies Biochemistry 1-6 cr**

Students participate in research under the direction of a graduate faculty member. The student may pursue independent research or participate in a literature project. This course should be taken by students who have completed their laboratory rotations, but have not yet submitted a research proposal.

**BCH 590 Sp Top - 1-3 cr**

This course provides in-depth tutorial exposure to specific areas in the discipline. Student and/or faculty presentations followed by group discussions (usually in the Socratic mode), examine the subject matter in an area of current interest either to one student or to a group of students. Credit and title are arranged with an individual faculty member.

**BCH 620 Enzymes and Proteins 3 cr**

The techniques used for the physical and chemical characterization of protein are presented and protein structure-function relationships, enzyme kinetics, and enzyme mechanisms are presented to provide a student with the basic knowledge to understand the role of functional proteins in life processes.

**BCH 622 Molecular Biology 3 cr**

The focus of this course is on cellular processes involving DNA repair, replication and translation. Current concepts regarding the organization and structure of chromosomes, genes and the regulation of gene expression will be discussed. Eukaryotic molecular biology is emphasized, however some eukaryotic and prokaryotic processes are compared and contrasted. This course stresses the methods and experimental design used to delineate and understand cellular information transfer and molecular phenomena.

**BCH 626 Biochemistry Research Seminar 1 cr**

Students and faculty present a research topic for discussion before members of the department. The presentations are usually scheduled on a rotational basis. The student may present research data for critique by the faculty.

**BCH 799 Research-Dissertation 1-6 cr**

Independent research by the student under the sponsorship of the graduate faculty. Students are required to submit a research project description form before enrolling in this course. Progress reports of the work accomplished are required every six months.

## Biology (BLY) (BLY)

**BLY 101 Life Science I 3 cr**

The first of a two-semester sequence designed for the non-major. The basic principles of biological phenomena are emphasized by examples relating to the human. Cell structure and function, energy and organ systems are studied. Credit will not be allowed for both the non-major sequence (BLY 101, BLY 101L and BLY 102 BLY 102L) and the major/minor sequence (BLY 121, BLY 121L and BLY 122, BLY 122L).

**Corequisite:** BLY 101L

**BLY 101L Life Science I Laboratory 1 cr**

Laboratory exercises associated with BLY 101. Together, BLY 101 and BLY 101L count as one laboratory science course, partially fulfilling general education requirements. Credit will not be allowed for both the non-major sequence (BLY 101, BLY 101L and BLY 102 BLY 102L) and the major/minor sequence (BLY 121, BLY 121L and BLY 122, BLY 122L).

**Corequisite:** BLY 101

**BLY 102 Life Science II 3 cr**

A continuation of BLY 101. Organ systems, cell reproduction, plant and animal development, heredity, evolution, and ecology area studied. Credit will not be allowed for both the non-major sequence (BLY 101, BLY 101L and BLY 102 BLY 102L) and the major/minor sequence (BLY 121, BLY 121L and BLY 122, BLY 122L).

**Prerequisite:** BLY 101 (may be taken concurrently) Minimum Grade of D

**Corequisite:** BLY 102L

**BLY 102L Life Science II Lab 1 cr**

Laboratory exercises associated with BLY 102. Together, BLY 102 and 102L count as one laboratory science course, partially fulfilling general education requirements. Credit will not be allowed for both the non-major sequence (BLY 101, BLY 101L and BLY 102 BLY 102L) and the major/minor sequence (BLY 121, BLY 121L and BLY 122, BLY 122L).

**Prerequisite:** BLY 101 (may be taken concurrently) Minimum Grade of D and BLY 102 (may be taken concurrently) Minimum Grade of D

**BLY 121 General Biology I 3 cr**

A study of general biological principles, including the chemical basis of life; cellular biology, including cell structure and metabolism, genetics, microevolution; and a survey of simple organisms, including bacteria, protists and fungi. Core Course. Credit will not be allowed for both the non-major sequence (BLY 101, BLY 101L and BLY 102 BLY 102L) and the major/minor sequence (BLY 121, BLY 121L and BLY 122, BLY 122L).

**Prerequisite:** A02 22 or S02 540 or S12 565 or CH 100 Minimum Grade of D or CH 131 (may be taken concurrently) Minimum Grade of D or BLY 101 Minimum Grade of C or MA 112 (may be taken concurrently) Minimum Grade of D

**Corequisite:** BLY 121L

**BLY 121L General Biology I Lab 1 cr**

Laboratory exercises associated with BLY 121. Together, BLY 121 and BLY 121L count as one laboratory science course, partially fulfilling general education requirements. Credit will not be allowed for both the non-major sequence (BLY 101, BLY 101L and BLY 102 BLY 102L) and the major/minor sequence (BLY 121, BLY 121L and BLY 122, BLY 122L). Fee.

**Prerequisite:** (S02 540 or A02 22 or CH 100 Minimum Grade of D or CH 131 (may be taken concurrently) Minimum Grade of D or BLY 101 Minimum Grade of C or MA 112 (may be taken concurrently) Minimum Grade of D)

**Corequisite:** BLY 121

**BLY 122 General Biology II 3 cr**

A study of plants, major invertebrate phyla, vertebrate morphology, plant and animal physiology, animal behavior, macroevolution and ecology. Core course. Credit will not be allowed for both the non-major sequence (BLY 101, BLY 101L and BLY 102 BLY 102L) and the major/minor sequence (BLY 121, BLY 121L and BLY 122, BLY 122L).

**Prerequisite:** BLY 121 Minimum Grade of D

**Corequisite:** BLY 122L

**BLY 122L General Biology II Laboratory 1 cr**

Laboratory exercises associated with BLY 122. Together, BLY 122 and 122L count as one laboratory science course, partially fulfilling general education requirements. Credit will not be allowed for both the non-major sequence (BLY 101, BLY 101L and BLY 102 BLY 102L) and the major/minor sequence (BLY 121, BLY 121L and BLY 122, BLY 122L). Fee.

**Prerequisite:** BLY 121 Minimum Grade of D

**Corequisite:** BLY 122

**BLY 134 Ocean Science 3 cr**

An introduction to physical, chemical, and biological oceanography.

**BLY 134L Ocean Science Lab 1 cr**

Lab experiences associated with BLY 134.

**Prerequisite:** BLY 134 (may be taken concurrently) Minimum Grade of D

**BLY 205 Intro Environmental Sci 4 cr**

Environmental science, including the fundamentals required to understand how ecosystems work, how environmental modifications affect ecosystems and living things, and how living things affect their environment. Topics to be emphasized include the effects of pollution, habitat modification and other environmental changes, on ecosystems, plants, wildlife, man, outdoor recreation and the future. Public health and medical effects will also be considered. Many topics covered are of special significance to this region: wetlands, the effects of dredging and filling, artificial lake construction, development, agricultural and forestry practices on ecosystems, plants and animals. Requires college biology, or permission of instructor. The course includes lecture and a lab component.

**BLY 207 Biology of Aging 3 cr**

A descriptive review of processes of aging. Emphasis is placed on studying structural and functional changes that could occur with increase in chronological age. Usually taught in the fall, spring and summer terms.

**Prerequisite:** BLY 101 Minimum Grade of D

**BLY 213 Microbiology 3 cr**

A survey of bacteria, fungi, protozoa and viruses with emphasis on host-microbe interactions, immune responses, and control mechanisms.

**Prerequisite:** BLY 101 Minimum Grade of D or BLY 121 Minimum Grade of D

**Cross-Listed:** BMD 210

**BLY 214 Lab Studies Microbiology 1 cr**

A series of laboratory experiments designed to provide practical experiments in basic microbial techniques.

**Prerequisite:** (BLY 213 (may be taken concurrently) Minimum Grade of D or BMD 210 Minimum Grade of D)

**BLY 300 Ecology 3 cr**

Introduction to general concepts of ecology. Major topics will include population growth dynamics, community structure and interactions, ecosystem structure and function, and principles of biodiversity and biogeography. Theoretical and practical issues will be addressed. Core course.

**Prerequisite:** (MA 112 Minimum Grade of D and CH 131 Minimum Grade of D and BLY 121 Minimum Grade of C and BLY 122 Minimum Grade of C)

**BLY 301 Cell Biology 3 cr**

A course designed to integrate cell structure and function: the study of the ultrastructure, organization, physiology, genetics, and other functions of the cell. Core course.

**Prerequisite:** (BLY 121 Minimum Grade of C and BLY 122 Minimum Grade of C and CH 131 Minimum Grade of D) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**BLY 302 Genetics 3 cr**

An introduction to both classical and modern genetic concepts and theory, with an emphasis on problem-solving. Topics covered include Mendelian genetics, molecular genetics, and evolutionary genetics. Core course.

**Prerequisite:** BLY 121 Minimum Grade of C and BLY 122 Minimum Grade of C and CH 131 Minimum Grade of D and BLY 121L Minimum Grade of C and BLY 122L Minimum Grade of C

**BLY 304 Exp. Designs in Biology 3 cr**

Experimental designs in Biology is intended to provide students with basic skills of experimental design and statistical methodology needed in modern biological research. Additionally, students will learn basic statistical software (e.g., Minitab, Ecosim, Resampling Procedures). The use of statistical software will be fully integrated with lecture material to provide a 'holistic' learning experience. Having completed this course, students will have gained a basic foundation in quantitative procedures for analyzing and interpreting biological data. This course requires each student to have a lap-top computer and a copy of Minitab Student v 14, which is provided with the required text.

**Prerequisite:** BLY 121 Minimum Grade of C and BLY 122 Minimum Grade of C and MA 112 Minimum Grade of C

**BLY 305 Introduction to Evolution 3 cr**

Introduction to general concepts of evolution. Major topics will include natural selection, genetic drift, quantitative genetics, phylogenetics, speciation, human evolution, and evolutionary medicine. Theoretical and practical issues will be addressed. Core course.

**Prerequisite:** (MA 112 Minimum Grade of D or CH 131 Minimum Grade of D) and (BLY 121 Minimum Grade of C and BLY 122 Minimum Grade of C)

**BLY 307 Research Methods for STEM Educators 3 cr**

Research Methods (BLY 307) is a three-hour course in the required UTeach South sequence. Content focuses on the teaching and application of the Scientific Method, experimental design, data collection, analysis, and interpretation, as well as scientific communication. It is designed to meet the needs of pre-service STEM education students. Alignment to state content and pedagogical standards will be emphasized.

**Prerequisite:** (EDU 125 Minimum Grade of C) and (EDU 126 Minimum Grade of C)

**BLY 310 Economic Botany - W 3 cr**

This course includes the study of plants in their form and structure by connecting them to their use by humans. Topics include plant anatomy and nomenclature; history of plant use; origins of economically important plants; use of flowers, fruits, stems and leaves for food and other purposes.

**Prerequisite:** (BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 300 Minimum Grade of C and BLY 305 Minimum Grade of C and EH 102 Minimum Grade of C)

**BLY 312 Writing in Biology 3 cr**

An introduction to writing and communication in the life sciences. Topics will include searching the scientific literature, scientific writing style, data presentation, writing lab reports, and preparing scientific presentations.

**Prerequisites:** EH102 or EH105, BLY 300, 301, 302, 305.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (BLY 300 Minimum Grade of C and BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 305 Minimum Grade of C)

**BLY 314 Molecular Microbiology - W 4 cr**

Study of procaryotic and eucaryotic microorganisms and their relationship to their environment. Molecular, genetic and biochemical aspects of each will be emphasized.

**Prerequisite:** EH 102 Minimum Grade of C and CH 131 Minimum Grade of C and BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 321 Genetics of Development 3 cr**

An in-depth laboratory experience to determine the genetic regulation involved in organ development using the *C. elegans* model system.

The research experience gained in this laboratory class is designed to generate novel results to ultimately be shared with the larger scientific community. Emphasis will be place on mastering experimental design and data analysis. Students will work together in laboratory groups to carry out experiments, to discuss progress and conclusions, and review the primary literature relating to the project.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 327 Philosophy of Science 3 cr**

Studies such topics as method and explanation in the sciences; the demarcation between science and pseudoscience; realist and anti-realist views about scientific theories; the logic of scientific change; confirmation; reduction; laws of nature; underdetermination; and society, science, values and also explores the intellectual, social and cultural history of science, mathematics and philosophy. This course is designed to meet needs of students in Philosophy, Biology, and Mathematics and students in pre-service education programs..

**BLY 332 Biology of Algae 4 cr**

A survey of non-vascular plants: algae, fungi, liverworts, and mosses, with emphasis on morphology and taxonomy.

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 333 Biomedical Ethics - W 3 cr**

Ethical analyses of problems and issues in the biomedical and health-related fields. Topics may include genetic research and technology, abortion, health care, experimentation, and death and dying.

**Prerequisite:** EH 102 Minimum Grade of C or EH 105 Minimum Grade of C

**Cross-Listed:** PHL 333

**BLY 342 Experimental Cell Biology-W 2 cr**

Laboratory experience with instrumentation and techniques utilized in modern cell biology research including organellar isolation, enzyme assay, protein analysis, and microscope techniques. Students develop and conduct group projects.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 350 Human Physiology 3 cr**

The function and regulation of the organ systems of the body and physiological integration of the systems to maintain homeostasis. Course content will include neural and hormonal homeostatic control mechanisms, and study of the musculoskeletal, circulatory, respiratory, digestive, urinary, immune, reproductive, and endocrine systems.

**Prerequisite:** (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C) and CH 115 Minimum Grade of C or (CH 131 Minimum Grade of C and CH 131L Minimum Grade of C) and (BLY 121 Minimum Grade of C or BLY 141 Minimum Grade of C) and BLY 121L Minimum Grade of C and (BLY 122 Minimum Grade of C or BLY 142 Minimum Grade of C) and BLY 122L Minimum Grade of C

**BLY 354 General Entomology 4 cr**

Classification and habits of insects, including collection, preservation, and identification of those occurring in south Alabama.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 360 Invertebrate Zoology 4 cr**

Detailed study of the invertebrate phyla, taxonomy, ecology and phylogenetic relationship. Terrestrial, fresh-water, and marine forms are studied.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 365 Comp Vertebrate Anatomy 5 cr**

Anatomy and evolution of the organ systems of the major vertebrate groups. Laboratory includes dissections of dogfish, sharks, and cats. Category C (usually taught in the fall term).

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D)

**BLY 367 Marine Biology 4 cr**

A general survey of marine plants, invertebrates and vertebrates, the communities they form and the physical and chemical factors that influence them. Field trips include marsh, seagrass, and dune habitats. Sampling from research vessels and laboratory exercises will serve to introduce students to the diversity of marine habitats and organisms. Organisms will be identified using dichotomous keys. Participation in overnight field trips is a part of this course. Snorkeling gear is required.

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C) and (CH 115 Minimum Grade of D or CH 131 Minimum Grade of D) and (CH 116 Minimum Grade of D or CH 132 Minimum Grade of D)

**BLY 368 Dolphins and Whales 2 cr**

Classification, anatomy, and ecology of cetaceans and manatees. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 369 Bly/Conserv Marine Turtles 2 cr**

Introductory course providing an overview of the biology and conservation of marine turtles. The course will culminate with a multi-day field trip to sea turtle nesting beaches and foraging grounds in the southeastern U.S. Class also will visit sea turtle research and rehabilitation facilities. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term. Special fees apply and will be posted on the website: [www.disl.org](http://www.disl.org)

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of C or BLY 142 Minimum Grade of C) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 370 Marine Aquaculture 2 cr**

Techniques and issues involved with the commercial culture of marine organisms including nutrition, reproductive biology, production, water quality, processing, marketing, and economics. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 371 Shark and Ray Biology 2 cr**

This course will provide an introduction to the biology of sharks and rays, with special emphasis on regional shark fauna and field techniques. Lectures will be supplemented with discussions of papers from the primary literature to familiarize students with current research; in addition, longline and gillnet sampling will provide students with first hand knowledge of field techniques and local shark identification. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) or (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 372 Coastal Birds of Alabama 2 cr**

An introductory-level, field-based course covering identification, population dynamics and behavior of coastal avian fauna. Field trips will be taken to local coastal ecosystems and island rookeries. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 380 Study Abroad Biology 1-4 cr**

This course is for educational opportunities in foreign countries in any biological science discipline. Offered in May, or Summer Semester. May be repeated when content varies.

**Prerequisite:** (BLY 300 Minimum Grade of C and BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 305 Minimum Grade of C)

**BLY 411 Developmental Biology 3 cr**

A study of the principles that regulate the development of a complex, multicellular from a single cell with a focus on the underlying molecular mechanism and genetic regulation. Topics to be covered will include fertilization, differentiation, cell fate determination, pattern formation, organogenesis and regeneration. Particular emphasis will be placed on the experimental approaches, both historical and contemporary, that led to our current understanding of the development of multicellular organisms.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 414 Expt Bacterial Genomics - W 4 cr**

An integrated lab-lecture course utilizing real-world research experiences to explore the molecular genetics and genomics of bacteria. Students will be directly involved in the design, execution, analysis, and presentation of group research projects determining the function of genes from completed microbial genomes. A basic foundation in microbiology and genetics is required for this course.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C and BLY 314 Minimum Grade of C and EH 101 Minimum Grade of C and EH 102 Minimum Grade of C

**BLY 425 Chemical Ecology - W 3 cr**

This class focuses on chemically mediated interactions between, among, and within organisms in both the aquatic and terrestrial environments. The topics covered include: chemoreception, chemical defense, chemical attraction, and the impact of chemical ecology on humans. This course includes a writing component. Students will gain experience in critical analysis, research development, grant writing, and computer-based presentation.

**Prerequisite:** (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 426 Freshwater Ecology 3 cr**

This course examines four aspects of freshwater ecology; physical and chemical properties of water, biotic communities, links among freshwater systems, and human influence on freshwater ecosystems. Students will be required to submit a collection of local freshwater invertebrates.

**Prerequisite:** (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**Cross-Listed:** BLY 526

**BLY 430 Marine Botany 4 cr**

A general survey of marine algae and vascular and non-vascular plants associated with the marine environment. Distribution, identification, structure, ecology, and reproduction will be considered. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

**Prerequisite:** (BLY 121 Minimum Grade of C or BLY 141 Minimum Grade of C) and (BLY 122 Minimum Grade of C or BLY 142 Minimum Grade of C) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 431 Plant Physiology - W 4 cr**

An integrative study of higher plant functions. This course includes a study of water relations, plant biochemistry, plant development, and plant-environmental interactions.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C and CH 132 Minimum Grade of D

**BLY 433 Evolution of Vascular Plants 4 cr**

A survey of the systematics, taxonomy, and structure of the major groups of vascular plants. Fossil plants (paleobotany) will also be covered where relevant. Many labs are outdoors and focus on plant structure and identification utilizing the rich local flora.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 434 Plant Physiological Ecology 3 cr**

Plant Physiological Ecology is an investigation into the relatively "new" scientific field of physiological ecology (i.e., the study of how plants function in their environment) and is designed to meet the needs of students majoring in biology, ecology and/or various disciplines in plant biology. This course explores plant biology, plant-animal interactions, as well as, principles of ecology and evolution. Category B.

**Prerequisite:** BLY 121 Minimum Grade of C and BLY 122 Minimum Grade of C and BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C and BLY 431 Minimum Grade of C

**Cross-Listed:** BLY 534

**BLY 435 Biology of Fungi 4 cr**

Identification and morphology of fungi with some emphasis on their relation to human affairs. Collection required.

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 436 Animal Physiology - W 4 cr**

This class will take a comparative approach to animal physiology. Comparisons of structural and functional relationships in the body systems of invertebrates and vertebrates, including humans, will be made. A basic foundation in chemistry and cell biology is required for this course. This course incorporates writing and computer components. Students will gain experience in critical analysis, research development and analysis, word processing, computer based statistical and graphical analysis, and in computer based presentation programs.

**Prerequisite:** (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 440 Biochemistry I 3 cr**

Study of the fundamental biochemical concepts; emphasis is placed on protein, carbohydrate, and lipid structure as related to their functional behavior; enzymes kinetics and mechanisms of action; thermodynamic relationships in biochemical systems. Offered only in Fall term. Cross-listed with CH 440.

**Prerequisite:** CH 202 Minimum Grade of D and BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**Cross-Listed:** CH 440

**BLY 441 Biochemistry II 3 cr**

Study of the reaction and regulations of intermediary metabolism; the biochemistry of genetics systems to include regulatory mechanisms and protein synthesis. Offered only in Spring term. Cross-listed with CH 441.

**Prerequisite:** BLY 440 Minimum Grade of D or CH 440 Minimum Grade of D

**Cross-Listed:** CH 441

**BLY 443 Lab Studies Biochemistry 2 cr**

Course familiarizes the student with basic laboratory techniques commonly employed in biochemical research. Offered only in Spring term. Cross-listed with CH 443.

**Prerequisite:** (BLY 440 Minimum Grade of D or CH 440 Minimum Grade of D) and (BLY 441 (may be taken concurrently) Minimum Grade of D or CH 441 (may be taken concurrently) Minimum Grade of D)

**Cross-Listed:** CH 443

**BLY 445 Computational Genetics-W 3 cr**

An ever growing body of online genetic datasets and publically available software makes basic informatic analysis of genetic systems no longer restricted to programmers. Utilizing the principle online resources employed by researchers today, this course will provide advanced undergraduates with a solid foundation in computational biology as well as the competency to independently evaluate emerging resources in the future. Students enrolled in this course will gain real world experience in the application of informatic techniques through participating in an actual collaborative research analysis and through directly contributing to a peer-reviewed manuscript reporting their results. Requires permission of instructor.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 450 Animal Behavior 4 cr**

Course examines animal behavior from a biological and empirical viewpoint, with an emphasis on behavioral adaptations of animals to their environment. Orientation, migration, rhythms, communication, territoriality, social and courtship behaviors will be considered within the context of ecology and evolution.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 451 Marine Vertebrate Zoology 4 cr**

A study of marine vertebrates, with emphasis on fishes; their systematics, zoogeography, and ecology. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

**Prerequisite:** (BLY 121 Minimum Grade of C or BLY 141 Minimum Grade of C) and (BLY 122 Minimum Grade of C or BLY 142 Minimum Grade of C) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 452 Marine Mammals 4 cr**

This is a marine field course designed to engage students in the collection, identification, and preservation of parasites of marine vertebrates and invertebrates. Each student will be required to submit a collection of parasites taken from beach, barrier island, estuarine, and pelagic (10-200km) offshore localities.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 455 Ornithology 4 cr**

Principles of classification, structure, distribution, migration, natural history and adaptations of birds within an ecological context. Field & laboratory identification of birds by habitat, size, form, color, and sound. Some field activities may occur at times other than regularly scheduled laboratory hours.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C and BLY 121 Minimum Grade of C and BLY 121L Minimum Grade of C and BLY 122 Minimum Grade of C and BLY 122L Minimum Grade of C

**BLY 459 General Parasitology 4 cr**

Ecology and evolution of parasites and a survey of all major parasitic groups.

**Prerequisite:** (BLY 121 Minimum Grade of C or BLY 141 Minimum Grade of C) and (BLY 122 Minimum Grade of C or BLY 142 Minimum Grade of C) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 463 Vertebrate Histology 4 cr**

Microscopic anatomy of organ systems, with emphasis on human tissues. Category C (usually taught in the Spring term)

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D)

**BLY 466 Introduction to Neurobiology 3 cr**

Neuroanatomy and neurophysiology of marine invertebrates and vertebrates. Topics include resting and action potentials, synaptic transmission, neurotransmitters, sensory transduction, muscle innervation, sensorimotor transformations, and the neurophysiological basis of behavior. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 468 Coral Reef Ecology 4 cr**

Ecology and evolution of coral reef, seagrass, and mangrove communities. An additional assessment will cover transportation, meals, and lodging for a one-week field trip to Andros Island, Bahamas. Updated information at [www.disl.org](http://www.disl.org). Prerequisites: BLY 121 and 122 and BLY 325 or BLY 325 or BLY 425 or BLY 475. Category D (usually taught in summer session).

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (BLY 325 Minimum Grade of C or BLY 425 Minimum Grade of C or BLY 475 Minimum Grade of C)

**BLY 470 Herpetology 4 cr**

A field course that emphasizes the ecology, evolution, natural history, characteristics, structure, function, geographic distribution, behavior, and systematics of amphibians and reptiles. Course includes structured writing assignments and focuses on good writing skills and forms. Laboratory and field work emphasize identification of specimens by name, habitat, and characteristics. Some field activities will occur at times other than the scheduled laboratory hours.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 471 Mar Invertebrate Zoology 4 cr**

A study of the natural history, systematics, and morphology of marine invertebrates. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

**Prerequisite:** (BLY 121 Minimum Grade of C or BLY 141 Minimum Grade of C) and (BLY 122 Minimum Grade of C or BLY 142 Minimum Grade of C) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 472 Marine Behavioral Ecology 4 cr**

The ecological and evolutionary significance of animal behaviors in the marine environment. Exercises will include analysis of data collected from laboratory and field experiments. Statistics recommended. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 474 Intro to Oceanography 4 cr**

A general introduction to the oceans, with emphasis on chemical, physical, and geological processes and their relation to biological systems. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

**Prerequisite:** (BLY 121 Minimum Grade of C or BLY 141 Minimum Grade of C) and (BLY 122 Minimum Grade of C or BLY 142 Minimum Grade of C) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 475 Marine Ecology 4 cr**

The relationship of marine organisms to their environment. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

**Prerequisite:** (BLY 121 Minimum Grade of C or BLY 141 Minimum Grade of C) and (BLY 122 Minimum Grade of C or BLY 142 Minimum Grade of C) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 478 Coastal Wetlands Ecology 4 cr**

This course will focus on near shore wetland areas and emphasize biogeochemical processes, productivity, biodiversity and ecosystem function, as well as address the issues that threaten and protect these valuable resources.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 483 Field Marine Science 1-4 cr**

Course consists of a 10-day field exercise in the tropical southeastern Gulf of Mexico (Florida Keys) and the temperate north Atlantic. Sites alternate annually. Faculty members with diverse interest accompany the students, participate in pre-trip readings and discussion sessions and evaluate the product developed by each student. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term. Requires Senior or Graduate standing in a major related to Marine Sciences and permission of instructor.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 484 Conservation Biology 3 cr**

The study of preserving biodiversity and sustaining ecosystems using a multidisciplinary approach. Primary emphasis will focus on the development of strategies for preservation and management using scientific principles and theory.

**Prerequisite:** (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 485 Evolutionary Biology 3 cr**

The study of mechanisms and historical patterns of evolutionary change in biological systems ranging from genes to phylogeny.

**Prerequisite:** (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**BLY 490 Special Topics 1-4 cr**

Small interested groups of students will study specialized topics not generally listed in the course offerings. Faculty and visiting professors will offer courses in their areas of specialization. This course may be taken more than once if the topic changes for a total of eight hours. Requires permission of the department.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 494 Directed Studies 1-4 cr**

Course is designed to enable the capable student to pursue independent research under the direction of a member of the faculty. Six hours of credit can be used to satisfy the 37 credit hours for the Biology major. Requires permission of the department chair.

**Prerequisite:** BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C

**BLY 499 Honors Research in Biology-H-W 1-6 cr**

Experience in planning, conducting, and reporting a research project under the direction of the faculty. Requires overall GPA 3.0, Biology GPA 3.5, and permission of the faculty.

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (CH 115 Minimum Grade of D or CH 131 Minimum Grade of D) and (CH 116 Minimum Grade of D or CH 132 Minimum Grade of D)

**BLY 510 Prof in Science 3 cr**

The overall goal for this course to convey expectations and important "survival skills" required to succeed in the competitive world of science. Emphasis is placed on grant writing, publications, tenure and promotion, collegiality, productivity creativity, building a CV, alternative paths, and achieving balance between the professional and private life.

**BLY 511 Developmental Biology 3 cr**

A study of the principles that regulate the development of a complex, multicellular organism from a single cell with a focus on the underlying molecular mechanism and genetic regulation. Topics to be covered will include fertilization, differentiation, cell fate determination, pattern formation, organogenesis, and regeneration. Particular emphasis will be placed on the experimental approaches, both historical and contemporary, that led to our current understanding of the development of multicellular organisms.

**Prerequisite:** (BLY 302 Minimum Grade of D or BLY 311 Minimum Grade of D) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and BLY 363 Minimum Grade of D

**BLY 514 Expt Bact Genomics 4 cr**

An integrated lab-lecture course utilizing real-world research experience to explore the molecular genetics and genomics of bacteria. Students will be directly involved in the design, execution, analysis, and presentation of group research projects determining the function of genes from completed microbial genomes. A basic foundation in microbiology and genetics is required for this course.

**BLY 515 Ecotoxicology 4 cr**

The impact of chemicals as toxic agents on ecosystems. Students will understand types, sources, and effects of environmental toxicants, methods of testing and interpretation, and regulation of environmental toxicants. This material will be presented in the context of ecosystem health rather than human health. This is a core course for MS degree students in the Environmental Toxicology program.

**Prerequisite:** (BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C) and (CH 201 Minimum Grade of C and CH 202 Minimum Grade of C) and (CH 540 Minimum Grade of B and CH 541 Minimum Grade of B)

**BLY 520 Biometry 4 cr**

The application of statistical methodology, both univariate and multivariate techniques, to the solution of biological problems. This course is not designed as a substitute for instruction in statistics, but rather to complement previous course work. The laboratory will involve the use of PC computers to perform procedures on biological data and subsequent interpretation of the results. Prerequisites can be waived at the discretion of the instructor.

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (ST 175 Minimum Grade of D or ST 210 Minimum Grade of D or ST 540 Minimum Grade of C)

**BLY 525 Chemical Ecology 3 cr**

Chemical Ecology focuses on chemically mediated interactions within organisms in both aquatic and terrestrial environments. The topics covered include: chemoreception, chemical defense, chemical attraction, and the impact of chemical ecology on humans. Students will gain experience in critical analysis, research development, grant writing, and computer-based presentation. Requires permission of instructor.

**Prerequisite:** (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C) and (CH 201 Minimum Grade of C or CH 222 Minimum Grade of C)

**BLY 526 Freshwater Ecology 3 cr**

Course examines four aspects of freshwater ecology: physical and chemical properties of water, biotic communities, links among freshwater systems, and human influences on freshwater ecosystems. Students will be required to submit a collection of local freshwater invertebrates. Prerequisite: Ecology (equivalent to BLY 303). This prerequisite may be waived at the discretion of the instructor. Dual listed with BLY 426.

**Prerequisite:** BLY 303 Minimum Grade of C

**Cross-Listed:** BLY 426

**BLY 530 Marine Microbial Ecology 3 cr**

A general survey of the types of microorganisms found in the marine environment. Emphasis will be on the interaction of microorganisms with each other and with their environment. In particular, the role of microorganisms in the carbon cycling and biogeochemical processes will be stressed. Readings from current literature will expose students to the latest techniques and research.

**Cross-Listed:** MAS 530

**BLY 534 Plant Physiological Ecology 3 cr**

This course is an investigation into how plants function in their environment and is designed to meet the needs of students majoring in biology, ecology and/or various disciplines in plant biology. This course explores plant biology, plant-animal interactions, as well as, principles of ecology and evolution.

**Prerequisite:** BLY 121 Minimum Grade of C and BLY 122 Minimum Grade of C and BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C and BLY 303 Minimum Grade of C and BLY 431 Minimum Grade of C

**Cross-Listed:** BLY 434

**BLY 535 Biology of Fungi 4 cr**

Identification and morphology of fungi with some emphasis on their relation to human affairs. Collection required. Credit for both BLY 535 and 435 is not allowed.

**Cross-Listed:** BLY 435

**BLY 536 Advanced Animal Physiology 3 cr**

This class explores animal physiology, aiming to understand how animals work, from individual cells to whole organisms. We will take a comparative approach to understand the fundamental ways in which animals deal with the common challenges. A basic foundation in chemistry, molecular biology, cell biology, and evolutionary biology is required for this course. Students will complete a capstone independent literature review on a topic of their choice in the field of animal physiology.

**Cross-Listed:** BLY 436

**BLY 540 Biochemistry I 3 cr**

Study of the fundamental biochemical concepts; emphasis is placed on protein, carbohydrate, and lipid structure as related to their functional behavior; enzymes kinetics and mechanisms of action; thermodynamic relationships in biochemical systems. Offered only in Fall term. Cross-listed with CH 540.

**Prerequisite:** (CH 201 Minimum Grade of D or CH 222 Minimum Grade of D) and (CH 202 Minimum Grade of D or CH 223 Minimum Grade of D)

**Cross-Listed:** BLY 440

**BLY 541 Biochemistry II 3 cr**

Study of the reaction and regulations of intermediary metabolism; the biochemistry of genetics systems to include regulatory mechanisms and protein synthesis. Offered only in Spring term. Cross-listed with CH 541.

**Prerequisite:** BLY 540 (may be taken concurrently) Minimum Grade of B

**BLY 543 Lab Studies Biochemistry 2 cr**

Course familiarizes the student with basic laboratory techniques commonly employed in biochemical research. Offered only in Spring term. Cross-listed with CH 543.

**Prerequisite:** BLY 440 Minimum Grade of D or BLY 441 Minimum Grade of D or BLY 540 Minimum Grade of B or BLY 541 Minimum Grade of B

**Cross-Listed:** CH 543

**BLY 544 Molecular Biology 3 cr**

BLY 544 is a graduate course that covers the basic mechanisms by which organisms utilize, maintain and duplicate their genetic information. Topics to be covered include: organization of genes, the mechanisms and regulation of transcription, RNA processing and translation, the packaging of DNA as chromatin and its impact on gene expression, DNA replication, recombination and repair, and genomics and proteomics.

**BLY 549 Scientific Writing for Biologists 3 cr**

Writing and communication skills are amongst the most important assets for any biologist and is a broadly transferable skill regardless of career path. This course aims to demystify the writing process and teach the fundamentals of effective scientific writing. Instruction will focus primarily on the process of writing a research prospectus and publishing scientific manuscripts but grant writing will also be addressed.

**BLY 551 Marine Vertebrate Zoology 4 cr**

A study of marine vertebrates with emphasis on fishes; their systematics, zoogeography, and ecology. Students will have an opportunity to assemble a collection of vertebrate species. Course offered only through Marine Environmental Sciences Consortium. Credit for both BLY 551 and BLY 451 is not allowed.

**BLY 566 Introduction to Neurobiology 4 cr**

Neuroanatomy and neurophysiology of marine invertebrates and vertebrates. Topics include resting and action potentials, synaptic transmission, neurotransmitters, sensory transduction, muscle innervation, sensorimotor transformations, and the neurophysiological basis of behavior. Credit for BLY 566 and 466 is not allowed.

**Prerequisite:** ((BLY 121 Minimum Grade of C and BLY 121L Minimum Grade of C) or BLY 141 Minimum Grade of C) and ((BLY 122 Minimum Grade of C and (BLY 122L Minimum Grade of C) or BLY 142 Minimum Grade of C)

**BLY 568 Coral Reef Ecology 4 cr**

Ecology and evolution of coral reef, seagrass, and mangrove communities. An additional assessment will cover transportation, meals, and lodging for a one-week field trip Andros Island, Bahamas. Updated information at [www.disl.org](http://www.disl.org). Prerequisite: BLY 325, Ecology. Credit for BLY 568 and BLY 468 is not allowed.

**Prerequisite:** BLY 325 Minimum Grade of C

**BLY 570 Herpetology 4 cr**

A field course that emphasizes the ecology, evolution, natural history, characteristics, structure, function, geographic distribution, behavior, and systematics of amphibians and reptiles. Course includes structured writing assignments and focuses on good writing skills and forms. Laboratory and field work emphasize identification of specimens by name, habitat, and characteristics. Some field activities will occur at times other than the scheduled laboratory hours. Oral classroom presentations required. Credit for BLY 470 and BLY 570 is not allowed.

**BLY 571 Marine Invertebrate Zoology 4 cr**

A study of the natural history, systematics and morphology of marine invertebrates. Credit for both BLY 571 and BLY 471 is not allowed.

**BLY 572 Marine Behavioral Ecology 4 cr**

The ecological and evolutionary significance of animal behaviors in the marine environment. Exercises will include analysis of data collected from laboratory and field experiments. Statistics recommended. Credit for BLY 572 and BLY 472 is not allowed.

**Prerequisite:** (BLY 122 Minimum Grade of C and BLY 122L Minimum Grade of C) or BLY 142 Minimum Grade of C

**BLY 573 Oceanol Gulf of Mexico 3 cr**

A descriptive study of the oceanology of the Gulf of Mexico, and adjacent waters, including coastal zone, continental shelf, and deep ocean.

**BLY 575 Marine Ecology 4 cr**

Their relationship of marine organisms to their environment. Credit for both BLY 575 and BLY 475 is not allowed.

**BLY 583 Field Marine Science I 1-4 cr**

The Field Marine Science course will consist of an 8 - 12 day field exercise in representative coastal sites. The field exercise is conducted in the term break prior to the term of registration for the course. Faculty members with diverse interests will accompany the students, participate in pre-trip discussions and evaluate the product developed by each student. The course is designed to familiarize students with habitats and research conditions different from those they experience on the Northern Gulf Coast. Field trip locations are selected on the basis of faculty and student interest, economics, and availability of logistical support. Students pay their room and board costs for the field exercise. The course is primarily for graduate students, but advanced undergraduates may enroll with consent of instructor. Both BLY 483/583 and 488/588 may be taken for credit when each is taught in a different environment.

**BLY 585 Evolutionary Biology 3 cr**

The study of mechanisms and historical patterns of evolutionary change in biological systems ranging from genes to phylogeny.

**BLY 589 Marine Plankton 3 cr**

The course familiarizes the student with the taxonomic breadth of phytoplankton, bacterioplankton and zooplankton in estuaries, coastal seas and open oceans. Though the focus is on taxonomic familiarization, basic biology of all major taxa, represented in the plankton will be covered. Students will learn fundamental, as well as "cutting-edge", field, lab, and statistical techniques.

**BLY 590 Special Topics - 1-4 cr**

Small, interested groups of students will study specialized topics not generally listed in the course offerings. Faculty and visiting professors will offer courses in their areas of specialization. This course may be taken more than once if the topic changes for a total of eight hours. Requires permission of the department.

**BLY 592 Seminar 1 cr**

Recent research in areas of special academic interest to students and faculty.

**BLY 594 Directed Studies - 1-4 cr**

Independent research under the direction of a member of the graduate faculty. A maximum of six credits may be used to meet degree requirements. Permission of instructor required.

**BLY 599 Thesis 1-4 cr**

Requires approval of research prospectus by student's graduate committee.

## Biomedical Engineering (BME) (BME)

**BME 467 Intro to Biomedical Eng 3 cr**

Survey of topics and current issues in the field of biomedical engineering. Topics include biomechanics, biomedical instrumentation, biomaterials engineering, biomedical imaging, cellular mechanics, tissue engineering, biomedical design and ethics. A portion of the course is devoted to basic biology concepts and principles. Students will review literature and discuss technical and technological developments relevant to biomedical engineering.

**Prerequisite:** ME 328 (may be taken concurrently) Minimum Grade of C  
**Cross-Listed:** ME 467

**BME 567 Principles of Biomedical Eng 3 cr**

Survey of topics and current issues in the field of biomedical engineering. Topics may include biomechanics, biomedical instrumentation, biomaterials engineering, biomedical imaging, cellular mechanics, tissue engineering, biomedical design and ethics. A portion of the course is devoted to basic biology concepts and principles. Students will review literature and discuss technical and technological developments relevant to biomedical engineering.

**Prerequisite:** MA 507 (may be taken concurrently) Minimum Grade of C  
**Cross-Listed:** ME 567

## Biomedical Sciences (BMD) (BMD)

**BMD 101 Orientation to BMD 1 cr**

An introduction to Biomedical Sciences that will establish an early and continuing working relationship between students and faculty, increase awareness of sciences and scientists and familiarize students with functions, policies and services of the University, College and Department. Taught Fall Semester.

**BMD 102 Lab Skills Bootcamp 0 cr**

Lab Skills Bootcamp is an intense one-week training program to provide first-time experience and practice in basic biomedical laboratory techniques for students who have little to no research or laboratory background. Skills include basic biosafety, calculations, preparing solutions, data interpretation, micropipetting, DNA isolation, and PCR. A minimum cumulative GPA of 3.0 is required.

**BMD 110 Introduction to A & P I 4 cr**

An introduction to the structure and function of the human body with an emphasis on anatomy. This course surveys anatomical terminology, basic chemistry, cell structure/function, tissues, skin skeleton, joints, muscles, and central nervous system.

**BMD 111 Introduction to A & P II 4 cr**

Topics include, peripheral/autonomic nervous system, endocrinology, cardiovascular system, blood, respiration, digestion, metabolism/nutrition, urinary system, and reproduction.

**BMD 200 Career Planning 1 cr**

Clinical Observations (Medicine, Dentistry, Optometry and Veterinary Medicine). This course gives the student clinical exposure to various health-care services. It is designed to help students make informed decisions when selecting a career in the health professions. A written report on the clinical experience or scenario dealing with "medical ethics" is required. May be repeated for a maximum of six hours' credit. Permission of the Director of Health Pre-Professional Program is required.  
**Prerequisite:** CH 131 Minimum Grade of D and BLY 121 Minimum Grade of D

**BMD 201 Seminars in Biomedical Science 1 cr**

This course introduces students to contemporary biomedical research and career possibilities in the biomedical sciences. Students will use the resources of the Biomedical Library to perform a literature search.

**BMD 210 Microbiology in Healthcare 3 cr**

This course introduces concepts of human host-infectious microbe interactions that result in disease. Microorganisms examined include viruses, parasites, fungi, mycobacteria, and bacteria. Included topics are genetics, taxonomy, microbial metabolism, virulence factors, host defense/microbe evasion mechanisms, epidemiology, antimicrobial chemotherapy/resistance, merging/reemerging infectious diseases, and diagnostic criteria. Emphasis will be placed on the microbial infections of different body systems.

**Prerequisite:** BLY 101 Minimum Grade of C or BLY 121 Minimum Grade of C or CH 101 Minimum Grade of C or CH 131 Minimum Grade of C

**BMD 210L Microbiology in Healthcare Lab 1 cr**

Laboratory experience includes introduction to fundamental microbial techniques, including differential staining, biochemical identification techniques, and antimicrobial susceptibility testing. Patient case studies will be used to supplement learning experience.

**Prerequisite:** (BLY 101 Minimum Grade of C or BLY 121 Minimum Grade of C or CH 101 Minimum Grade of C or CH 131 Minimum Grade of C)

**BMD 212 Introduction to Food Science 3 cr**

This course is an introduction to digestion, absorption, transportation, and utilization of nutrients. It will discuss the integration of basic chemical, physical, microbiological and nutritional properties and components of food and their relationship to a healthy lifestyle. Lab exercises are completed in which students prepare foods and observe the chemical and physical properties that affect the product.

**Corequisite:** BMD 212L

**BMD 212L Intro to Food Science Lab 1 cr**

Laboratory experience includes an introduction to digestion, absorption, transportation, and utilization of nutrients. Lab exercises are completed in which students prepare foods and observe the chemical and physical properties that affect the product.

**Corequisite:** BMD 212

**BMD 251 Human Anatomy & Physiology I 4 cr**

This is the first of a two-course sequence that covers basic human anatomy and physiology, including the study of the structure and function of various body systems. Included is a study of basic principles of organism homeostasis, biochemical makeup, a study of cells and tissue, cellular metabolism, joints, the integumentary, and skeletal systems, muscular and nervous systems, and the senses. Laboratory experiences are provided through demonstration and interactive (virtual) laboratories.

**Prerequisite:** BLY 101 Minimum Grade of C or BLY 121 Minimum Grade of C or CH 100 Minimum Grade of C or CH 131 Minimum Grade of C

**Cross-Listed:** BMD 114

**BMD 252 Human Anatomy & Physiology II 4 cr**

A continuation of BMD 251. Topics include nervous, cardiovascular, lymphatic, immune, respiratory, digestive, and urinary systems. Additional topics may include blood, metabolism, immunology and reproduction. Laboratory experience is provided through demonstration and interactive (virtual) laboratories.

**Prerequisite:** BMD 251 Minimum Grade of C

**Cross-Listed:** BMD 115

**BMD 290 Sp Top - H - 1-3 cr**

Topics of current health interest.

**BMD 311 Human Anatomy 3 cr**

A course in human gross and microscopic anatomy in a systematic approach, with an emphasis on structure-function relationships at the cell, tissue and organ level. The topics include anatomy of integumentary, musculoskeletal, nervous, cardio-vascular, lymphatic, respiratory, digestive, urinary and reproductive systems. This course is lecture-based with no lab component.

**Prerequisite:** BLY 121 Minimum Grade of D

**BMD 321 Biochemistry I-Molecular Biol 3 cr**

The course covers different aspects of molecular biology including protein structure and function, carbohydrate, lipids, DNA replication, transcription and translation and applications to medical problems (i.e., forensic medicine, diagnosis of genetic diseases, etc).

**Prerequisite:** CH 201 Minimum Grade of D

**BMD 322 Biochemistry II-Metabolism 3 cr**

The course discusses the chemical basis of metabolism including the conversion of nutrients from digestion to either molecules of biological relevance or to energy. Genetic diseases affecting these pathways are described and discussed.

**Prerequisite:** (BMD 321 Minimum Grade of C or BLY 440 Minimum Grade of C or CH 440 Minimum Grade of C) and CH 201 Minimum Grade of D

**BMD 323 Biochemistry Laboratory 2 cr**

This laboratory is designed to provide hands-on experience on several biochemical techniques including cell fractionation, chromatography, DNA isolation, electrophoresis, determination of enzyme activity, etc.

**Prerequisite:** BMD 321 Minimum Grade of C

**BMD 331 Biotechnology Skills I 4 cr**

This course is designed to train students in fundamental biotechnology laboratory skills and applying the scientific method to create, test, and interpret new hypotheses. Students will collaborate with peers and faculty to generate publishable data, and present their findings in both written and oral form.

**Prerequisite:** BMD 323 Minimum Grade of C

**BMD 334 Human Physiology I 3 cr**

The objectives of this course are to study human physiology with emphasis on cellular physiology (cell structure, metabolism, and transport) and the endocrine and nervous systems and skeletal muscle. This course is the first of a 2 course sequence.

**Prerequisite:** BLY 121 Minimum Grade of C and CH 131 Minimum Grade of C and CH 132 Minimum Grade of C

**BMD 335 Human Physiology II 3 cr**

Study of human physiology with emphasis on the basic principles of organ system physiology. The course emphasizes muscle, cardiovascular, renal, respiratory, digestive, and reproductive physiology and an introduction to immunology. This is the second course in a 2 course sequence.

**Prerequisite:** BMD 334 Minimum Grade of C

**BMD 336 Physiology Lab - W 2 cr**

This laboratory is designed to provide students with hands-on laboratory experience in physiology, with emphasis on the musculoskeletal, cardiovascular, respiratory and nervous systems. Limited to BMD majors unless by special permission. Special fee.

**Prerequisite:** (BMD 334 Minimum Grade of C and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C))

**Corequisite:** BMD 335

**BMD 350 Human Genetics and Genomics 3 cr**

This course presents the principles and current information about classical, molecular, and population genetics. It gives an understanding of DNA, gene, gene function and regulation, genome, and the mechanisms of Mendelian and non-Mendelian inheritance. The focus is on human genetics by understanding the clinical applications of genetics and genomics in human health and disease, with special emphasis on chromosomal abnormalities, gene mutations, cancer genetics, and gene therapy.

**Prerequisite:** BMD 321 Minimum Grade of C or BLY 301 Minimum Grade of C or BLY 440 Minimum Grade of C

**BMD 351 Global Health-W 3 cr**

This course introduces students to the basic principles of global public health that are used to improve population health at all levels. Students will get an overview of the determinants of health and how health status is measured. Students will also review the burden of disease, who is most affected by different disease burdens, risk factors, and key measures to address the burden of disease in cost-effective, doable, sustainable, and fair ways. Special attention will be paid throughout the course to health systems issues. The course will cover key concepts and frameworks but be practical in orientation. The course will be global in coverage but with a focus on low- and middle-income countries, the health of the poor and health disparities. Particular attention will be paid throughout the course to the linkages between health and development.

**BMD 390 Sp Top - 1-6 cr**

Topics of current health interest.

**BMD 401 Immunology 3 cr**

This course presents the basic concepts of immunochemistry, immunobiology and host immune responses to disease. Antigens, antibodies, cells and structures of the immune system will be discussed as well as their roles in the processes of immunity, allergies, transplantation, and diseases.

**Prerequisite:** BMD 321 Minimum Grade of C

**BMD 402 Medical Microbiology 4 cr**

This course presents the concepts of pathogenicity and virulence as they relate to disease causing bacteria, mycobacteria, fungi, protozoans, and viruses. Mechanisms of pathogenicity, host interactions, epidemiology and diagnosis will be emphasized. General concepts of microbial physiology, taxonomy, genetics, host immune response, and antimicrobial therapy are also presented. The laboratory portion of the course will provide hands-on experience in the handling and identification of each microbe class. Special fee.

**Prerequisite:** (BMD 321 (may be taken concurrently) Minimum Grade of C or BLY 440 Minimum Grade of C or CH 440 Minimum Grade of C)

**BMD 403 Molecular Basis of Cancer 3 cr**

This course will focus on the biological and molecular features of oncogenesis and clinical cancer, with specific attention given to the molecular events underlying carcinogenesis, metastasis, and angiogenesis. Recent therapeutic advances and their implications for the field will be explored through reading of current scientific literature. Case study learning is integrated into the course to help students understand the societal implications of cancer. Credit cannot be received for BMD 403 and BMD 503.

**Prerequisite:** BMD 321 Minimum Grade of C or BLY 301 Minimum Grade of C or BLY 302 Minimum Grade of C

**Cross-Listed:** BMD 503

**BMD 404 Neurobiology of Trauma and Recovery 3 cr**

The objective of this course is to take the student to a greater level of understanding of the neurophysiology of the mind-body interaction and how, after trauma, this same mind-body interaction holds the potential for recovery, through a process of neurobiological restoration.

**Prerequisite:** (BLY 101 Minimum Grade of D and BLY 102 Minimum Grade of D) or (BLY 121 Minimum Grade of D and BLY 122 Minimum Grade of D)

**BMD 410 Pathophysiology 3 cr**

A systematic study of disease processes involving relationships between pathophysiological changes and clinical manifestations.

**Prerequisite:** BMD 321 Minimum Grade of C

**BMD 411 Women's Health 3 cr**

This course is an introduction to the medical, research, and public health issues surrounding women's health. Female anatomy and physiology, pregnancy and childbirth, and diseases disproportionately affecting women will be presented. Historical and current social and economic perspectives on women's roles in healthcare, science, and society will be discussed.

**Prerequisite:** BLY 121 Minimum Grade of D

**BMD 415 Microscopic Anatomy 4 cr**

A course in (human) microscopic anatomy with laboratory emphasizing recognition and utilizing traditional histologic techniques to process tissue for microscopic examination. Taught Fall Semester.

**Prerequisite:** BMD 311 Minimum Grade of D

**BMD 420 Pharmacology 3 cr**

An introduction to pharmacological concepts and effects and uses of major drug classes. Drug design, pharmacodynamics (receptors, mechanisms, dose-response) and pharmacokinetics (time action) are discussed in general (principles), and in particular, for selected classes of drugs. Credit cannot be received for BMD 420 and BMD 520.

**Prerequisite:** (BMD 321 Minimum Grade of C or BLY 440 Minimum Grade of C or CH 440 Minimum Grade of C)

**Cross-Listed:** BMD 520

**BMD 430 Neurosciences 4 cr**

A study of neuroscience which integrates neurochemistry, neuroanatomy, and neurophysiology, emphasizing cellular neurobiology, neural systems, and the neurobiology of behavior. Course includes laboratory experience. Credit cannot be received for BMD 430 and BMD 530.

**Prerequisite:** BMD 311 Minimum Grade of C and BMD 334 Minimum Grade of C

**Cross-Listed:** BMD 530

**BMD 434 Human Physiology 6 cr**

A study of human physiology from cells to systems. A strong foundation in biology and general chemistry is required. Special permission from instructor required. Prerequisites: BLY 121 and 122, CH 131 and 132.

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (CH 115 Minimum Grade of D or CH 131 Minimum Grade of D) and (CH 116 Minimum Grade of D or CH 132 Minimum Grade of D)

**Cross-Listed:** BMD 534

**BMD 441 Epidemiology 3 cr**

This course will cover a wide variety of topics along with providing students in-field examples of the use of epidemiology and statistics for public and global health. The goal is to become familiar with basic statistical concepts, epidemiologic terminology, outcome measures, and study designs; to appreciate application of epidemiology to subfields (e.g., infectious diseases, reproductive health, genetics); and to apply epidemiologic methods to current public health issues.

**Prerequisite:** (ST 210 Minimum Grade of D or ST 305 Minimum Grade of D)

**BMD 450 Introduction to Research 2 cr**

The purpose of this course is to relay the relevance of biomedical research to all medical practices. First, students will learn how to systematically read, analyze, and present primary biomedical science literature. Second, students will learn how to design a new research project. Written abstracts and oral classroom presentations are required.

**Prerequisite:** BMD 321 Minimum Grade of C

**BMD 451 Biotechnology Skills II 4 cr**

Students will learn the biological principles of genome editing and its applications in biotechnology. Emphasis will be on CRISPR/Cas technology in prokaryotic and eukaryotic biological systems. Students will perform CRISPR/Cas9 gene editing and collaborate with peers and faculty to generate a knock-out cell line.

**Prerequisite:** (BMD 331 Minimum Grade of C)

**BMD 490 Special Topics 1-6 cr****BMD 493 Ethical Issues in Health - W 3 cr**

This course will provide an open forum for discussion of current controversial issues in biomedical sciences. The topics will include research integrity, discussions on the impact of medical advances in society as well as issues of historical relevance.

**Prerequisite:** (BLY 121 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**BMD 494 Directed Research Studies 1-3 cr**

The student will perform a biomedical research project under the direction of a faculty mentor. This will include literature searches and presenting the project in a written format. Instructor Permission Required. Credit cannot be received for BMD 494 and BMD 594.

**Prerequisite:** BMD 321 Minimum Grade of C

**Cross-Listed:** BMD 594

**BMD 499 Honors Research Thesis - W - H 1-6 cr**

Literature survey and laboratory research experience under the direction of the faculty. Instructor permission required.

**Prerequisite:** BMD 311 Minimum Grade of C and BMD 322 Minimum Grade of C and BMD 323 Minimum Grade of C and BMD 335 Minimum Grade of C and BMD 336 Minimum Grade of C

**BMD 500 Graduate Seminar 2 cr**

Professional growth through in-depth experiences in the presentation of problems and formal papers, with emphasis on guided discussions and research criticism. A different topic of current health interest will be selected every semester for in-depth coverage and discussion. Various aspects of the selected topic will be presented by both faculty and students. Each presentation will focus on a single paper from the current biomedical literature.

**BMD 501 Immunology 3 cr**

This course presents the basic concepts of immunochemistry, immunobiology, and host immune responses to disease, antigens, antibodies, cells and structures of the immune system will be discussed as well as their roles in the process of immunity, allergies, transplantation and diseases. A term paper is required.

**BMD 502 Medical Microbiology 4 cr**

This course presents the concepts of pathogenicity and virulence as they relate to disease causing bacteria, mycobacteria, fungi, protozoans, and viruses. Mechanisms of pathogenicity, host interactions, epidemiology and diagnosis will be emphasized. General concepts of microbial physiology, taxonomy, genetics, host immune response, and antimicrobial therapy are also presented. The laboratory portion of the course will provide hands-on experience in the handling and identification of each microbe class. A term paper is required. Credit cannot be received for both BMD402 and BMD502

**Cross-Listed:** BMD 402

**BMD 503 Molecular Basis of Cancer 3 cr**

This course will be a discussion of the biological and molecular features of oncogenesis and clinical cancer focusing on the specific molecular events underlying carcinogenesis, metastasis, and angiogenesis. Case study learning will be integrated into the course to engage students in understanding the societal implications of cancer. A term paper is required. Credit cannot be received for both BMD 403 and BMD 503.

**Cross-Listed:** BMD 403

**BMD 507 Advanced Physiology 4 cr**

The foundation of the biomedical sciences in physiology - the study of the function of the human body. This course will cover advanced concepts in body function from the molecular, cellular, and organ levels. In addition, there will be a weekly focus on current literature reports that coordinate with recent lecture topics.

**BMD 508 Human Gross Anatomy 4 cr**

This is a course in gross anatomy of human body systems utilizing human cadavers and prosected specimens. Emphasis is placed on the relationships between structure and function. The lecture component of the course will be presented through live in person lectures and recorded video lectures on selected topics. The laboratory component will consist of dissection of human cadaver. Prosected material, skeleton models and diagnostic imaging will be introduced for each area of dissection.

**BMD 511 Women's Health 3 cr**

This course is an introduction to the medical, research, and public health issues surrounding women's health. Female anatomy and physiology, pregnancy and childbirth, and diseases disproportionately affecting women will be presented. Historical and current social and economic perspectives on women's roles in healthcare, science, and society will be discussed.

**Prerequisite:** BLY 121 Minimum Grade of D

**BMD 520 Pharmacology 3 cr**

This course will help students master the practical competencies of basic pharmacology. It will focus on the pharmacology of drugs including their classification and origin, pharmacokinetics, mechanism of action, indications, contraindications, adverse and side effects, drug interactions, and use in special patient populations. You will learn how drugs affect different biological systems, how the body responds to those drugs, and why one drug does not fit all. It is the responsibility of the student to go over the biochemistry and physiology concepts learned in previous courses to better understand this course.

**Cross-Listed:** BMD 420

**BMD 530 Neurosciences 4 cr**

A study of neuroscience which integrates neurochemistry, neuroanatomy, and neurophysiology, emphasizing cellular neurobiology, neural systems, and the neurobiology of behavior. Course includes laboratory experience. A term paper is required. Credit cannot be received for BMD 430 and BMD 530.

**Cross-Listed:** BMD 430

**BMD 534 Human Physiology 6 cr**

A study of human physiology from cells to systems. A strong foundation in cell biology and general chemistry is required. This course is restricted to pharmacy students or special permission from the instructor.

Prerequisites: BLY 121, BLY 122, CH 131, CH 132.

**Prerequisite:** (BLY 121 Minimum Grade of D or BLY 141 Minimum Grade of D) and (BLY 122 Minimum Grade of D or BLY 142 Minimum Grade of D) and (CH 115 Minimum Grade of D or CH 131 Minimum Grade of D) and (CH 116 Minimum Grade of D or CH 132 Minimum Grade of D)

**Corequisite:** BMD 536

**BMD 536 Physiology Lab 1 cr**

This laboratory is designed to provide hands-on laboratory experiments to accompany the lecture material in BMD 534. This course is restricted to pharmacy students or special permission from the instructor.

Corequisite: BMD 534.

**Corequisite:** BMD 534

**BMD 590 Special Topics 1-3 cr**

This course provides in-depth study on current topics in biomedical sciences. Permission of Graduate Coordinator or Department Chair required.

**Cross-Listed:** BMD 490

**BMD 594 Directed Studies 1-3 cr**

With the guidance of a faculty mentor, students will complete an independent research project (quantitative or qualitative) that will include a complete literature search, hypothesis development and testing through either laboratory experiments or meta-analysis, and final written report and analysis. Approval by the mentor and/or Graduate Director is required.

**Cross-Listed:** BMD 494

## Biostatistics in Medicine - MD (BIM)

**BIM 103 Biostatistics in Medicine 1 cr**

This module will introduce students to the basic concepts of biostatistics that later will be reinforced in other modules. Throughout the module, students will engage in lectures, active learning sessions, and independent study.

## Business (BUS) (BUS)

**BUS 101 Prof Experience I 1 cr**

An introduction to career success tools including: personality and career interest inventories, steps to succeed basic resume preparation, business ethics, personal branding, university and community involvement and other career preparation activities. This course is designed for students in their first and second semester within the MCOB.

**Prerequisite:** EH 101 (may be taken concurrently) Minimum Grade of C or EH 102 (may be taken concurrently) Minimum Grade of C

**BUS 150 Intro to Business and Mgt 3 cr**

A survey of the field of business, including profit-seeking firms, not-for-profit organizations, and new businesses created by entrepreneurs. Emphasis on the business environment, organization and management, current economic and international issues, and career opportunities. Societal and ethical issues are also examined. Open to University of South Alabama freshmen only.

**Prerequisite:** EH 101 (may be taken concurrently) Minimum Grade of C or EH 102 (may be taken concurrently) Minimum Grade of C

**BUS 201 Professional Experience II 1 cr**

Continued introduction to Career success tools including: resume building activities, cover letter and references development, career for a day shadowing, speed branding, dress for success, networking, career fair tools for success, university and community involvement and other career preparation activities. Prerequisite: C or better in BUS 101, Sophomore standing.

**Prerequisite:** BUS 101 Minimum Grade of C

**BUS 245 Data Analytics I 3 cr**

An introduction to data analytics in business that includes analysis to make data driven business decisions. This course utilizes statistical applications in business problems solving using descriptive statistics, probability theory, sampling distributions, methods of estimation, and tests of hypotheses. The course introduces students to basic predictive business modeling, and the communication of analytical results.

**Prerequisite:** UTM 75 or MMT 080 or A02 23 or MA 112 Minimum Grade of D or MA 113 Minimum Grade of D or MA 115 Minimum Grade of D or MA 120 Minimum Grade of D or MA 121 Minimum Grade of D or MA 125 Minimum Grade of D or MA 126 Minimum Grade of D or MA 131 Minimum Grade of D or MA 132 Minimum Grade of D or MA 171 Minimum Grade of D or MA 172 Minimum Grade of D or MA 287 Minimum Grade of D

**BUS 255 Data Analytics II 3 cr**

A second course in quantitative data analytics in business decision making utilizing methods of analysis including statistical inference, predictive, modeling, forecasting, correlation and regression analysis. It further develops fundamental knowledge and skills for making data driven business decisions including the use of computer applications for problem solving. This course relies heavily on project based learning to provide students with experience of solving data based business problems.

**Prerequisite:** (BUS 245 Minimum Grade of C or ST 175 Minimum Grade of D or ST 210 Minimum Grade of D) and (UTM 75 or (MA 112 Minimum Grade of D or MA 171 Minimum Grade of D) or (MA 113 Minimum Grade of D or MA 172 Minimum Grade of D) or (MA 115 Minimum Grade of D or MA 121 Minimum Grade of D) or (MA 120 Minimum Grade of D or MA 287 Minimum Grade of D) or (MA 125 Minimum Grade of D or MA 132 Minimum Grade of D) or (MA 126 Minimum Grade of D or MA 233 Minimum Grade of D))

**BUS 265 Legal Environ of Business I 3 cr**

A study of the global legal environment in which contemporary American business functions, including a review of legal thought and ethical considerations and the foundations and impacts of governmental regulation in areas such as labor and employment, environmental concerns, consumer protection, and antitrust. Contemporary issues, domestic and international concepts and institutions, and social forces that shape the legal environment are emphasized. Requires sophomore standing

**BUS 301 Professional Experience III 1 cr**

Career success tools including: personal professional strategic plan development, mock interviewing, dining etiquette, personal and professional mentoring, job search, application, and acceptance, job search ethics, creating a career plan, university and community involvement and other career preparation activities. Prerequisite: C or better in BUS 201, Junior standing.

**Prerequisite:** BUS 201 Minimum Grade of C

**BUS 302 Professional Preparation 3 cr**

Career success tools including personal professional strategic plan development, interviewing, personal and professional mentoring, job search, application, creating a career plan, university and community involvement, and other career preparation activities. Prerequisite: Junior transfer standing. Business students only.

**BUS 305 Data Analytics III 3 cr**

A course in quantitative data analytics in business decision making utilizing methods of analysis including linear programming, network optimization, binary integer programming, nonlinear optimization, decision analysis, and deep learning. It further develops fundamental knowledge and skills for making data driven business decisions including the use of computer applications for problem solving. This course relies heavily on project based learning to provide students with the experience of solving data based business problems.

**Prerequisite:** BUS 255 Minimum Grade of C and CIS 250 Minimum Grade of D

**BUS 430 Business Data Visualization: Concepts and Applications 3 cr**

The course provides an overview of the purposes, methods, and techniques of data visualization, that includes planning, data gathering, data validation, data analysis, and visual presentation. Additionally, the course covers data mining, data storytelling, and the use of data to support decision-making.

**Prerequisite:** BUS 305 Minimum Grade of C

**BUS 440 Bus in Reg and Emerg Markets-W 3 cr**

A comprehensive analysis of the issues in starting and maintaining business in emerging and developing markets, building on data and research skills acquired in foundational international business courses.

**Prerequisite:** MKT 310 Minimum Grade of D and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (ECO 330 Minimum Grade of D or ECO 363 Minimum Grade of D or FIN 332 Minimum Grade of D or MGT 334 Minimum Grade of D or MGT 336 Minimum Grade of D)

**BUS 490 Special Topics 3 cr**

Designed to provide senior students an opportunity to study selected topics of particular interest. A student may count no more than six hours of Special Topics in the concentration. Prerequisite: Approval of Department Chair.

**BUS 496 MCOB Honors Sr Project I - H 3 cr**

Applied business project and paper prepared under the direction of a project advisor plus two other persons selected by the advisor in consultation with the student. The student must have developed a proposal for the project and paper in consultation with the advisor and received permission from the committee to proceed. In addition, the student must be entering his or her senior year and be a major in the Mitchell College of Business. The project proposal must be formulated no later than the end of the first semester of the student's senior year and the project must be completed by the student's graduation date. The student must have maintained his or her standing in the university honors program to be eligible to enroll in this course in his or her last full semester in school. The course may be counted in one of two ways: 1) as an additional course not counting towards the business degree, or 2) in special cases, as a major or business elective, to be decided by the committee.

**Prerequisite:** (HON 399 Minimum Grade of D or HON 301 Minimum Grade of D) and BUS 305 Minimum Grade of D and (FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D) and (MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D) and (MGT 305 Minimum Grade of D or MGT 324 Minimum Grade of D) and (MGT 310 Minimum Grade of D or MGT 322 Minimum Grade of D or MGT 422 Minimum Grade of D) and (MGT 325 Minimum Grade of D or MGT 396 Minimum Grade of D) and (MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D)

**BUS 497 MCOB Honors Sr Project II - H 3 cr**

Applied business project and paper prepared under the direction of a project advisor plus two other persons selected by the advisor in consultation with the student. The student must have developed a proposal for the project and paper in consultation with the advisor and received permission from the committee to proceed. In addition, the student must be entering his or her senior year and be a major in the Mitchell College of Business. The project proposal must be formulated no later than the end of the first semester of the student's senior year and the project must be completed by the student's graduation date. The student must have maintained his or her standing in the university honors program to be eligible to enroll in this course. The student will formally enroll in the course in his or her last full semester in school. The course may be counted in one or two ways: 1) as an additional course not counting towards the business degree, or 2) in special cases, as a major or business elective, to be decided by the committee. Requires completion of the business core with the exception of MGT 485.

**Prerequisite:** BUS 496 Minimum Grade of C

**BUS 498 Mitchell Scholars Sr Project 3 cr**

Applied business project and presentation prepared under the direction of the instructor in consultation with the student. This course will have irregular meetings scheduled by the instructor and will have both a classroom component and a project component. The student must have maintained his/her standing in the Mitchell Scholars program and be a senior to be eligible to enroll in this course. This class will be counted in one of three ways: 1) as a business elective, 2) as an additional course not counting towards the business degree; or 3) in special cases, as a major elective to be decided by the major department's faculty. Requires completion of the business core with the exception of MGT 485 and approval of Associate Dean.

**Prerequisite:** MCOB 10 and BUS 305 Minimum Grade of D and FIN 315 Minimum Grade of D and MGT 300 Minimum Grade of D and MGT 305 Minimum Grade of D and MGT 310 Minimum Grade of D and MGT 325 Minimum Grade of D and MKT 320 Minimum Grade of D

**BUS 555 Study Abroad 3-6 cr**

Examines issues in business administration in an international setting at the graduate level. Specific topics selected from the fields of accounting, economics, finance, information systems, management or marketing depending on the instructor's area of expertise. Part or all of the course will be conducted outside the United States. Prerequisite: Permission to enroll in a relevant Mitchell College of Business study abroad program.

**BUS 601 Sem in Org. Behavior 3 cr**

This seminar provides an introduction to established theories and emerging trends in the field of organizational behavior. The course explores the thoughts, emotions, and behaviors of individuals within the context of work, teams, organizations and society. The emphasis is an organizational theory and development.

**BUS 614 Sem in Int'l Bus 3 cr**

This course provides students with exposure to management concepts and theories that form the basis of literature separate from other seminars in the doctoral program. Given that cultural, law and politics shape the different business environments around the world, it is unsurprising that different management concepts and theories are found in other places as well. This seminar introduces doctoral students to those elements of the international business environment that have an impact on management theory and practice on other business environments.

**BUS 622 Multivar Analysis 3 cr**

The course is designed to broaden and enrich student's knowledge and understanding of statistical methodology as it pertains to the study of multivariate techniques used in behavioral research.

**BUS 628 Regress Analysis 3 cr**

A study of applications of regression analysis used in business research. Topics include: a review of basic regression concepts and applications, multiple regression, residual analysis, model building, regression limitations and assumptions, time series modeling and forecasting, and case studies using regression techniques.

**BUS 630 Struct Equ Mod 3 cr**

The course provides students with a functional understanding of the path analysis theory and procedures of structural equation modeling. Students will learn to specify, estimate, and evaluate models using AMOS software.

**BUS 700 Fund of Research 3 cr**

This course provides students with the tools and perspective necessary to succeed in the DBA program. Readings are drawn from several sources and provide participants with a better understanding of the way to approach their work.

**BUS 702 Applied Stat and Reg 3 cr**

This course provides an examination of statistical concepts used for business research. Topics include: fundamentals of probability, sampling, statistical estimation, test of hypotheses, analysis of variance, chi-square analysis and regression analysis. Emphasis is placed on the use of statistical techniques for business research applications.

**BUS 704 Multivariate Analysis 3 cr**

The course is designed to broaden and enrich a student's knowledge and understanding of statistical methodology as it pertains to the study of multivariate techniques used in behavioral research.

**BUS 705 Seminars in Business Analytics 3 cr**

This course introduces the foundations of Data Science and Business Analytics with focus on research design and data analytic methods in Accounting, Economics, Finance, Management, Marketing, and Real Estate.

**BUS 706 Research Design and Methods 3 cr**

This course focuses on the general concepts related to conducting academic research and the various research methods commonly used in business research, including quantitative and qualitative analysis.

**BUS 708 Adv Stats & App Res 6 cr****BUS 710 Struct Equation Modeling 3 cr**

This course provides students with a functional understanding of path analysis theory and procedures of structural equation modeling. Students will learn to specify, estimate, and evaluate models using software packages designed for this purpose.

**BUS 751 Python for Business Analytics 3 cr**

Python programming for Business Analytics, with applications and examples from statistics, finance economics, marketing, management, accounting, and other business-related disciplines.

**BUS 753 Applied Business Analytics I 3 cr**

This course covers a variety of concepts and applied analytical methods useful in business research and analytics, such as big data, data measurement and preparation, multi-source modeling files, data analysis and machine learning.

**BUS 754 Seminars Business Analytics II 3 cr**

This course focuses on applied analytics. Students will complete the continuum of analytics including data source identification, data prep, descriptive and exploratory analytics, confirmatory and inferential analytics.

**BUS 757 Computational Business Stats 3 cr**

This course is designed for students who seek to develop skills in statistical computing using the R programming language. Students will learn how to use R for data manipulation, data visualization, writing statistical function, and optimizing statistical functions.

**BUS 759 Machine Learning and AI 3 cr**

Advanced statistical and machine learning algorithms/techniques/methods for Business Analytics with applications from statistics, finance, economics, marketing, management, accounting, and other business-related disciplines.

**BUS 789 Res and Teaching Concepts 1 cr**

Presentations and discussions related to teaching and research concepts.

**BUS 799 Dissertation Research 1-6 cr**

Independent research by the student under the sponsorship of the graduate faculty.

**Prerequisite:** BUS 699 Minimum Grade of S

## Cancer Biology - MD (CB)

**CB 560 Cancer Biology I 3 cr**

This course is the first in a series of two courses that provides a comprehensive coverage of molecular and cellular aspects of carcinogenesis as well as clinical issues related to human cancer. This course will specifically cover areas of histology, pathology, epidemiology, genetics, viruses, oncogenes and tumor suppressor genes.

## Cardiorespiratory Care (CRC) (CRC)

### CRC 360 Entry-Level Exam Review 2 cr

This course is designed to assist students prepare for the Entry-Level Examination (ELE) offered by the National Board for Respiratory Care (NBRC). All the respiratory therapy equipment, therapeutic modalities, therapeutic interventions, medications, and related procedures relevant to the NBRC ELE will be reviewed in the form of practice examinations. The entry-level examination matrix will be used as the main resource for this course.

### CRC 429 Cardiovascular Physiology 2 cr

Discusses the physiology of the heart and the vasculature. Will serve as the basis for understanding cardiovascular pathophysiology.

### CRC 432 Subacute Care 3 cr

This course will focus on cases involving patients who are treated in nursing homes, subacute care facilities, rehabilitation programs, and the home. Topics will include health care settings and organization, polysomnography, subacute mechanical ventilation, and case management. Students will discuss the health promotion and disease prevention aspects of each case. Relevant laboratory exercises will be conducted.

## Cardiovascular - MD (CVR)

### CVR 130 Cardiovascular 8 cr

The Cardiovascular Module is designed to provide students with an in-depth survey of the cardiovascular system in health and disease, integrating concepts across disciplines. Each week in the seven-week module is topically focused and the week's content is framed by introduction and discussion of relevant clinical vignettes. Development and aging in the cardiovascular system, cardiac function and rhythmicity, regulation of blood pressure, vascular function and dysfunction, risk factors for and epidemiology of cardiovascular disease, basics of clinical treatment strategies, and disparities in access to health care will be discussed. Students will master content through a combination of learning strategies, including active learning, lectures, laboratories, and independent self study. In parallel, students will gain experience in developing patient history, as well as basic clinical skills relevant to assessment of cardiovascular function.

## Career Planning (CP) (CP)

### CP 101 Freshman Sem-Continuing Educ 2 cr

A course for first-time students that assists with maximizing the student's potential to achieve academic success and to adjust responsibly to the individual and interpersonal challenges presented by college life. This course provides an introduction to the nature of higher education and a general orientation to the functions and resources of the University. Extensive reading and writing assignments relevant to the student's first year experience are required.

### CP 250 Career Planning and Develop 3 cr

Principles, methods, and practice in career planning and development with emphasis on career information, self-analysis, exploration of careers, career opportunities, guidelines for goal achievement.

### CP 450 The Job Campaign 3 cr

Practical approach to career development designed to help students develop strategies for obtaining suitable employment and making career choices. Emphasis is on the principles, methods, and practice in achieving career goals through the study of careers, preparing resumes, writing letters of application, practicing job interview techniques, and identifying prospective employers.

**Cross-Listed:** IST 450

## Cell Biology/Neuroscience-MD (CBN)

### CBN 111 Medical Gross Anatomy 9 cr

Lectures by the faculty stress clinically important aspects of anatomy, utilizing both systemic and regional approaches. Student groups of four dissect the entire human body. Prosections and computer programs are available to augment information learned in the laboratory. The lecture and laboratory material is reinforced through physician-presented correlation conferences. Additionally, the students are required to complete a computer program in radiological anatomy.

### CBN 112 Medical Histology 8 cr

The main objective is to teach the microscopic structure and functional anatomy of cells, tissues, and organs of the human body through lectures, laboratories, slides, demonstrations, and examinations. The course provides the student the opportunity to gain information and experience in the science of microscopic structure and to learn essential basic terminology for use and expansion in future courses.

### CBN 112R Medical Histology 8 cr

Summer make-up course in Medical Histology at an LCME approved medical school.

### CBN 113 Developmental Anatomy 3 cr

The course presents a synopsis of human development and related information. Clinically related topics are emphasized while normal development is closely correlated with the systemic lectures given in the gross anatomy course

### CBN 114 Neuroanatomy 4 cr

The course consists of both laboratory and lecture material. Emphasis is given to the functional neurobiology of the human central nervous system. In addition to basic anatomical systems, considerable time is given to the delineation of the anatomical bases of human CNS dysfunction.

### CBN 215 Medical Neuroscience 9 cr

This course is an organ-based multi-disciplinary course combining neuroanatomy, neuropathology, and neurophysiology to provide an integrated approach to neuroscience. The final exam is a mini-board from the National Board of Medical Examiners; students are charged a fee to purchase this exam.

### CBN 400 Cell Biol & Neuro Externship 4 cr

To be determined.

### CBN 401 Adv Gross Anatomy I - Longitu 1-4 cr

Each student is responsible for completing the dissection and study of the anatomy of the upper and lower extremities and selection and review of recent literature related to the region under study. Time will be divided between laboratory dissection, library reference study, and conference sessions with faculty, both clinical and basic science. Conferences directed by faculty will deal with the basic anatomy, both normal and anomalous, and with the practical utilization of that knowledge. Conferences directed by the student will deal with techniques from current literature.

**CBN 402 Adv Gross Anatomy II - Longitu 1-4 cr**

Each student is responsible for completing the dissection and study of the anatomy of the thorax, abdomen, and pelvis, and selection and review of recent literature related to the region under study. Time will be divided between laboratory dissection, library reference study, and conference sessions with faculty, both clinical and basic science. Conferences directed by faculty will deal with the basic anatomy, both normal and abnormal, and with the practical utilization of that knowledge. Conferences directed by the student will deal with techniques from current literature.

**CBN 403 Adv Gross Anatomy III-Longitu 1-4 cr**

Each student is responsible for completing the dissection and study of the anatomy of the head and neck, and selection and review of recent literature related to the region under study. Time will be divided between laboratory dissection, library reference study, and conference sessions with faculty, both clinical and basic science. Conferences directed by faculty will deal with the basic anatomy, both normal and abnormal, and with the practical utilization of that knowledge. Conferences directed by the student will deal with techniques from current literature.

**CBN 404 Adv Neuroanatomy-Longitu 1-4 cr**

The course will consist of three phases: (1) a review of the topographic and internal anatomy of the nervous system; (2) discussions by the faculty concerning current research of interest in neuroanatomy; (3) discussions of functional and clinical neuroanatomy and areas of special interest.

**CBN 405 Research Assistantship 1-4 cr**

Teaching assistantships are available in the following areas: head and neck; thorax and abdomen; pelvis and perineum; or extremities.

**CBN 406 Teach Asst-Histology 1-4 cr**

Participants will assist the faculty in teaching histology laboratories either pertaining to tissues (4 weeks) or organ systems (4 weeks, or 8 weeks for both). The student will be mentored by one of the listed faculty who will assume responsibility for the final evaluation of the student.

**CBN 407 Teach Assistantship - Anatomy 1-4 cr**

Teaching assistantships are available in the following areas: head and neck; thorax and abdomen; pelvis and perineum or extremities.

**CBN 501 Medical Gross Anatomy 8 cr**

A course consisting of lectures and laboratory experience stressing the more important aspects of human morphology using both systemic and regional approaches supplemented by introductory radiological features.

**CBN 510 Medical Histology 7 cr**

A study of the structure and function of cells, tissues and organs which includes lectures, demonstrations, and individual laboratory study of slides.

**CBN 511 Medical Neuroanatomy 6 cr**

This course consists of lectures and laboratories stressing the important aspects of the structures of the central nervous system and emphasizing the functional aspects which relate to human disease.

**CBN 513 Developmental Anatomy 2 cr**

A course which presents a synopsis of human development and related information. Clinically related topics are emphasized while normal development is closely correlated with the systemic lectures given in the gross anatomy course

**CBN 516 Cell Biol-Neurosci Lit Reports 1 cr**

Students and faculty participate in a supervised reading of the current literature and meet periodically (usually once a week) to interact in a discussion of the selected article or topic. The goal of this course is to maintain the faculty's and students' level of information at the "state of the art" in both methods and theory in the discipline to develop critical review skills in reviewing the literature. Student presentation is required to receive credit.

**CBN 517 Dir St - Cell Bio Neuroscience 1-6 cr**

Students participate in research under the direction of a graduate faculty member. The student may pursue independent research or participate in a literature project. This course should be taken by students who have completed their laboratory rotations, but have not yet submitted a research proposal.

**CBN 590 Sp Top - 1-3 cr**

This course provides in-depth tutorial exposure to specific areas in the discipline. Student and/or faculty presentations followed by group discussion (usually in the Socratic mode), examine the subject matter in an area of current interest either to one student or to a group of students. Credit and title are arranged with an individual faculty member.

**CBN 610 Molecular-Cellular Neuroscienc 2 cr**

A course which requires students to read and evaluate critically the contemporary literature dealing with the cellular and molecular mechanisms of neural function.

**CBN 612 Cytoskeleton-Membranes 2 cr**

This course requires students to read, present, and evaluate critically the modern literature on cytoskeleton and membrane structure, interactions, and function.

**CBN 614 Gene Expr- Reg- Repair- Ther 2 cr**

This course requires students to read, present, and evaluate critically the modern literature on gene expression and regulation, repair and therapy.

**CBN 615 Molecular-Cellular Development 2 cr**

This course examines embryonic development in animal systems. The focus is on the protein and molecular interactions that regulate the development of animal embryos. The course consists of lectures and written exams. Students are required to read from an assigned text and from the primary literature.

**CBN 616 Cell Biol-Neurosci Resrch Sem 1 cr**

Students and faculty present a research topic for discussion before members of the department. The presentations are usually scheduled on a rotational basis. The student may present research data for critique by the faculty.

**CBN 799 Research Dissertation 1-6 cr**

Independent research by the student under the sponsorship of the graduate faculty. Students are required to submit a research project description form before enrolling in this course. Progress reports of the work accomplished are required every six months.

## Chemical Engineering (CHE) (CHE)

**CHE 190 Special Topics - 1-5 cr**

Topics of current Chemical Engineering interest. Requires permission of department chair.

**CHE 201 CHE Fundamentals I 3 cr**

Formulation of material balances and relations involving real gases, vapors, liquids, and solids. Prerequisites: CH 132. Corequisite: MA 126.

**Prerequisite:** (CH 116 Minimum Grade of D or CH 132 Minimum Grade of D) and (MA 126 (may be taken concurrently) Minimum Grade of D or MA 233 Minimum Grade of D)

**CHE 202 CHE Fundamentals II 3 cr**

Formulation of energy balance and combined material and energy balances for steady-state processes. Prerequisites: CHE 201.

Corequisites: BLY 121. Fee

**Prerequisite:** CHE 201 Minimum Grade of D and (BLY 121 (may be taken concurrently) Minimum Grade of D or BLY 141 Minimum Grade of D)

**CHE 203 Material and Energy Balances 4 cr**

Application of multicomponent material and energy balances to chemical processes involving phase changes and chemical reactions. Minimum grade of 'C' is required and only 2 attempts are permitted. Fee

**Prerequisite:** CH 132 Minimum Grade of C and CH 132L Minimum Grade of C and MA 126 Minimum Grade of C and (EH 101 Minimum Grade of C or EH 105 Minimum Grade of C or A01 27 or S01 610 or S13 33 or USEH P)

**CHE 232 Chemical Engr Thermodynamics I 3 cr**

Applications of the First and Second Law. Estimation of fluid properties and heat effects. Thermodynamic analysis of meters, throttles, nozzles, and compressors.

**Prerequisite:** (PH 201 Minimum Grade of D or PH 216 Minimum Grade of D) and (MA 227 Minimum Grade of D or MA 234 Minimum Grade of D) and (CHE 201 Minimum Grade of D)

**CHE 290 Special Topics - 1-5 cr**

Topics of current chemical engineering interest. Requires consent of department chair.

**CHE 301 CHE Calculations III - C 3 cr**

Material and energy balance process calculations emphasizing applied statistics utilizing computer programming concepts, spreadsheets, and modern mathematical computer tools.

**Prerequisite:** CHE 202 Minimum Grade of D

**CHE 311 CHE Separations I 3 cr**

Applications of material balances and equilibrium relations to equilibrium stage design. Design of single stages and cascades for absorption, stripping, distillation, liquid-liquid extraction, and bioseparations.

**Prerequisite:** CHE 203 Minimum Grade of C

**Corequisite:** CHE 331

**CHE 321 Transport Phenomena I 3 cr**

Fundamentals of momentum transfer with applications in fluid flow through pipes and process equipment.

**Prerequisite:** MA 238 Minimum Grade of C and CHE 203 Minimum Grade of C and PH 201 Minimum Grade of C

**CHE 322 Transport Phenomena II 3 cr**

Fundamentals of conductive, convective, and radiative modes of heat transfer with applications in the design of heat exchanges.

**Prerequisite:** CHE 321 Minimum Grade of C

**CHE 331 CHE Thermodynamics I 3 cr**

This course introduces the fundamentals of thermophysical property estimation and modeling of non-ideal pure and multicomponent fluid systems, including an introduction to multicomponent vapor/liquid equilibria.

**Prerequisite:** CH 201 Minimum Grade of C and CHE 203 Minimum Grade of C and MA 238 Minimum Grade of C and CH 201L Minimum Grade of C and PH 201 Minimum Grade of C

**Corequisite:** CHE 351

**CHE 332 CHE Thermodynamics II 3 cr**

This class is an advanced thermodynamics course that uses a molecular level viewpoint to introduce students to applications of thermodynamics principles to complex chemical engineering problems including multicomponent, non-ideal fluid phase equilibria (VLE, VLLE, SLE), and chemical reaction equilibria. The concepts of chemical potential, fugacity, partial molar and excess properties as well as complex activity coefficient models are introduced to solve these problems.

**Prerequisite:** CHE 331 Minimum Grade of C

**Corequisite:** CHE 352

**CHE 342 Engineering Communication - W 3 cr**

Formal and informal reports, oral presentations, and visual aids.

**Prerequisite:** EH 102 Minimum Grade of C or EH 105 Minimum Grade of C

**Corequisite:** CHE 352

**CHE 351 Modeling Lab 1 cr**

Computational tools and numerical methods for solving chemical engineering problems.

**Corequisite:** CHE 311, CHE 331

**CHE 352 Measurement Lab 1 cr**

Laboratory practices for measurement of reaction and phase change parameters. Statistical tools for assessing experimental data.

**Prerequisite:** CHE 351 Minimum Grade of C

**Corequisite:** CHE 332, CHE 372

**CHE 363 Simulation of Chemical Process 3 cr**

In this course, students utilize modern software tools, such as Aspen Plus, to model steady rate chemical processes. Simulation topics include physical property selection, flowsheet generation, separations, and reactors.

**Prerequisite:** CHE 311 Minimum Grade of C

**Corequisite:** CHE 332, CHE 372

**CHE 372 Chemical Reactor Design 3 cr**

Fundamentals of systems involving chemical reactions, including batch and flow systems. Design of thermal and catalytic systems with single and multiple reactions. Analysis of kinetic data and mechanisms.

**Prerequisite:** CHE 331 Minimum Grade of C

**Corequisite:** CHE 322, CHE 332

**CHE 390 Special Topics - 1-5 cr**

Topics of current chemical engineering interest. Requires consent of department chair.

**CHE 421 CHE Separations II 3 cr**

Fundamentals of mass transfer. Mass, energy, and momentum transfer analogies. Design of mass transfer equipment.

**Prerequisite:** CHE 311 Minimum Grade of C and CHE 322 Minimum Grade of C

**CHE 441 Chem Engr Ops Lab I-W 2 cr**

Laboratory Studies of the unit operations of chemical engineering with emphasis on momentum and heat transfer.

**Prerequisite:** CHE 322 Minimum Grade of C and CHE 351 Minimum Grade of C and CHE 352 Minimum Grade of C and (CHE 342 Minimum Grade of C or CHE 363 Minimum Grade of C)

**CHE 442 Chem Engr Ops Lab II - W 2 cr**

Laboratory studies of the unit operations of chemical engineering with emphasis on stage-wise and differential contactors.

**Prerequisite:** CHE 441 (may be taken concurrently) Minimum Grade of C and CHE 311 Minimum Grade of C and CHE 421 Minimum Grade of C

**CHE 451 Process Models 3 cr**

Mathematical modeling, simulation, and dynamics of chemical process systems for design and analysis.

**Prerequisite:** CHE 322 Minimum Grade of C

**CHE 452 Process Dynamics and Control 3 cr**

Mathematical modeling, simulation and dynamics of chemical process systems. Feedback and Feed-forward control of chemical processes. Specification of control loops. Selection and tuning of controller modes.

**Prerequisite:** CHE 372 Minimum Grade of C

**CHE 461 Process Design I 3 cr**

Engineering economics and elements of process design, including energy and material balances, manufacturing and product cost. Unit operation equipment sizing, and cost. This course is considered a "Senior Capstone Design" course.

**Prerequisite:** EG 231 Minimum Grade of C and CHE 332 Minimum Grade of C and CHE 372 Minimum Grade of C and (CHE 342 Minimum Grade of C or CHE 363 Minimum Grade of C)

**CHE 462 Process Design II 3 cr**

Selection, design and specification of principal chemical processes. This course is considered a "Senior Capstone Design" course.

**Prerequisite:** CHE 461 Minimum Grade of C

**CHE 490 Special Topics 1-3 cr**

Topics of current chemical engineering interest. Requires consent of department chair or departmental approval.

**CHE 494 Directed Studies 1-3 cr**

Directed study, under the guidance of a faculty advisor, of a topic from the field of chemical engineering, not offered in a regularly scheduled course. A written report is required. May be repeated for a maximum of 6 credit hours. Requires consent of the department chair and minimum GPA of 3.00 for admission or departmental approval.

**CHE 499 Honors Senior Project 1-6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project, relevant to the field of chemical engineering. The senior project will be judged and graded by three faculty chaired by the honors mentor. This course is required for Honors recognition. A minimum of 4 credit hours is required, but students may enroll for a maximum of 6 credit hours over two semesters. Requires completion of an approved project prospectus.

**Prerequisite:** CHE 322 Minimum Grade of C and CHE 332 Minimum Grade of C

**CHE 501 Chemical Engineering Seminar 1 cr**

A weekly research seminar for Chemical Engineering graduate students. Students will attend research presentations by faculty, invited speakers and other students rehearsing for their proposal presentations, thesis defenses or conference presentations. Topics will include research, research methods, safety and responsible conduct of research.

**CHE 510 Adv Chemical Thermodynamics 3 cr**

Advanced classical and molecular thermodynamics as applied to non-ideal multicomponent phase and reaction equilibria for chemical engineering applications. An introduction to statistical thermodynamics will also be given.

**CHE 520 Adv Transport Phenomena I 3 cr**

An advanced treatment of the principles and methods of transport phenomena. Detailed coverage of several key aspects of energy and momentum transfer including creeping flows, boundary layers and lubrication theory.

**CHE 521 Adv Transport Phenomena II 3 cr**

An advanced treatment of the principles and methods of mass transfer, diffusion and adsorption phenomena. Coverage of conservation equations, mass transfer at interfaces and boundary conditions. Includes coverage of adsorption and diffusion on surfaces, porous structures and membranes.

**CHE 525 Chemical Reactor Analysis 3 cr**

Design, modeling and analysis of non-ideal chemical reactor systems. Includes effects of mass transfer in heterogeneous catalytic reactors, non-steady-state heat transfer and residence time distributions.

**CHE 530 Synthetic Fuels 3 cr**

Fundamentals of gasification and liquefaction concepts applied to fossil fuels and biomass conversion.

**CHE 540 Distillation 3 cr**

Analysis and design of separation units for multicomponent nonideal systems.

**CHE 550 Chemical Process Control 3 cr**

Sampled-data algorithms, feedback, feedforward, deadtime compensation, advanced control schemes applied to chemical engineering processes.

**CHE 551 Adv Chem Engineering Modeling 3 cr**

Advanced mathematical modeling of chemical process systems for design and analysis.

**CHE 560 Mixing and Agitation 3 cr**

Analysis and design of single-phase and multiple-phase mixing units.

**CHE 563 Simulation of Chem Processes 3 cr**

In this course, students utilize modern software, tools, such as Aspen Plus, to model steady state chemical processes. Simulation topics include physical property selection, flowsheet generation, separations and reactors.

**Cross-Listed:** CHE 463

**CHE 570 Separation Processes 3 cr**

Analysis and design of separation processes. Topics include molecular diffusion and convective mass transfer with applications in the chemical, petroleum and pharmaceutical industries.

**CHE 575 Chem Proc Synth Optimization 3 cr**

Use of analysis, synthesis, and optimization in process development.

**CHE 580 Chem Process Safety and Design 3 cr**

Fundamental principles of chemical process safety, fires and explosions and design for the mitigation of associated hazards.

**CHE 590 Special Topics - 3 cr**

Topics of current chemical engineering interest. Requires consent of the department chair or departmental approval.

**CHE 592 Directed Independent Study 1-6 cr**

Directed study, under the guidance of a faculty advisor, of a topic from the field of chemical engineering, not offered in a regularly scheduled course. A written report is required. Requires consent of the department chair and overall minimum GPA of 2.5 for admission or departmental approval.

**CHE 594 Project in Chem Engineering 3 cr**

Approved investigation of original problems under direction of a faculty member. Requires approved prospectus.

**CHE 599 Thesis 1-6 cr**

May be taken more than once. Only 6 hours may be applied for credit toward a degree. Requires approved prospectus.

## Chemistry (CH) (CH)

**CH 101 Survey of Inorg and Org Chem 3 cr**

An intensive presentation of inorganic and organic chemistry principles selected to convey a basic understanding of their relationship to and function in the life process. Laboratory exercises will introduce students to basic laboratory procedures, often using exercises related to life process. This course is generally taken by students in the College of Nursing. CH 101L must be taken concurrently. Together, CH 101 and CH 101L count as one laboratory science course, partially fulfilling general education requirements. (Offered Fall and Spring Semesters.) Core Course.

**Corequisite:** CH 101L

**CH 101L Survey Inorg-Org Chem Lab 1 cr**

Laboratory exercises associated with CH 101. CH 101 must be taken concurrently or as a prerequisite. Together, CH 101 and CH 101L count as one laboratory science course, partially fulfilling general education requirements. Core Course.

**Corequisite:** CH 101

**CH 131 General Chemistry I 3 cr**

Three lecture hours and one recitation hour per week for one semester. First of a two-semester sequence for majors, minors, and others seeking quantitative treatment. Topics include the nuclear model, stoichiometry, chemical reactions, gas laws, thermochemistry, atomic structure, and molecular bonding. It is strongly suggested that students take CH 131 and CH 131L concurrently. Together, CH 131 and CH 131L count as one laboratory science course partially fulfilling general education requirements. (Offered Fall and Spring Semesters.) Core Course.

**Prerequisite:** CH 100 Minimum Grade of D or CH 110 Minimum Grade of D or A02 24 or S02 560 or S12 580 or MA 112 Minimum Grade of C or MA 113 Minimum Grade of C or MA 172 Minimum Grade of C or MA 115 Minimum Grade of C or MA 121 Minimum Grade of C or MA 120 Minimum Grade of C or MA 287 Minimum Grade of C or MA 125 Minimum Grade of C or MA 132 Minimum Grade of C or MA 126 Minimum Grade of C or MA 233 Minimum Grade of C or MMT 080 or UTM 85

**CH 131L General Chemistry I Lab 1 cr**

Laboratory exercises associated with CH 131. It is strongly suggested that students take CH 131 and CH 131L concurrently. Together, CH 131 and CH 131L count as one laboratory science course, partially fulfilling general education requirements. Core course.

**Prerequisite:** CH 100 Minimum Grade of D or CH 110 Minimum Grade of D or A02 24 or S02 560 or S12 580 or MA 112 Minimum Grade of C or MA 113 Minimum Grade of C or MA 172 Minimum Grade of C or MA 115 Minimum Grade of C or MA 121 Minimum Grade of C or MA 120 Minimum Grade of C or MA 287 Minimum Grade of C or MA 125 Minimum Grade of C or MA 132 Minimum Grade of C or MA 126 Minimum Grade of C or MA 233 Minimum Grade of C or MMT 080 or UTM 85

**CH 132 General Chemistry II 3 cr**

Continuation of CH 131. Topics include solutions, colligative properties, chemical kinetics, equilibrium, acids and bases, pH, buffers, titrations, thermodynamics, and electrochemistry. Additional topics may include nuclear chemistry, organic and biochemistry, chemistry of inorganic compounds, transition metal complexes, and industrial chemistry. It is strongly suggested that students take CH 132 and CH 132L concurrently. Together, CH 132 and CH 132L count as one laboratory science course, partially fulfilling general education requirements. (Offered Fall and Spring Semesters.) Core Course.

**Prerequisite:** CH 115 Minimum Grade of D or (CH 131 Minimum Grade of D and CH 131L Minimum Grade of D)

**CH 132L General Chemistry II Lab 1 cr**

Laboratory exercises associated with CH 132. It is strongly suggested that students take CH 132 and CH 132L concurrently. Together, CH 132 and CH 132L count as one laboratory science course, partially fulfilling general education requirements. Core course.

**Prerequisite:** CH 131 Minimum Grade of D and CH 131L Minimum Grade of D

**CH 141 Chemical Principles 4 cr**

A one-semester accelerated introductory course in chemistry for majors, minors, and others seeking a more physical and quantitative treatment. Covers stoichiometry, states of matter, chemical bonding and structure, solutions, kinetics, gaseous and aqueous equilibria, thermodynamics, electrochemistry, and nuclear chemistry. (Offered Fall and Spring Semesters.) Core Course.

**Prerequisite:** TOL 45

**Corequisite:** CH 141L

**CH 141L Chemical Principles Lab 1 cr**

Laboratory exercises associated with CH 141. CH 141 must be taken concurrently or as a prerequisite. Together, CH 141 and CH 141L count as one laboratory science course, partially fulfilling general education requirements.

**Prerequisite:** CH 141 (may be taken concurrently) Minimum Grade of D

**Corequisite:** CH 141

**CH 150 Intro to Computer Chemistry 2 cr**

This course will introduce the student to direct application and use of computer activity for applications in chemistry; acquisition of data from instrumentation, data analysis, presentation of experimental data, and chemical structure and modeling programs.

**Prerequisite:** (CH 115 Minimum Grade of D or (CH 131 Minimum Grade of D and CH 131L Minimum Grade of D) or (CH 141 (may be taken concurrently) Minimum Grade of D and CH 141L (may be taken concurrently) Minimum Grade of D)) and ((MA 113 Minimum Grade of D or MA 172 Minimum Grade of D) or (MA 115 Minimum Grade of D or MA 121 Minimum Grade of D) or (MA 125 Minimum Grade of D or MA 132 Minimum Grade of D) or (MA 126 Minimum Grade of D or MA 233 Minimum Grade of D))

**CH 201 Organic Chemistry I 3 cr**

Fundamentals of structure and chemical behavior of organic molecules including nomenclature, properties, structure, stereochemistry, spectroscopy (both infrared and nuclear magnetic resonance), reactions, synthesis, and mechanisms of alkanes, alkenes, alkyl halides, and alcohols. (Offered Fall and Spring Semesters.) CH 201L must be taken concurrently.

**Prerequisite:** CH 116 Minimum Grade of D or (CH 132 Minimum Grade of D and CH 132L Minimum Grade of D) or (CH 141 Minimum Grade of D and CH 141L Minimum Grade of D)

**Corequisite:** CH 201L

**CH 201L Organic Chemistry I Lab 1 cr**

Laboratory exercises associated with CH 201. (Offered Fall and Spring Semesters.) The laboratory introduces basic organic laboratory practices such as the collection of physical properties data, separation and purification techniques, synthesis, and spectroscopic methods. CH 201 must be taken concurrently or as a prerequisite.

**Prerequisite:** ((CH 116 Minimum Grade of D) or (CH 132 Minimum Grade of D and CH 132L Minimum Grade of D))

**Corequisite:** CH 201

**CH 202 Organic Chemistry II 3 cr**

Continuation of study of structure and chemical behavior of organic molecules including aromatic compounds, ketones and aldehydes amines, carboxylic acids and their derivatives, carbohydrates, amino acids, peptides and proteins, nucleic acids, alkynes, ethers and epoxides, and conjugated dienes. (Offered Fall and Spring Semesters.) CH 202L must be taken concurrently.

**Prerequisite:** (CH 201 Minimum Grade of D and CH 201L Minimum Grade of D) or CH 222 Minimum Grade of D

**Corequisite:** CH 202L

**CH 202L Organic Chemistry II Lab 1 cr**

Laboratory exercises associated with CH 202. The laboratory continues with the basic organic laboratory practices with additional synthetic methods. (Offered Fall and Spring Semesters.) CH 202 must be taken concurrently or as a prerequisite.

**Prerequisite:** (CH 222 Minimum Grade of D) or (CH 201 Minimum Grade of D and CH 201L Minimum Grade of D)

**Corequisite:** CH 202

**CH 265 Introductory Analysis 3 cr**

A detailed study of the fundamental theories and principles of chemistry with emphasis on their application to quantitative analysis. Because proficiency of the material covered in CH 132 is vital for success in this course, students are strongly advised to take the two courses as close together as schedules permit. (Offered Fall and Spring Semesters.)

**Prerequisite:** (CH 132 Minimum Grade of C and CH 132L Minimum Grade of C) or (CH 116 Minimum Grade of C)

**Corequisite:** CH 265L

**CH 265L Introductory Analysis Lab 1 cr**

Laboratory exercises associated with CH 265. (Offered Fall and Spring Semesters.) CH 265 must be taken concurrently or as a prerequisite.

**Prerequisite:** (CH 132 Minimum Grade of C and CH 132L Minimum Grade of C) or (CH 116 Minimum Grade of C)

**Corequisite:** CH 265

**CH 301 Physical Chemistry I 3 cr**

Gas Laws, First and Second Law of Thermodynamics, Phase Equilibrium, Chemical Equilibrium, Physical Chemistry of Solutions, Electrochemistry, Transport Properties, and Chemical Kinetics. (Offered Fall Semester).

**Prerequisite:** (CH 132 Minimum Grade of C and CH 132L Minimum Grade of C and MA 126 Minimum Grade of D) and (PH 115 Minimum Grade of D or PH 202 Minimum Grade of D)

**Corequisite:** CH 301L

**CH 301L Physical Chemistry I Lab-W 1 cr**

Laboratory exercises associated with CH 301. (Offered Fall Semester.) Lab is required for chemistry majors.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (CH 132 Minimum Grade of C and CH 132L Minimum Grade of C) and (MA 126 Minimum Grade of D) and (PH 202 Minimum Grade of D or PH 115 Minimum Grade of D)

**Corequisite:** CH 301

**CH 302 Physical Chemistry II 3 cr**

Quantum Theory and Applications to Atoms and Molecules, Spectroscopy, and Statistical Thermodynamics. (Offered Spring Semester.) Required for chemistry majors.

**Prerequisite:** ((CH 265 Minimum Grade of D and CH 265L Minimum Grade of D) or CH 266 Minimum Grade of D) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (MA 126 Minimum Grade of D or MA 223 Minimum Grade of D) and (PH 202 (may be taken concurrently) Minimum Grade of D or PH 217 Minimum Grade of D) or (MA 227 (may be taken concurrently) Minimum Grade of D or MA 234 (may be taken concurrently) Minimum Grade of D) and (PH 115 Minimum Grade of D or PH 113 Minimum Grade of D)

**Corequisite:** CH 302L

**CH 302L Physical Chemistry II Lab - W 1 cr**

Laboratory exercises associated with CH 302. (Offered Spring Semester.) Lab is required for chemistry majors.

**Prerequisite:** ((EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and CH 265 Minimum Grade of D) and (CH 265L Minimum Grade of D or CH 266 Minimum Grade of D) and (MA 126 Minimum Grade of D or MA 233 Minimum Grade of D) and (PH 202 (may be taken concurrently) Minimum Grade of D or PH 217 Minimum Grade of D) or (MA 227 (may be taken concurrently) Minimum Grade of D or MA 234 (may be taken concurrently) Minimum Grade of D) and (PH 115 Minimum Grade of D or PH 113 Minimum Grade of D)

**Corequisite:** CH 302

**CH 394 Directed Studies - 1-4 cr**

Student works in a research laboratory under faculty guidance. May be repeated; sum of all directed studies cannot exceed eight (8) credits. Requires Junior standing or permission of Department Chair.

**CH 401 Intern Inorganic Chemistry 3 cr**

Atomic and molecular structure and bonding emphasizing the use of symmetry, group theory, and molecular orbitals; NMR spectrometry; coordination chemistry; organometallic chemistry and homogeneous catalysis. (Offered Spring Semester).

**Prerequisite:** (CH 301 Minimum Grade of D and CH 301L Minimum Grade of D and CH 302 Minimum Grade of D and CH 302L Minimum Grade of D) or CH 333 Minimum Grade of D

**CH 413 Org Reaction Mech and Synth 3 cr**

Study of organic reaction kinetics and mechanisms. Study of the synthesis of natural products and their mechanism of formation with concurrent discussion of nuclear magnetic resonance spectroscopy. (Offered as required).

**Prerequisite:** (CH 202 Minimum Grade of D or CH 223 Minimum Grade of D) and (CH 301 Minimum Grade of D or CH 332 Minimum Grade of D)

**CH 440 Biochemistry I 3 cr**

Study of fundamental biochemical concepts; emphasis is placed on protein, carbohydrate, and lipid structures as related to their functional behavior; enzyme kinetics and mechanisms of action; thermodynamic relationships in biochemical systems. (Offered Fall Semester). Cross-listed with BLY 440.

**Prerequisite:** (CH 202 Minimum Grade of D or CH 223 Minimum Grade of D)

**Cross-Listed:** BLY 440

**CH 441 Biochemistry II 3 cr**

Study of the reaction and regulations of intermediary metabolism; the biochemistry of genetic systems to include regulatory mechanisms and protein synthesis. (Offered Spring Semester). Cross-listed with BLY 441.

**Prerequisite:** CH 440 Minimum Grade of D or BLY 440 Minimum Grade of D

**Cross-Listed:** BLY 441

**CH 443 Lab Studies in Biochemistry 2 cr**

Course familiarizes the student with the basic laboratory techniques commonly employed in biochemical research. (Offered Spring Semester). Cross-listed with BLY 443.

**Prerequisite:** CH 440 Minimum Grade of D or BLY 440 Minimum Grade of D

**Cross-Listed:** BLY 443

**CH 451 Biophysical Chemistry 3 cr**

The study of the hydrodynamic and optical properties and methods used to elucidate the structure, conformation and function of biological macromolecules. (Offered as required). Prerequisite: Permission of instructor

**Prerequisite:** (CH 300 Minimum Grade of D or CH 301 Minimum Grade of D or CH 332 Minimum Grade of D) and (CH 440 Minimum Grade of D or BLY 440 Minimum Grade of D)

**CH 465 Instrumental Analysis 3 cr**

Modern analytical instruments, their operating principles, and their applications. (Offered Fall Semester).

**Prerequisite:** ((CH 265 Minimum Grade of D and CH 265L Minimum Grade of D) or CH 266 Minimum Grade of D) and (CH 300 Minimum Grade of D and CH 300L Minimum Grade of D) or ((CH 302 Minimum Grade of D and CH 302L Minimum Grade of D) or CH 333 Minimum Grade of D) or ((CH 301 Minimum Grade of D and CH 301L Minimum Grade of D) or CH 332 Minimum Grade of D)

**Corequisite:** CH 465L

**CH 465L Instrumental Analysis Lab 2 cr**

Laboratory exercises associated with CH 465. (Offered Fall Semester.)

**Prerequisite:** ((CH 265 Minimum Grade of D and CH 265L Minimum Grade of D) or CH 266 Minimum Grade of D) and (CH 300 Minimum Grade of D and CH 300L Minimum Grade of D) or ((CH 302 Minimum Grade of D and CH 302L Minimum Grade of D) or CH 333 Minimum Grade of D) or ((CH 301 Minimum Grade of D and CH 301L Minimum Grade of D) or CH 332 Minimum Grade of D)

**Corequisite:** CH 465

**CH 490 Sp Top - 1-4 cr**

Study of a significant topic in Chemistry. May be repeated for a maximum of four credits when the content varies.

**CH 492 Seminar I 1 cr**

Information retrieval from scientific references, journals, and on-line databases directed toward computer-based preparation of a student seminar having as the capstone experience a formal seminar for Department Faculty and students. (Offered Spring Semester). Requires Senior standing.

**CH 494 Directed Studies 1-4 cr**

Student works in a research laboratory under faculty guidance. May be repeated; sum of all directed studies cannot exceed eight (8) credits. Requires Senior standing or permission of Department Chair.

**CH 499 Sr Honors Chemistry Project-H 3 cr**

Student research under faculty direction; written report and oral presentation of research work to faculty and students. This course may be repeated once for a maximum of six credits. Requires permission of department chair.

**CH 514 Environmental Chemistry 3 cr**

Introduces the cycling of elements in the earth as groundwork for understanding the chemical reactions and fate of chemical species introduced as contaminants to the environment. The chemistry of natural and anthropogenic contaminants in the atmosphere, the hydrosphere, the lithosphere and the transport and transformation of chemical species in the environment are discussed. CH 514L must be taken concurrently. (Offered in Fall Semester.)

**Prerequisite:** (CH 202 Minimum Grade of D or CH 223 Minimum Grade of D)

**Corequisite:** CH 514L

**CH 514L Environmental Chemistry Lab 1 cr**

Laboratory exercises associated with CH 514. Real-world samples will be used to learn appropriate isolation techniques followed by chemical and instrumental analysis. CH 514 must be taken concurrently. (Offered in Fall Semester.)

**Prerequisite:** (CH 202 Minimum Grade of D or CH 223 Minimum Grade of D)

**Corequisite:** CH 514

**CH 515 Environmental Toxicology 4 cr**

Introduction to the scientific and technical principles of toxicological processes in the context of the ecosystem. Students will understand both the types of major environmental toxicants and how to properly evaluate their toxicity and factors that influence toxicity. Students will recognize and coherently formulate risk assessment and by using the tools and techniques acquired, develop and communicate proposals for remedy.

**Prerequisite:** (BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C) and (CH 201 Minimum Grade of C and CH 202 Minimum Grade of C) and (CH 540 Minimum Grade of B and CH 541 Minimum Grade of B)

**Cross-Listed:** EXT 515, MAS 515

**CH 540 Biochemistry I 3 cr**

Study of fundamental biochemical concepts; emphasis is placed on protein, carbohydrate, and lipid structures as related to their functional behavior, enzyme kinetics and mechanisms of action; thermodynamic relationships in biochemical systems. (Offered Fall Semester.) Requires Graduate status. Cross-listed with BLY 540.

**Prerequisite:** (CH 202 Minimum Grade of D or CH 223 Minimum Grade of D)

**CH 541 Biochemistry II 3 cr**

Study of the reactions and regulations of intermediary metabolism; the biochemistry of genetic systems to include regulatory mechanisms and protein synthesis. (Offered Spring Semester.) Requires Graduate status. Cross-listed with BLY 541.

**Prerequisite:** CH 540 Minimum Grade of B or BLY 540 Minimum Grade of B

**CH 543 Lab Studies in Biochemistry 2 cr**

Course familiarizes the student with the basic laboratory techniques commonly employed in biochemical research. (Offered Spring Semester.) Requires Graduate status. Cross-listed with BLY 543.

**Prerequisite:** CH 441 (may be taken concurrently) Minimum Grade of D or CH 540 Minimum Grade of B or CH 541 (may be taken concurrently) Minimum Grade of B

**CH 551 Biophysical Chemistry 3 cr**

The study of the hydrodynamic and optical properties and methods used to elucidate the structure, conformation and function of biological macromolecules. (Offered as required.)

**Prerequisite:** (CH 300 Minimum Grade of D or CH 301 Minimum Grade of D or CH 332 Minimum Grade of D) and (CH 440 Minimum Grade of D or BLY 440 Minimum Grade of D)

**CH 565 Instrumental Analysis 3 cr**

Modern analytical instruments, their operating principles, and their applications. (Offered Fall Semester). Requires Graduate status.

**Prerequisite:** ((CH 265 Minimum Grade of D and CH 265L Minimum Grade of D) or CH 266 Minimum Grade of D) and (CH 300 Minimum Grade of D and CH 300L Minimum Grade of D) or ((CH 302 Minimum Grade of D and CH 302L Minimum Grade of D) or CH 333 Minimum Grade of D) or ((CH 301 Minimum Grade of D and CH 301L Minimum Grade of D) or CH 332 Minimum Grade of D)

**CH 565L Instrumental Analysis Lab 2 cr**

Laboratory exercises associated with CH 565. (Offered Fall Semester.) Requires Graduate status.

**Prerequisite:** ((CH 265 Minimum Grade of D and CH 265L Minimum Grade of D) or CH 266 Minimum Grade of D) and (CH 300 Minimum Grade of D and CH 300L Minimum Grade of D) or ((CH 302 Minimum Grade of D and CH 302L Minimum Grade of D) or CH 333 Minimum Grade of D) or ((CH 301 Minimum Grade of D and CH 301L Minimum Grade of D) or CH 332 Minimum Grade of D)

**CH 571 Oxy Trans Proteins Marine Org 3 cr**

Study of the structure-function relationship of oxygen transport proteins utilized by marine vertebrates and invertebrates. (Offered as required.) Prerequisite: Graduate status or permission of instructor.

**CH 590 Special Topics - 1-4 cr**

Study of a significant topic in chemistry. May be repeated for a maximum of four credits when the content varies. Requires Graduate status.

**CH 592 Seminar 1 cr**

The use of scientific references and journals retrieval. Library assignment may be directed toward preparation of student seminars which are scheduled concurrently. (Offered as required). Requires Graduate status.

**CH 594 Directed Studies- 1-4 cr**

Literature survey and research under senior staff guidance. May be repeated but not to exceed four credits.

## Civil Engineering (CE) (CE)

**CE 102 Intro to Civil Engineering 2 cr**

Introduction to Civil Engineering as a profession and the issues facing today's Civil Engineers. This course also includes a brief introduction of civil engineering sub-disciplines, freehand sketching techniques, Computer Aided Design (CAD) drawings, and spreadsheet application to civil engineering problems.

**Prerequisite:** MA 113 Minimum Grade of D or MA 125 Minimum Grade of D

**CE 204 Surveying Fundamentals 2 cr**

Applications of fundamental surveying techniques. Students will be introduced to the applications of Global Positioning Systems (GPS) and Geographical Information Systems (GIS) in Civil Engineering.

**Prerequisite:** MA 113 Minimum Grade of C or MA 115 Minimum Grade of C or MA 125 (may be taken concurrently) Minimum Grade of C and CE 102 Minimum Grade of C

**Corequisite:** CE 205

**CE 205 Surveying Fundamentals Lab 1 cr**

Students will collect field data and using state-of-the-art surveying and GPS equipment. Collected data will be used in Geographical Information Systems (GIS) software.

**Prerequisite:** MA 113 Minimum Grade of C or MA 115 Minimum Grade of C or MA 125 (may be taken concurrently) Minimum Grade of C and CE 102 Minimum Grade of C

**Corequisite:** CE 204

**CE 314 CE Materials 3 cr**

Study of Engineering Properties of Materials used in civil engineering including steel, concrete, asphalt, and timber.

**Prerequisite:** EG 315 Minimum Grade of D

**Corequisite:** CE 315

**CE 315 CE Materials Lab-W 1 cr**

Study of experimental techniques used to evaluate engineering properties of materials. These techniques will be used to test materials used in civil engineering according to ASTM standards.

**Prerequisite:** EH 102 Minimum Grade of C or EH 105 Minimum Grade of C and EG 315 Minimum Grade of D

**Corequisite:** CE 314

**CE 340 Soil Mechanics 3 cr**

An introduction to Soil Mechanics. Soil identification and engineering properties of soils. Analysis of elementary geo-hydraulics and geo-mechanics problems.

**Prerequisite:** EG 315 Minimum Grade of D and (EG 360 Minimum Grade of D or CE 365 Minimum Grade of D or ME 324 Minimum Grade of D)

**Corequisite:** CE 341

**CE 341 Geotechnical Laboratory-W 1 cr**

Soil identification and classification: experimental measurement of soil properties and technical reporting.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and CE 340 (may be taken concurrently) Minimum Grade of D

**Corequisite:** CE 340

**CE 352 Intro to Transportation 3 cr**

Principles of transportation engineering with emphasis on highways and traffic.

**Prerequisite:** CE 204 Minimum Grade of C and CE 205 Minimum Grade of C and ST 315 Minimum Grade of C

**CE 353 Transp-Geometric Design 3 cr**

Basic principles and techniques of highway design, including route layout, alignment, intersection design, and materials/earthwork estimation. Use of computer tools to generate and analyze highway designs.

**Prerequisite:** CE 352 Minimum Grade of D

**CE 360 Water Resources Engineering I 2 cr**

The application of fluid mechanics and other science and engineering disciplines in the development of structures, projects, and systems involving water resources. Introductions to open-channel flow, closed-conduit flow, hydraulic structures, hydraulic machinery, and groundwater flow.

**Prerequisite:** EG 360 Minimum Grade of D

**Corequisite:** CE 367

**CE 367 Hydraulics Laboratory - W 1 cr**

Laboratory and field measurement of fluid and flow properties; hydraulic laboratory practice and model stimulation techniques.

**Prerequisite:** EG 360 Minimum Grade of D or CE 365 Minimum Grade of D

**Corequisite:** CE 360

**CE 370 Intro to Enviro Eng 3 cr**

Introduction to the fundamentals of water quality characterization, water pollution hazardous waste management, water and wastewater treatment, solid waste management, waste minimization and control.

**Prerequisite:** CH 132 Minimum Grade of C and MA 238 Minimum Grade of D

**Corequisite:** CE 374

**CE 374 Intro to Environmental Eng Lab 1 cr**

Introduction to specific physical, chemical, and microbiological methods of analysis common to environmental engineering; including laboratory and field measurement of water quality characteristics and interpretation of results.

**Prerequisite:** CH 132 Minimum Grade of C and MA 238 Minimum Grade of D

**Corequisite:** CE 370

**CE 384 Structural Analysis 3 cr**

Analysis of statically determinate structures such as trusses, beams, and frames including the calculation of deflections. Introduction to analysis of indeterminate structures.

**Prerequisite:** EG 315 Minimum Grade of D

**Corequisite:** CE 385

**CE 385 Structural Analysis Lab 1 cr**

Modeling and analysis of determinate and indeterminate structures. Use of state-of-the-art structural analysis software.

**Prerequisite:** EG 315 Minimum Grade of D

**Corequisite:** CE 384

**CE 410 Construction Engineering 3 cr**

An introduction to the construction industry and the role of civil engineering in construction. Construction engineering methods including preparation of cost estimates, critical path scheduling and resource allocation. Instructor permission.

**CE 412 Mgmt & Sustainability of C.I. 3 cr**

Management and sustainability of Civil infrastructure is designed to present an overview of infrastructure engineering and management systems and to use project management, decision support tools, and life cycle costing tools in connection with infrastructure planning and assessment. Students will be presented with the understanding that achieving sustainability requires the consideration to meeting present and future human needs and respecting "triple bottom line: economic, social, and environmental goals. The course also provides a review of several important design and management tools to support sustainable development and communities.

**CE 431 Civil Engineering Design I 2 cr**

Introduction to the practice of civil engineering and the engineering design process. In depth consideration of ethical issues in engineering practice. Participation in engineering design teams for project planning, proposal development, and completion of a feasibility study. Written and oral presentations of results. Senior Capstone Course.

**Prerequisite:** CE 353 Minimum Grade of D

**Corequisite:** CE 440, CE 460, CE 470, CE 480

**CE 432 Civil Engineering Design II 4 cr**

A multidisciplinary development of a project involving analysis and design in Civil Engineering. Implementation of design concepts and methodologies from conception to final design. Completion of a comprehensive design project including cost estimates, oral and written presentation of results. A senior capstone course.

**Prerequisite:** CE 431 Minimum Grade of D

**CE 440 Intro to Geotech Eng 3 cr**

An Introduction to Geotechnical Engineering designed to provide tools to analyze geomechanical and geohydraulic problems associated with the design of foundations, retaining structures, slopes and other geotechnically related designs.

**Prerequisite:** CE 340 (may be taken concurrently) Minimum Grade of D and CE 341 Minimum Grade of D

**CE 442 Foundation Engineering 3 cr**

Principles of foundation analysis, design and construction in engineering practice.

**Prerequisite:** CE 440 Minimum Grade of D

**CE 452 Transportation Geometric Design 3 cr**

This course will provide students with an understanding of the basic principles and techniques of highway design. This will include laying out potential routes, design of the alignment and intersections, and evaluation of earthwork requirements. The student should be able to understand and apply these principles to highway design problems. The student should also be able to use existing computer tools to generate and analyze designs. Upon completion, students should be prepared to work in the field of highway design.

**Prerequisite:** CE 352 Minimum Grade of D

**CE 460 Water Resources Engineering II 3 cr**

The application of hydrologic and hydraulic principles for hydrologic analysis, frequency analysis, flood routing, hydrologic simulation, urban hydrology, floodplain hydraulics, and coastal engineering.

**Prerequisite:** CE 360 Minimum Grade of D and CE 367 Minimum Grade of D

**CE 466 Coastal and Harbor Eng 3 cr**

An introduction to the principles of coastal hydraulic and sedimentary processes and the design of coastal and harbor works such as ship channels, marinas, jetties, breakwaters, groins, seawalls and beach nourishment projects.

**Prerequisite:** CE 460 (may be taken concurrently) Minimum Grade of D

**CE 470 Water-Wastewater Trtmt Design 3 cr**

Development of the principles of design for components of water supply and wastewater treatment facilities, including drinking water distribution and wastewater collection systems.

**Prerequisite:** CE 360 Minimum Grade of D and CE 370 Minimum Grade of D and CE 374 Minimum Grade of D

**Corequisite:** CE 471

**CE 471 Water-Wastewater Design Lab 1 cr**

Application of design principles and criteria to analyze, design, and evaluate water and wastewater treatment facility components, including water distribution and wastewater collection systems.

**Prerequisite:** CE 360 Minimum Grade of D and CE 370 Minimum Grade of D and CE 374 Minimum Grade of D

**Corequisite:** CE 470

**CE 474 Industrial Waste Treatment 3 cr**

Topics in Industrial Waste Treatment unit processes and their design, including those addressing wastewater treatment, air pollution control, solid waste, and hazardous management.

**Prerequisite:** CE 470 Minimum Grade of D

**CE 480 Design of Steel Structures 3 cr**

Design of Steel Trusses, Girders, Building Frames, and other Steel Structures.

**Prerequisite:** CE 384 Minimum Grade of D and CE 314 Minimum Grade of D and CE 315 Minimum Grade of D

**Corequisite:** CE 481

**CE 481 Steel Design Lab 1 cr**

Application of structural steel design methods to specific cases.

**Prerequisite:** CE 384 Minimum Grade of D and CE 314 Minimum Grade of D and CE 315 Minimum Grade of D

**Corequisite:** CE 480

**CE 482 Timber Design 3 cr**

This course will cover the design of timber structures. Design loads, structural behavior, properties and grades of wood will be covered. Design of beams, columns, diaphragms, shear walls, structural glued laminated timber, and structural connections. Instructor Approval Required

**Prerequisite:** CE 384 Minimum Grade of D and CE 385 Minimum Grade of D

**CE 485 Reinforced Concrete Design 3 cr**

Fundamentals of reinforced concrete analysis and design. Design of beams, one-way slabs, short columns, and single footings. Calculations of cracking and deflection of beams.

**Prerequisite:** CE 384 Minimum Grade of D and CE 314 Minimum Grade of D and CE 315 Minimum Grade of D

**Corequisite:** CE 486

**CE 486 Reinforced Concrete Design Lab 1 cr**

Integrated reinforced concrete design problems similar to those found in practice will be presented. Students will solve similar problems in class during the lab period.

**Prerequisite:** CE 384 Minimum Grade of D and CE 314 Minimum Grade of D and CE 315 Minimum Grade of D

**Corequisite:** CE 485

**CE 490 Special Topics 1-4 cr**

Topics of current civil engineering interest.

**CE 494 Directed Studies 1-4 cr**

Directed study, under the guidance of a faculty advisor, of a topic from the field of civil engineering not offered in a regularly scheduled course. Requires department chair permission.

**CE 499 Honors Senior Project 1-6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project, relevant to the field of Civil Engineering study, that will lead to a formal presentation at the Annual Honors Student Colloquium. The senior project will be judged and graded by three faculty, chaired by the honors mentor. This course is required for Honors recognition. A minimum of 4 credit hours is required, but a student may enroll for a maximum of 6 credit hours over two semesters. Prerequisites: Completion of the most advanced required course in the subdiscipline of the project (CE 440, CE 366, CE 470, or CE 384) and completion of an approved project prospectus.

**Prerequisite:** CE 352 Minimum Grade of C or CE 366 Minimum Grade of D or CE 384 Minimum Grade of C or CE 443 Minimum Grade of C or CE 470 Minimum Grade of C

**CE 503 Intro to Coastal Engineering 3 cr**

This graduate course provides students with an introduction to the coastal design environment. The goal of this course is to orient civil engineers, or students from related degree programs, to fundamental coastal engineering concepts. These concepts are important as they make the practice of civil engineering unique due to the complex tide, wave, and sediment characteristics found along the coast. These coastal systems are dynamic, ecologically sensitive, critical to the nation's economy, and are highly vulnerable to storms and the impacts of climate change.

**CE 510 Construction Engineering 3 cr**

An introduction to the construction industry and the role of civil engineering in construction. Construction engineering methods including preparation of cost estimates, critical path scheduling and resource allocation. Instructor permission required.

**CE 512 Mgmt & Sustainability of Infr 3 cr**

This course is designed to present an overview of infrastructure systems and how to manage and maintain these systems. Project management, decision support tools, and life cycle costing tools will be presented, in connection with infrastructure planning and assessment. Infrastructure sustainability will also be addressed, particularly considering the "triple bottom line" of economic, social, and environmental goals. The course also provides a review of several important design and management tools to support sustainable development and communities. A course project is required.

**CE 540 Advanced Soil Mechanics 3 cr**

Shearing strength and deformation behavior of soils with applications to retaining structures, slopes and bearing capacity. Behavior of cohesionless soils and cohesive soils under drained and undrained conditions. Permeability, steady state flow and effective stress in soils. Consolidation theory.

**Prerequisite:** CE 440 Minimum Grade of C

**CE 542 Foundation Engineering 3 cr**

This course is to provide advanced knowledge of selected geotechnical principals for analysis, design and construction of a variety of foundations systems. This course is dually listed with an equivalent 400 level course(CE 442).

**Prerequisite:** CE 440 Minimum Grade of C

**CE 547 Groundwater 3 cr**

Principals of fluid flow through porous media, well hydraulics. Ground water contamination, including principals that govern fate, transport, and remediation.

**Prerequisite:** CE 340 Minimum Grade of C and CE 470 Minimum Grade of C

**CE 551 Traffic Engineering 3 cr**

This course will focus on traffic flow parameters and their influence on roadway traffic conditions, with emphasis on traffic data collection, traffic safety analysis, roadway markings, traffic signs, traffic signal timing and signal capacity analysis, and traffic management systems.

**Prerequisite:** CE 352 Minimum Grade of C

**CE 552 Trans. Geometric Design 3 cr**

This course will provide students with an understanding of the basic principles and techniques of highway design. This will include laying out potential routes, design of the alignment and intersections, and evaluation of earthwork requirements. The student should be able to understand and apply these principles to highway design problems. The student should also be able to use existing computer tools to generate and analyze designs. Upon completion, students should be prepared to work in the field of highway design.

**Prerequisite:** CE 352 Minimum Grade of C

**CE 553 Transportation Systems Eval 3 cr**

This course will focus on concepts and principles of transportation economic analysis, transportation costs and benefits, user and nonuser consequences, methods of evaluation of plans and projects, environmental impact assessments, and transportation programming and management. Requires Instructor Permission.

**CE 560 Coastal Hydrodynamics 3 cr**

Theory and analysis of advanced coastal and estuarine hydrodynamics. Potential topics to be covered include: wave mechanics; tidal dynamics; coastal and estuarine circulation; and transport and mixing in coastal waters.

**Prerequisite:** CE 501 Minimum Grade of C

**CE 563 Hydrodynamic Modeling 3 cr**

Theory and application of numerical models to coastal hydrodynamics. Potential topics to be covered include: overview of numerical simulation techniques; wave transformation processes; engineering wave models; principles of circulation; and advanced circulation models.

**Prerequisite:** CE 501 Minimum Grade of C

**CE 566 Coastal and Harbor Engineering 3 cr**

Advanced principles of coastal hydraulic and sedimentary processes and the design of coastal and harbor works such as ship channels, marina, jetties, breakwaters, groins, seawalls, and beach nourishment projects. This course is dually listed with an equivalent 400 level course (CE 466).

**Prerequisite:** CE 460 Minimum Grade of C and CE 501 Minimum Grade of C

**CE 571 Biological Wastewater Treatment 3 cr**

Theory, analysis and design criteria of biological treatment systems for municipal and industrial wastewaters, including suspended and attached growth processes in both the aerobic and anaerobic environments.

**Prerequisite:** CE 470 Minimum Grade of C

**CE 572 Physical Wastewater Treatment 3 cr**

Advanced theory and applications in physical and chemical wastewater treatment. Topics covered include mass balance; reactor design, modeling, and analysis; filtration; mixing and flocculation; flotation; dissolved oxygen transfer optimization; chemical treatment of nutrient loads; disinfection; and residuals management.

**Prerequisite:** CE 470 Minimum Grade of C

**CE 574 Industrial Waste Treatment 3 cr**

Topics in Industrial Waste Treatment unit processes and their design, including those addressing waste water treatment, air pollution, solid waste, and hazardous waste management. This course is dually listed with an equivalent 400 level course (CE 474). Credit for both CE 474 and CE 574 is not permitted.

**Prerequisite:** CE 470 Minimum Grade of C

**CE 579 Fundamentals Environmental Eng 3 cr**

Fundamentals of water quality characterization, water pollution, hazardous waste management, water and wastewater treatment, solid waste management, and waste minimization and control. This course includes a comprehensive project in addition to the lecture class. Note: This course is a core course for MS degree students in the Environmental Toxicology Program and not intended for Engineering Majors. Instructor Permission. (This course is dual listed with CE 370.)

**Prerequisite:** (CH 116 Minimum Grade of C or CH 132 Minimum Grade of C)

**CE 580 Steel Design 3 cr**

Design of steel trusses, girders, building frames, and other steel structures. This course is dually listed with an equivalent 400 level course (CE 480).

**Prerequisite:** CE 384 Minimum Grade of C or CE 385 Minimum Grade of C

**Corequisite:** CE 581

**CE 581 Steel Design Lab 1 cr**

Application of structural steel design methods to specific cases. This course is dually listed with an equivalent 400 level course (CE 481).

**Prerequisite:** CE 384 Minimum Grade of C and CE 385 Minimum Grade of C

**Corequisite:** CE 580

**CE 582 Timber Design 3 cr**

This course will cover the design of timber structures. Design loads, structural behavior, properties and grades of wood will be covered. Design of beams, columns, diaphragms, shearwalls, structural glued laminated timber, and structural connections. This course is dually listed with an equivalent 400 level course (CE 482). Instructor Approval Required.

**CE 583 Advanced Steel Design 3 cr**

This course covers the design of built-up members, composite beams, columns and floors. Design of advanced bolted and welded connections will also be covered. Students will use state-of-the-art software to model and design complex steel structures.

**Prerequisite:** CE 480 Minimum Grade of C or CE 481 Minimum Grade of C

**CE 584 Advanced Structural Analysis 3 cr**

Students will be introduced to the analysis of indeterminate structures using classical and matrix methods. Students will also be introduced to advanced structural modeling techniques using state-of-the-art software.

**Prerequisite:** CE 384 Minimum Grade of C and CE 385 Minimum Grade of C

**CE 585 Concrete Design 3 cr**

Fundamentals of reinforced concrete analysis and design. Design of beams, one-way slabs, short columns, and single footings. Calculations of cracking and deflection of beams. This course is dually listed with an equivalent 400 level course (CE 485).

**Prerequisite:** CE 384 Minimum Grade of C or CE 385 Minimum Grade of C

**Corequisite:** CE 586

**CE 586 Concrete Design Lab 1 cr**

Integrated reinforced concrete design problems similar to those found in practice will be presented. Students will solve similar problems in class during the lab period. This course is dually listed with an equivalent 400 level course (CE 486).

**Prerequisite:** CE 384 Minimum Grade of C and CE 385 Minimum Grade of C

**Corequisite:** CE 585

**CE 587 Advanced Concrete Design 3 cr**

Students will be introduced to the analysis and design of reinforced concrete footings, retaining walls, two-way floor systems, long columns, beams subjected to torsion and deep beams.

**Prerequisite:** CE 485 Minimum Grade of C and CE 486 Minimum Grade of C

**CE 588 Prestressed Concrete Design 3 cr**

Students will be introduced to the concepts of prestressing, loss of prestress, design of prestressed beams, columns and slabs.

**Prerequisite:** CE 485 Minimum Grade of C and CE 486 Minimum Grade of C

**CE 590 Special Topics - 1-4 cr**

Topics of current civil engineering interest.

**CE 592 Directed Independent Study - 1-3 cr**

Directed study, under the guidance of a faculty advisor, of a topic from the field of Civil Engineering not offered in a regularly scheduled course. Requires Instructor Permission.

**CE 594 Projects in Civil Engineering 1-3 cr**

May be repeated for credit. Requires approved proposal and consent of director of engineering graduate studies.

**CE 599 Thesis 1-6 cr**

Thesis research. May be taken more than once. Requires approved prospectus.

## Classics (CLA) (CLA)

**CLA 103 Art History I 3 cr**

A survey of art and architecture of Europe and the Near East from the prehistoric to the end of the Gothic era. Identical with ARH 103. Credit cannot be received for both CLA 103 and ARH 103. Core Course.

**Cross-Listed:** ARH 103

**CLA 105 Encounter with the Humanities 3 cr**

Introduction to the various disciplines within the humanities with emphasis on the role each plays in a liberal arts education. Identical with AIS 105. Credit cannot be received for both CLA 105 and AIS 105. Core Course.

**Cross-Listed:** AIS 105

**CLA 110 Intro Anc Greek Roman Culture 3 cr**

A survey of the history, literature, philosophy, religion, art architecture, sociology, and political institutions of the Greek and Roman world with readings in translation from major Greek and Latin authors.

**CLA 240 Western Philosophy: Classical 3 cr**

Survey of classical Greek philosophy. The philosophers surveyed may include Presocratic philosophers, Socrates, Plato, Aristotle, and Hellenistic philosophers. Fulfills the General Education Requirement. Identical with CLA 240. Credit cannot be received for both PHL 240 and CLA 240.

**Cross-Listed:** PHL 240

**CLA 290 Sp Top - 3 cr**

Different figures, periods or topics of significance in Classics will be studied as announced. May be repeated, when content varies, for a total of six hours.

**CLA 304 Ancient Greek Art Architecture 3 cr**

Architecture, sculpture, and painting in Ancient Greece and the expansion and influence of Greek culture in the Ancient World.

**Prerequisite:** ARH 103 Minimum Grade of C or CLA 110 Minimum Grade of C

**Cross-Listed:** ARH 304

**CLA 306 Roman Art 3 cr**

Roman Art: Architecture, sculpture, and painting in Ancient Rome and its empire.

**Prerequisite:** (ARH 103 Minimum Grade of C or CLA 103 Minimum Grade of C) or CLA 110 Minimum Grade of C

**Cross-Listed:** ARH 306

**CLA 310 Classical Mythology 3 cr**

Through the disciplines of English and Philosophy, this course will provide an introduction to myths and to the literature that recounts the myths and to the literature that recounts the myths, legends, and folktales of ancient Greece and Rome. This course will also look at how different writers treat the material and why their treatments vary. Cross-listed with PHL 310, REL 310, and EH 310. Credit cannot be received for both CLA 310 and either PHL 310 or REL 310 or EH 310.

**Prerequisite:** (A01 27 or S01 610 or USEH P or EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** EH 310, PHL 310, REL 310

**CLA 311 Classical Political Thought 3 cr**

The course examines the central themes of classical Western political philosophy through the reading and discussing of the primary works of such thinkers as Plato, Aristotle, Augustine, and Aquinas. (Cross-listed as PHL 311 and PSC 311).

**Cross-Listed:** PHL 311, PSC 311

**CLA 390 Sp Top - 3 cr**

Different figures, periods or topics of significance in Classics will be studied as announced. May be repeated, when content varies, for a total of six hours.

**CLA 402 Rhetoric: Ancient and Modern 3 cr**

Readings in rhetorical theory, ancient and modern, are applied in specific writing assignments which encourage students to adopt a point of view and address a specific audience.

**Prerequisite:** EH 101 Minimum Grade of C and EH 102 Minimum Grade of C

**Cross-Listed:** ARG 402, EH 402

**CLA 454 Ancient Greek Culture 3 cr**

Through the disciplines of History and Philosophy, ancient Greek culture, including its history, literature, philosophy, art and architecture will be examined.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**CLA 455 Ancient Roman Culture 3 cr**

Through the disciplines of History and Philosophy, ancient Roman culture, including its history, literature, philosophy, art and architecture will be examined.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**CLA 492 Seminar - 3 cr**

An in-depth investigation of figures, periods or topics in Classics for advanced undergraduates. May be repeated, when content varies, for a total of six hours.

**CLA 494 Directed Studies 1-3 cr**

Directed research in Classics under the guidance of a member of the department. Credit according to the magnitude of the individual project. May be repeated, if content varies, for a total of three hours. Prerequisites: Junior or senior standing and approval of directing professor and department chair.

**CLA 499 Honors Thesis -W 3-6 cr**

Extended research paper prepared under the direction of thesis advisor plus two-person committee selected by advisor in consultation with student. Prerequisites: The student must have developed a proposal for the thesis in consultation with the advisor, and received permission for the work from the committee. In addition, the student must be a senior major or minor, have completed the common core, and have at least 3.3 GPA in the Classics concentration of the Philosophy major. Credit for this course is only given as an addition to the hours required for the major.

**Prerequisite:** (PHL 120 and PHL 240 (may be taken concurrently) and PHL 245 and PHL 321 and PHL 461 and PHL 310) or (REL 310 or CLA 310)

**CLA 594 Directed Studies 3 cr**

Directed research in philosophy under the guidance of a member of the department. May be repeated, if content varies, for a total of six hours. Prerequisite: Graduate Student in Department conferring a Graduate Degree (hence not open to Philosophy majors in any Concentration in Philosophy.)

**Cross-Listed:** PHL 594, REL 594

## Clinical Counseling Psy (CCP) (CCP)

**CCP 742 Advanced Psych Assessment 3 cr**

This course will offer an in-depth understanding of the assessment of complex cases, which includes both mental illness and physical disorders, as well as the impact of complex social issues, such as culture, ethnicity, and economic issues. The course covers topics pertaining to adults and children. The emphasis will be on the integration of nomothetic and empirical perspectives with idiographic approaches in an evidence-based assessment model. Topics covered will be assessing special populations (e.g., severely mentally ill, trauma, forensic, parents), therapeutic assessment, person-centered report writing, providing feedback, theoretical and scientific issues in assessment, and current controversies.

**Prerequisite:** CCP 706 (may be taken concurrently) Minimum Grade of B

**CCP 745 Teaching of Psychology 3 cr**

This course will offer an in-depth understanding of the teaching of psychology at the post secondary level.

**CCP 750 Applied Psychophys Biofeedback 3 cr**

This course will survey theory, research, and applications of psychophysiology and biofeedback in the prevention and treatment of illness and the enhancement and maintenance of health.

**Prerequisite:** CCP 706 Minimum Grade of B

**CCP 752 Clinical Neuropsychology 3 cr**

This course will offer an in-depth understanding of the different theories of brain function in humans. Assessment methods for detecting abnormal functioning and the localization of functioning by behavioral methods will also be examined. The possible etiologies of abnormal functioning as well as their treatment will be reviewed.

**Prerequisite:** CCP 706 Minimum Grade of B and CCP 742 Minimum Grade of B

**CCP 756 Practicum Therapy 1-3 cr**

Supervised experience with child and/or adult populations; includes case conference and seminars. This course may include supervised placement in an applied setting.

**Prerequisite:** CCP 706 (may be taken concurrently) Minimum Grade of B or PSY 506 (may be taken concurrently) Minimum Grade of B

**CCP 758 Psychology Resilience & Trauma 3 cr**

This course will offer an in-depth understanding of resilience, as it manifests across the lifespan in response to various types of traumas (natural vs. manmade; community-wide versus family- or individually-specific). Prevention and reduction of psychological impact related to trauma and the development, enhancement, and maintenance of resilience in the face of adversity will be emphasized.

**Prerequisite:** CCP 706 (may be taken concurrently) Minimum Grade of B

**CCP 759 Group and Systems Theory 3 cr**

This course will survey group and systems theories and the interventions that have been derived from this perspective. The dynamics of group processes will be delineated.

**Prerequisite:** CCP 706 Minimum Grade of B

**CCP 763 Prevention Treat Public Health 3 cr**

This course will survey the basic theory and techniques underlying the study of public health problems. Research related to the prevention and treatment of several specific public health problems (e.g. suicide, HIV/AIDS, youth violence) will be covered in depth.

**CCP 764 Consult Psych Program Develop 3 cr**

This course provides an overview of approaches to psychological consulting and program development in individual, small group and large organization contexts. Specific aspects of psychological consulting in mental health, business, and educational settings will be reviewed

**CCP 766 Clinical Supervision 3 cr**

This course provides an overview of the various theoretical approaches to supervision of professional psychological services, particularly psychotherapy services. In addition, relevant research findings in the area of supervision are reviewed. Students also have the opportunity to receive feedback on audio/video tapes of their supervision sessions with a junior graduate student clinician

**Prerequisite:** CCP 706 Minimum Grade of B and CCP 756 Minimum Grade of S

**CCP 772 Child Family Psychopath Interv 3 cr**

This course provides an overview of current theory and research findings relevant to psychological disorders typically occurring in childhood and adolescence. In addition, evidence-based interventions for various childhood disorders are reviewed. A focus will be upon an ecological and developmental view of childhood psychopathology that integrates family, community, and societal forces in a comprehensive view of such disorders.

**Prerequisite:** CCP 706 Minimum Grade of B

**CCP 777 Seminar on Suicide 3 cr**

This graduate seminar will examine the topic of suicide and self-harm in depth. Theoretical and empirical perspectives from sociology, psychology, and genetics/neuroscience will be considered. Additionally, we will examine suicide as both a clinical phenomenon and as a public health issue. Accordingly, cultural, political, and policy issues related to suicide will be explored alongside risk factors, mental health, and individual patient-level factors. This course will utilize focused readings, group discussions, and writing assignments to achieve the course objectives.

**CCP 780 Applied Health Psychology 3 cr**

This course will survey theory, research, and applications of health psychology in the prevention and treatment of illness and the enhancement and maintenance of health.

**Prerequisite:** CCP 706 (may be taken concurrently) Minimum Grade of B

**CCP 782 Advanced Practicum 1-3 cr**

Supervised experience with child and/or adult populations in a variety of settings; includes case conferences and advanced psychological assessment and interventions and supervision of lower level graduate students.

**Prerequisite:** CCP 756 Minimum Grade of B

**CCP 790 Special Topics- 3 cr**

Selected topics in psychology and may be repeated or credit when course varies.

**CCP 795 Multicultural Counseling 3 cr**

CCP 795 Multicultural Counseling in Professional Psychology. Provides a foundation in multicultural awareness, knowledge, and skills from a clinical and counseling psychology perspective.

**CCP 796 Directed Studies 1-3 cr**

Directed study and research.

**CCP 797 Psychology Internship 3 cr**

The predoctoral internship is a supervised learning experience in a work setting similar to that in which students will eventually be employed. The internship provides students with an opportunity to apply the theories and concepts learned during their graduate program. Not more than 18 hours may be taken.

**CCP 799 Dissertation Research 1-6 cr**

Completion and oral defense of a dissertation based upon original research. May be repeated for up to 12 hours credit. A minimum of nine hours is required to meet degree requirements.

## Clinical Lab Sciences (CLS) (CLS)

**CLS 101 Intro to Clinical Lab Sciences 1 cr**

This course presents an overview of the CLS profession, along with career options and job opportunities for certified clinical laboratory scientists. The course also includes an introduction to the subspecialties in CLS, along with strategies for progressing through the B.S. degree program at USA. Taught Spring Semester.

**CLS 290 Clinical Biochemistry 3 cr**

This course presents the chemistry of human metabolism and its relationship to disease, structure and function of carbohydrates, lipids, proteins, enzymes, and nucleic acids. Taught Spring semester.

**Prerequisite:** CH 201

**Prerequisite:** CH 201 (may be taken concurrently) Minimum Grade of D

**CLS 310 Clinical Genetics 3 cr**

Presents an integrated, systems-based approach in identifying clinically significant bacterial pathogens affecting either usually healthy or immunocompromised patients. Laboratory setting supplies basic and advanced bacterial identification methods. Taught Summer semester.

**Prerequisite:** CLS 290 or (BMD 321 and BMD 322). Special fee.

**Prerequisite:** CLS 290 Minimum Grade of D or (BMD 321 Minimum Grade of D and BMD 322 Minimum Grade of D)

**CLS 320 Hematology I 4 cr**

This course presents an introduction to the hematopoietic system, the development of blood cells, normal cell morphology and blood dyscrasias. It is also a study of hemostasis theory and evaluation of coagulation disorders. The laboratory component focuses on normal cell morphology and performance of coagulation testing procedures. Taught Summer semester. Special fee.

**CLS 325 Clinical Laboratory Methods 2 cr**

This course is an introduction to basic techniques used in the collection and testing of clinical laboratory specimens. It also includes mathematics calculations commonly used in clinical and biological laboratories. Taught Summer semester. **Prerequisite:** MA 112 and ST 210. Special fee.

**Prerequisite:** (MA 112 Minimum Grade of D or MA 171 Minimum Grade of D) and (ST 175 Minimum Grade of D or ST 210 Minimum Grade of D)

**CLS 330 Serology 2 cr**

This course is a study of theory and basic serological techniques used in the evaluation of infectious and autoimmune connective tissue diseases. The course also includes a study of theory, laboratory techniques, and evaluation of cerebrospinal, amniotic, synovial, and serous fluids. Taught Summer semester. **Prerequisite:** BMD 401. Special fee.

**Prerequisite:** (BMD 370 Minimum Grade of D or BMD 401 Minimum Grade of D)

**CLS 341 Clin Chem & Instrumentation I 4 cr**

This is the first of a two course sequence that studies analytical methods used in the clinical laboratory to measure substances found in blood and other body fluids, and the application of those measurements in diagnosing, monitoring, and treating disease. The laboratory will focus on basic clinical chemistry techniques. Taught Summer semester. Special fee.

**CLS 350 Clin Parasitology and Mycology 3 cr**

Provides essential knowledge of medically important parasites, mycobacteria, fungi, and viruses. Microorganism characteristics, life cycle, pathophysiology, distribution, and control are all covered. Laboratory sections stress microorganism isolation and identification. Taught Fall semester. Special fee.

**CLS 360 Diagnostic Microbiology I 4 cr**

Introduces medically important bacteria and their relationship to human disease. Emphasis is placed on host-bacteria interactions, metabolism, taxonomy, antimicrobial therapy, and control mechanisms. Laboratory segment focuses upon bacterial cultivation and isolation techniques. Taught Spring semester. Special fee.

**CLS 390 Sp Top- 1-4 cr**

Topics of current interest in the clinical laboratory sciences. May be taken more than once if course subject and content varies. Requires permission of Department Chair.

**CLS 394 Directed Study 2-4 cr**

Laboratory research conducted in conjunction with faculty-directed projects.

**CLS 410 Diagnostic Microbiology II 5 cr**

Presents an integrated, systems-based approach in identifying clinically significant bacterial pathogens affecting either usually healthy or immunocompromised patients. Laboratory setting supplies basic and advanced bacterial identification methods. Taught Summer semester.

**Prerequisite:** CLS 360 or BMD 402. Special fee.

**Prerequisite:** CLS 360 Minimum Grade of D or (BMD 380 Minimum Grade of D or BMD 402 Minimum Grade of D)

**CLS 420 Hematology II 4 cr**

This is an advanced study and evaluation of the hematopoietic system and blood cells including morphology in disease states, such as blood dyscrasias, leukemias, and lymphomas. Taught Fall semester. Special fee.

**CLS 431 Clin Chem & Instrumentation II 4 cr**

This is the second of a two course sequence that studies analytical methods used in the clinical laboratory to measure substances found in blood and other body fluids, and the application of these measurements in diagnosing, monitoring, and treating disease. The laboratory will focus on automated clinical chemistry instrumentation and molecular diagnostic techniques. Taught Fall semester. Special fee.

**CLS 432 Immunohematology II 5 cr**

This course is the study of immunohematological theory and techniques associated with blood banking and transfusion practice. It includes a study of blood components and derivatives, blood group systems, testing and evaluation of compatibility, and problem solving techniques. Taught Fall semester. Special fee.

**CLS 435 Intro to Lab Management - W 2 cr**

This course is a study of principles and practices of laboratory decision making, legal and regulatory compliance, fiscal planning, staffing, leadership/motivation, and quality assurance. Educational principles will also be covered. Students will complete the online portion of the course in spring semester and present management project in the following semester. Taught Spring semester.

**CLS 436 Introduction to Research-W 2 cr**

Basic concepts of scientific inquiry are presented to develop an appreciation for research as an element for contributing to the body of knowledge in the clinical laboratory sciences. Taught Fall semester.

**CLS 440 Hematology Practicum 3 cr**

Supervised clinical practice in hospital hematology and hemostasis laboratories. Taught Spring semester.

**CLS 445 Clinical Microbiology Practic 3 cr**

Supervised clinical practice in hospital transfusion service. Taught Spring Semester.

**CLS 452 Immunohematology Practicum 3 cr**

Supervised clinical practice in hospital transfusion service. Taught Spring semester.

**CLS 453 Clinical Chemistry Practicum 3 cr**

Supervised clinical practice in hospital chemistry laboratory. Taught Spring semester.

**CLS 465 Senior Project - W 2 cr**

Studies in case histories and clinical correlations. Requires a formal paper and presentation. Requires special permission.

**CLS 491 Field Pract Hemat-Hemost 3 cr**

Specialized practicum for students with extensive training and experience in hematology and hemostasis.

**CLS 492 Field Pract Immunology 1 cr**

Specialized practicum for students with extensive training and experience in immunology/immunochemistry.

**CLS 493 Field Pract Clin Microbiology 4 cr**

Specialized practicum for students with extensive training and experience in clinical microbiology.

**CLS 494 Field Pract Immunohem 3 cr**

Specialized practicum for students with extensive training and experience in blood bank.

**CLS 495 Clinical Correlation & Review 3 cr**

This is a capstone course covering advanced methods and pertinent case studies with emphasis on intralaboratory interpretation of patient data. Taught Summer semester.

**CLS 499 Senior Honors Project - H - W 3-6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project relevant to the field of Clinical Laboratory Sciences study that will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty members chaired by the honors mentor. This course is required for Honors recognition and may be repeated for up to 6 credit hours. Requires permission of department chair and completion of an approved project prospectus.

## Clinical Skills - MD (CLN)

**CLN 101 Clinical Skills 0 cr****CLN 201 Clinical Skills II 0 cr**

This course builds on the Clinical Skills 1 course to continue to develop and hone students' ability to draw on the medical knowledge attained in their modules and apply it to clinical patient care. Learners will continue to add to their knowledge of various components of the physical examination, and they will develop skills in the arena of clinical reasoning. Emphasis in this course will be on utilizing information gathered from history and physical examination to develop a prioritized differential diagnosis and propose a diagnostic workup and treatment plan. Required experiences in CLINIC will be in specialty settings, providing students with more real-world practice for their clinical skills, as well as an opportunity for early career exploration. A required assignment in Evidence Based Medicine is also a part of the CLINIC experience. The course grade consists of scores attained on OSCEs (observed structured clinical examinations), CBEs (competency-based evaluation), and the required CLINIC assignments.

## Co-op (COE) (COE)

**COE 100 COOP Alternating I 0 cr**

Work assignment as per program.

**COE 101 COOP Alternating II 0 cr**

Work assignment as per program.

**Prerequisite:** COE 100 Minimum Grade of S

**COE 110 COOP Parallel I 0 cr**

Work assignment as per program.

**COE 111 COOP Parallel II 0 cr**

Work assignment as per program.

**Prerequisite:** COE 110 Minimum Grade of S

**COE 120 Internship I 0 cr**

Work assignment as per program.

**COE 121 Internship II 0 cr**

Work assignment as per program.

**Prerequisite:** COE 120 Minimum Grade of S

**COE 200 COOP Alternating III 0 cr**

Work assignment as per program

**Prerequisite:** COE 101 Minimum Grade of S

**COE 201 COOP Alternating IV 0 cr**

Work assignment as per program.

**Prerequisite:** COE 200 Minimum Grade of S

**COE 210 COOP Parallel III 0 cr**

Work assignment as per program.

**Prerequisite:** COE 111 Minimum Grade of S

**COE 211 COOP Parallel IV 0 cr**

Work assignment as per program.

**Prerequisite:** COE 210 Minimum Grade of S

**COE 220 Internship III 0 cr**

Work assignment as per program.

**Prerequisite:** COE 121 Minimum Grade of S

**COE 221 Internship IV 0 cr**

Work assignment as per program.

**Prerequisite:** COE 220 Minimum Grade of S

**COE 300 COOP Alternating V 0 cr**

Work assignment as per program.

**Prerequisite:** COE 201 Minimum Grade of S

**COE 301 COOP Alternating VI 0 cr**

Work assignment as per program.

**Prerequisite:** COE 300 Minimum Grade of S

**COE 310 COOP Parallel V 0 cr**

Work assignment as per program.

**Prerequisite:** COE 211 Minimum Grade of S

**COE 311 COOP Parallel VI 0 cr**

Work assignment as per program.

**Prerequisite:** COE 310 Minimum Grade of S

**COE 400 COOP Alternating VII 0 cr**

Work assignment as per program.

**Prerequisite:** COE 301 Minimum Grade of S

**COE 401 COOP Alternating VIII 0 cr**

Work assignment as per program.

**Prerequisite:** COE 400 Minimum Grade of S

**COE 410 COOP Parallel VII 0 cr**

Work assignment as per program.

**Prerequisite:** COE 311 Minimum Grade of S

**COE 411 COOP Parallel VIII 0 cr**

Work assignment as per program.

**Prerequisite:** COE 410 Minimum Grade of S

**COE 500 COOP Alternating I 0 cr**

Work assignment as per program

**COE 501 COOP Alternating II 0 cr**

Work assignment as per program

**Prerequisite:** COE 500 Minimum Grade of S

**COE 510 COOP Parallel I 0 cr**

Work assignment as per program

**COE 511 COOP Parallel II 0 cr**

Work assignment as per program

**Prerequisite:** COE 510 Minimum Grade of S

**COE 600 COOP Alternating III 0 cr**

Work assignment as per program.

**Prerequisite:** COE 501 Minimum Grade of S

**COE 601 COOP Alternating IV 0 cr**

Work assignment as per program.

**Prerequisite:** COE 600 Minimum Grade of S

**COE 610 COOP Parallel III 0 cr**

Work assignment as per program.

**Prerequisite:** COE 511 Minimum Grade of S

**COE 611 COOP Parallel IV 0 cr**

Work assignment as per program.

**Prerequisite:** COE 610 Minimum Grade of S

## College of Arts/Sciences (CAS) (CAS)

**CAS 100 First Yr Exp - 2 cr**

A course for first-year students majoring in the College of Arts & Sciences that assists with maximizing the student's potential to achieve academic success and to adjust responsibly to the individual and interpersonal challenges presented by college life. Taught in small groups, the course provides an introduction to the nature of higher education and a general orientation to the functions and resources of the University.

**CAS 190 Special Topics - 1-3 cr**

This variable content course deals with selected topics from any of the disciplines in the College of Arts and Sciences. Topics will focus on current and relevant issues and may contain a service-learning component. The course may be repeated for credit when the topic varies for a maximum of six credit hours.

## Comm Mental Health Nurs (CMN) (CMN)

**CMN 350 Psy-Mental Health Nsg 2 cr**

Analysis of theories, concepts, evidence, issues and trends from contemporary nursing science and related disciplines in promoting the health of individuals and families experiencing psychiatric-mental health concerns. The emphasis is on the use of the nursing process and other systematic approaches to plan, implement, and evaluate health promotion and maintenance activities, illness care, and rehabilitation with individuals and families experiencing psychiatric-mental health concerns in a variety of acute and community settings.

**Prerequisite:** (NU 311 Minimum Grade of C and NU 327 Minimum Grade of C and HSC 342 Minimum Grade of C and NU 325 Minimum Grade of C and HSC 343 (may be taken concurrently) Minimum Grade of C)

**Corequisite:** CMN 351

**CMN 351 Psy-Mental Health Nsg Clin 2 cr**

The purpose of this course is to provide students the opportunity to analyze theories, concepts, research, and issues and trends in psychiatric-mental health nursing. The focus of the course is on internal and external factors affecting the mental health of children, adolescents, adults, elderly, and families. The emphasis is on the role of the professional nurse in health promotion and maintenance, illness care, and rehabilitation of children, adolescents, adults, elderly, and families experiencing psychiatric-mental health concerns.

**Prerequisite:** (NU 311 Minimum Grade of C and NU 325 Minimum Grade of C and NU 327 Minimum Grade of C and HSC 342 Minimum Grade of C and HSC 343 (may be taken concurrently) Minimum Grade of C)

**Corequisite:** CMN 350

**CMN 351B Psychiatric Mental Health Nursing Clinical 2 cr**

The purpose of this course is to provide students the opportunity to analyze theories, concepts, research, and issues and trends in psychiatric-mental health nursing. The focus of the course is on internal and external factors affecting the mental health of children, adolescents, adults, elderly, and families. The emphasis is on the role of the professional nurse in health promotion and maintenance, illness care, and rehabilitation of children, adolescents, adults, elderly, and families experiencing psychiatric-mental health concerns.

**CMN 420 Community Health Nursing 3 cr**

The purpose of this course is to provide students an opportunity to explore community health nursing concepts and principles from a population health care perspective. The changing needs of an increasingly culturally diverse population within the social context of the community systems are examined along with the environmental, economical, political, and legal constraints to the health of systems.

**Prerequisite:** (CMN 350 Minimum Grade of C and CMN 351 Minimum Grade of C and MCN 352 Minimum Grade of C and MCN 353 Minimum Grade of C and MCN 354 Minimum Grade of C and MCN 355 Minimum Grade of C)

**Corequisite:** CMN 421

**CMN 420B Community Health Nursing 3 cr**

The purpose of this course is to provide students an opportunity to explore community health nursing concepts and principles from a population health care perspective. The changing needs of an increasingly culturally diverse population within the social context of the community systems are examined along with the environmental, economical, political, and legal constraints to the health of systems.

**CMN 421 Community Health Nurs Clinical 1 cr**

The purpose of this course is to provide students the opportunity to complete a clinical project integrating community health nursing concepts and principles from an aggregate health care perspective. The changing needs of an increasingly culturally diverse population within the social context of the community are examined. Course content includes environmental, economical, political, and legal constraints to the health of aggregates.

**Prerequisite:** (CMN 350 Minimum Grade of C and CMN 351 Minimum Grade of C and MCN 352 Minimum Grade of C and MCN 353 Minimum Grade of C and MCN 354 Minimum Grade of C and MCN 355 Minimum Grade of C)

**Corequisite:** CMN 420

**CMN 421B Community Health Nursing Clinical 1 cr**

The purpose of this course is to provide students the opportunity to complete a clinical project integrating community health nursing concepts and principles from an aggregate health care perspective. The changing needs of an increasingly culturally diverse population within the social context of the community are examined. Course content includes environmental, economical, political, and legal constraints to the health of aggregates.

**CMN 520 CMN MSN Incomplete Extension 1-5 cr****CMN 548 Introduction to PMHNP 3 cr**

The purpose of this first didactic course is to prepare the Psychiatric-Mental Health Nurse Practitioner students to assess, diagnose, and manage selected health care needs of individuals across the lifespan. Emphasis is placed on synthesis and application of nursing and related theories and scientific knowledge to the development of differential/nursing diagnoses as a basis for health promotion and management.

**Prerequisite:** NU 545 (may be taken concurrently) Minimum Grade of C and NU 518 (may be taken concurrently) Minimum Grade of C

**Corequisite:** CMN 551

**CMN 550 PMHNP Clinical Progression 1-4 cr**

The purpose of this progression course is to provide opportunities for Psychiatric-Mental Health Nurse Practitioner students to apply concepts from PMHNP I in primary and acute care mental health settings with individuals and their families experiencing psychiatric-mental health concerns across the lifespan.

**CMN 551 HPDP & Issues for the PMHNP 2 cr**

This didactic course prepares the Psychiatric-Mental Health Nurse Practitioner student to identify and implement appropriate and culturally sensitive health promotion and disease prevention strategies of individuals and families across the lifespan in primary care settings. Emphasis is placed on health promotion/disease prevention with strategic planning at the primary, secondary, and tertiary levels.

**Corequisite:** CMN 548

**CMN 552 PMHNP I 3 cr**

This didactic course prepares the Psychiatric-Mental Health Nurse Practitioner student to assess, diagnose, and manage selected health care needs of culturally diverse populations across the life span. The focus is on advanced practice nursing with individuals and families in a variety of health care settings. Emphasis is placed on wellness and the pathophysiology and epidemiology underlying acute and chronic psychiatric-mental health problems.

**Prerequisite:** CMN 548 Minimum Grade of C and NU 578 (may be taken concurrently) Minimum Grade of C

**Corequisite:** CMN 553

**CMN 553 PMHNP Practicum I 3 cr**

The purpose of this practicum course is to provide opportunities for Psychiatric-Mental Health Nurse Practitioner students to apply concepts in primary and acute care settings with individuals and their families experiencing psychiatric-mental health concerns across the lifespan.

**Prerequisite:** NU 578 Minimum Grade of C

**Corequisite:** CMN 552

**CMN 554 PMHNP II 3 cr**

The purpose of this course is to provide the Psychiatric-Mental Health Nurse Practitioner student an in-depth study of psychiatric-mental health care management of individuals and their families across the lifespan within the framework of advanced nursing. The focus is on selected acute and chronic complex psychiatric-mental health care problems. Emphasis is on the interaction among health care providers in a culturally diverse environment.

**Prerequisite:** CMN 552 Minimum Grade of C

**Corequisite:** CMN 555

**CMN 555 PMHNP Practicum II 3 cr**

The purpose of this course is to provide opportunity for the Psychiatric-Mental Health Nurse Practitioner student to practice within advanced nursing framework. The focus is on the role of the advanced practice nurse in the health care management of individuals with psychiatric-mental health concerns across the lifespan. Emphasis is on collaboration with other health care providers in a culturally diverse environment.

**Corequisite:** CMN 554

**CMN 556 PMHNP Practicum III 4 cr**

The purpose of this culminating course is to provide a preceptor and faculty facilitated experience in the Psychiatric-Mental Health Nurse Practitioner role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses.

**Prerequisite:** CMN 554 Minimum Grade of C and NU 610 (may be taken concurrently) Minimum Grade of C or NU 607 (may be taken concurrently) Minimum Grade of C or NU 608 (may be taken concurrently) Minimum Grade of C or NU 613 (may be taken concurrently) Minimum Grade of C

**Corequisite:** CMN 557

**CMN 557 PMHNP III 3 cr**

The purpose of this course is to provide a forum for the evaluation of issues and trends encountered in the Psychiatric-Mental Health Nurse Practitioner role. Emphasis is on critical analysis and management of issues by the Psychiatric-Mental Health Nurse Practitioner in an interdisciplinary health care delivery system.

**Prerequisite:** NU 607 (may be taken concurrently) Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C and NU 610 (may be taken concurrently) Minimum Grade of C and NU 613 (may be taken concurrently) Minimum Grade of C

**Corequisite:** CMN 556

**CMN 566 Family NP Clin Progression 1-9 cr**

The purpose of this practicum course is to provide opportunities for the Family Nurse Practitioner to apply concepts from previous courses and CMN 572, 574, or 577 in select clinical settings. Focus is on individuals and families in primary care settings. The emphasis is on diagnostic reasoning and decision-making/critical-thinking.

**CMN 568 Intro to Family NP 3 cr**

The purpose of this first didactic course is to prepare Advanced Family Nurse Practitioner students to assess, diagnose, and manage selected health care needs of adults and children. Emphasis is placed on synthesis and application of nursing and related theories and scientific knowledge to the development of differential/nursing diagnoses as a basis for health promotion and management.

**Prerequisite:** NU 545 (may be taken concurrently) Minimum Grade of C and NU 518 (may be taken concurrently) Minimum Grade of C

**Corequisite:** CMN 571

**CMN 571 HPDP in Family NP 2 cr**

The purpose of this didactic course is to prepare the Advanced Family Nurse Practitioner student to identify and implement appropriate and culturally competent health promotion and disease prevention strategies across the lifespan. The focus is on the advanced practice nursing of individuals and families in primary care settings. Emphasis is placed on health promotion/disease prevention with strategic planning at the primary, secondary, and tertiary levels of prevention. Prevention, early diagnosis, prompt treatment, and in-depth patient education with dysmetabolic syndrome and diabetes will be emphasized. Effective strategies for life-style behavior change will also be evaluated.

**Corequisite:** CMN 568

**CMN 572 Family NP I 3 cr**

This didactic course prepares the Advanced Family Nurse Practitioner student to assess, diagnose, and manage selected health care needs of culturally diverse populations across the lifespan. The focus is on the advanced practice nursing of individuals and families in primary care settings. Emphasis is placed on wellness and the pathophysiology and epidemiology underlying acute and chronic health problems.

**Prerequisite:** CMN 568 Minimum Grade of C and NU 578 (may be taken concurrently) Minimum Grade of C

**Corequisite:** CMN 573

**CMN 573 Family NP Pract I 3 cr**

This practicum course provides opportunities for the Advanced Family Nurse Practitioner to apply concepts in select clinical settings. Focus is on individuals and families in primary care settings. The emphasis is on culturally competent delivery of health care, diagnostic reasoning and decision making/critical thinking.

**Prerequisite:** NU 578 Minimum Grade of C

**Corequisite:** CMN 572

**CMN 574 Family NP II 3 cr**

This course provides an in-depth study of the health care management of children, adults, and families within the framework of advanced nursing. Emphasis is on the interaction among health care providers in a culturally diverse environment. The focus is on selected acute and chronic complex health problems of children, adults, and families in primary health care settings.

**Prerequisite:** CMN 572 Minimum Grade of C

**Corequisite:** CMN 575

**CMN 575 Family NP Prac II 3 cr**

This practicum course provides an opportunity for the Advanced Family Nurse Practitioner student to practice within an advanced nursing framework. The focus is on the role of the advanced practice nurse in the health care management of children, adults, and families. Emphasis is on collaboration with other health care providers in a culturally diverse environment.

**Corequisite:** CMN 574

**CMN 576 Family NP Pract III 4 cr**

The purpose of this practicum course is to provide opportunities for the Family Nurse Practitioner student to apply concepts from CMN 577 and previously required courses in select clinical settings. Focus is on individuals and families in primary care settings. The emphasis is on diagnostic reasoning and decision making/critical thinking.

**Prerequisite:** NU 607 (may be taken concurrently) Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C

**Corequisite:** CMN 577

**CMN 577 Family NP III 3 cr**

The purpose of this course is to provide a forum for the evaluation of issues and trends encountered in health care. Emphasis is on critical analysis and management of these issues by the Advanced Family Nurse Practitioner student in an interdisciplinary health care system.

**Prerequisite:** NU 607 (may be taken concurrently) Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C and NU 610 (may be taken concurrently) Minimum Grade of C and NU 613 (may be taken concurrently) Minimum Grade of C

**Corequisite:** CMN 576

**CMN 604 PMHNP PP&D 3 cr**

This course assists the Family Psych Mental Health Nurse Practitioner student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the Family Psych Mental Health Nurse Practitioner student's selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C)

**CMN 617 PMHNP Residency I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The Family Psych Nurse Practitioner student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the Nurse Practitioner DNP student will work with the primary faculty advisor to complete projects and advance their selected practice area. The Nurse Practitioner student will have access to and authority for expanded scope of practice to master the DNP competencies. Residency sites will depend upon the student's career trajectory and approval by collaborating faculty. During the residency semester, students must participate in scheduled scholarly seminars online. Clinical hours of direct practice/management is required.

**Prerequisite:** CMN 604 Minimum Grade of S and NU 615 (may be taken concurrently) Minimum Grade of C

**CMN 618 PMHNP Residency II 3 cr**

Provides students the opportunity to fully express all DNP competencies. The student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

**Prerequisite:** CMN 617 Minimum Grade of C and NU 616 (may be taken concurrently) Minimum Grade of C

**CMN 619 PMHNP Residency III 3 cr**

Final course in residency series as student continues to implement and evaluate project plan. Provides student the opportunity to fully express all DNP competencies. The student, guided by the core faculty and advisor, completes quality improvement evidence-based system's change project.

**Prerequisite:** CMN 618 Minimum Grade of C and NU 612 (may be taken concurrently) Minimum Grade of C

**CMN 643 Public Health Admin PP&D 3 cr**

This course assists the public health nursing administration DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the public health students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C)

**CMN 644 Public Health Residency I 3-6 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The public health nursing administration student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the public health nursing administration DNP student will work with the primary faculty advisor to complete projects and advance their selected practice area. The public health nursing administration student will have access to and authority for expanded scope of practice to master the DNP competencies. Residency sites will depend upon the public health nursing administration student's career trajectory and approval by collaborating faculty. During the residency semester, student must participate in scheduled scholarly seminars online. Clinical hours of direct practice/management is required.

**Prerequisite:** CMN 643 Minimum Grade of S and NU 615 (may be taken concurrently) Minimum Grade of C

**CMN 645 Public Health Residency II 3-6 cr**

Provides public health nursing administration students the opportunity to fully express all DNP competencies. The public health nursing administration student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

**Prerequisite:** CMN 644 Minimum Grade of C and NU 616 (may be taken concurrently) Minimum Grade of C

**CMN 646 Public Health Residency III 3-6 cr**

Final course in residency series, the public health nursing administration student continues to implement and evaluate project plan. Provides public health nursing administration student the opportunity to fully express all DNP competencies. The public health nursing administration student, guided by the core faculty and advisor completes quality improvement evidence-based system's change project.

**Prerequisite:** CMN 645 Minimum Grade of C and NU 612 (may be taken concurrently) Minimum Grade of C

**CMN 680 Family NP PP&D 3 cr**

This course assists the family nurse practitioner student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the family nurse practitioner students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C)

**CMN 681 Family NP Residency I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The family nurse practitioner student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the family nurse practitioner student will work with the primary faculty advisor to complete projects and advance their selected practice area. The student will have access to and authority for expanded scope of practice to master the DNP competencies. Residency sites will depend upon the family nurse practitioner student's career trajectory and approval by collaborating faculty. During the residency semester, student must participate in scheduled scholarly seminars online. A total of 180 clinical hours of direct practice/management is required.

**Prerequisite:** CMN 680 Minimum Grade of S and NU 615 (may be taken concurrently) Minimum Grade of C

**CMN 682 Family NP Residency II 3 cr**

Provides family nurse practitioner students the opportunity to fully express all DNP competencies. The family nurse practitioner student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

**Prerequisite:** CMN 681 Minimum Grade of C and NU 616 (may be taken concurrently) Minimum Grade of C

**CMN 683 Family NP Residency III 3 cr**

Final course in residency series, the family nurse practitioner student continues to implement and evaluate project plan. This course provides the family nurse practitioner student the opportunity to fully express all DNP competencies. The family nurse practitioner student, guided by the core faculty and advisor completes quality improvement evidence-based system's change project.

**Prerequisite:** CMN 682 Minimum Grade of C and NU 612 (may be taken concurrently) Minimum Grade of C

**CMN 692 CMN DNP Incomplete Extension 3 cr**

Students will register for this course to complete residency course work under supervision of faculty. Students must remain continuously enrolled until all residency requirements are completed.

## Communication (CA) (CA)

**CA 100 Intro to Communication 3 cr**

Course examines various approaches people take to communicating. Focuses on developing an awareness of how and why we communicate and why we do not always communicate effectively. Includes consideration of variables related to interpersonal, group, public, and mass-communication contexts.

**CA 101 Intro to Media 3 cr**

Course examines the functioning of communication media in contemporary society including the political, economic and social environment. The structure and functions of newspapers, magazines, film, recording, radio, television, advertising and public relations industries are examined. The impact of the media on individuals and institutions is explored.

**CA 110 Public Speaking 3 cr**

A beginning study of the principles of speech communication as they relate to speaker-audience communication. The student is provided an opportunity to develop the art of audience and subject analysis, research, critical thinking, organization, language, and delivery of speeches. This course includes a video component. Fee

**CA 200 Survey of Comm Theory 3 cr**

Introductory survey of theoretical orientations in the field of human communication. Focuses on alternative explanations regarding elements of the communication process, models of communication, the communication act, and the communication relationship.

**CA 210 Argumentation 3 cr**

Examines the role of argumentation in a democratic society and aims to develop critical thinking and reasoned advocacy. Course makes functional a knowledge of tests of evidence and the modes of logical reasoning. Students participate in various forms of argumentation and debating.

**Prerequisite:** EH 101 Minimum Grade of C and EH 102 Minimum Grade of C

**Cross-Listed:** ARG 210

**CA 211 Interpersonal Comm 3 cr**

A study of communication behavior in the interpersonal setting. Focuses on development of knowledge, trust, understanding, supportiveness, etc., in a relationship, and their collective impact on the communication exchange.

**CA 220 Writing Comm Media - W 3 cr**

Intensive study of writing for various media and audiences. Specific attention is given to improvement of writing skills, including grammar, punctuation, spelling, word use, sentence composition, Associated Press style, and organization of material, as well as the different formats for the different media. Media styles studied include print, broadcast, on-line journalism, and public relations, which also includes a study of evaluating, documenting, and prioritizing facts in the writing of news stories and media releases for public relations. Computer fee.

**Prerequisite:** (A01 27 or S01 610 or USEH P or EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**CA 222 Rhetoric, Culture, and Society 3 cr**

Course examines rhetoric or the art of persuasion, as it relates to popular culture. Students will apply rhetorical theory to such topics as music, film, and advertising.

**Cross-Listed:** ARG 222

**CA 230 Comm in Organization 3 cr**

Application of communication principles and techniques to those aspects of one's life in an organization that have been shown to be the most difficult and troublesome parts of the communication milieu in the world of work. Includes interviewing, conference participation, leadership decisions, conflict management, and organizational change as communication phenomena.

**CA 260 Digital Writing and Production 3 cr**

This course considers the nature of the digital environment as it relates to communication. Topics include writing in the online environment, effective use of images and multimedia, and basic web design. Computer fee.

**CA 275 Decision Making - Small Groups 3 cr**

Theory and practice in leading and participating in small group decision making. Special focus on group problem solving and the management of conflict in small group decision-making meetings.

**CA 286 Principles of Public Relations 3 cr**

An overview of the principles and techniques of public relations. Concentrates on the role of public relations in our society, the audience for public relations, and the mass media as public relations vehicles.

**Prerequisite:** (A01 27 or S01 550 or USEH P or EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and CA 101 (may be taken concurrently) Minimum Grade of D

**CA 290 Special Topics - 1-3 cr**

A variable-topics course treating communication concepts and topics relevant to the disciplines. May be repeated once when course content changes for a total of six credit hours.

**CA 300 Fnds of Comm Research 3 cr**

Introduction to research foundations in the field of communication. Includes historical, critical, descriptive, and experimental methods. Computer fee.

**CA 310 Persuasion 3 cr**

Basic theories and techniques of persuasion and their application to typical communication situations and problems in today's society.

**CA 315 Gender and Communication 3 cr**

Examines communication between genders by exploring theoretical perspectives used of gender development, gender socialization, interactions and stereotypes. Includes discussions involving the lesbian, gay, bisexual, transgender and LGBTQ community.

**CA 330 Intercultural Communication-W 3 cr**

CA 330 is the study of the theory and practice of intercultural communication. This course's goal is to focus on global dialogues within critical organizational incidents. This course has three objectives: to explain the culture-based situational conflict model; to integrate theory and practice in the discussion of organizational conflict; and to provide an excellent opportunity for writing within the organizational communication content areas.

**CA 351 Social Effects Mass Comm 3 cr**

Examination of the interaction between mass communication and the social institutions of American society. Current research literature in the field will be analyzed and methods of improving the system will be discussed.

**Prerequisite:** CA 200 Minimum Grade of D

**CA 360 Comm and the Internet 3 cr**

Intensive study and application of rhetorical and communication theories to understanding problems that arise as the Internet and the World Wide Web begin to render fixed media-based communication obsolete. Implications for advertising, journalism, organizational record keeping and management, interpersonal communication, training, entertainment, etc. Computer fee

**CA 366 Visual Info Electron Com Media 3 cr**

Rhetorical issues in the design of Internet and World Wide Web materials. Focus on how motion, color, and other visual elements compete for audience attention; how rhetorical theory, learning theory, and communication theory inform the myriad decisions involved in visual presentation. This course will address these rhetorical issues from the creator's and user's view point. Computer fee

**CA 385 Magazine Writing and Editing 3 cr**

CA 385 is designed to give students a broad overview of the magazine industry and its current trends, while also teaching them the skills needed to become successful magazine writers.

**Prerequisite:** (CA 220 Minimum Grade of D or CA 280 Minimum Grade of D)

**CA 386 Public Relations Comm Meth - W 3 cr**

The course provides a framework for the development of solidly written pieces for the public relations professional. It examines the techniques and approaches to communication tools across various media channels including traditional, nontraditional and digital media as well as strategies and tactics of public relations campaigns for internal and external audiences. Prerequisites: CA 220 and CA 286. Computer fee.

**Prerequisite:** (CA 220 Minimum Grade of D or CA 280 Minimum Grade of D) and CA 286 Minimum Grade of D

**CA 388 History of the Mass Media 3 cr**

The role of journalism in American society from the Revolution to the present. This course is also listed as History 388.

**Cross-Listed:** HY 388

**CA 390 Special Topics - 1-3 cr**

An advanced variable-topic course treating communication concepts and topics relevant to the discipline. May be repeated twice for up to six hours credit.

**CA 394 Dir St - 1-3 cr**

Directed individual study of literature in an area of need and interest to the student. May be repeated for a maximum of six hours credit.

**CA 410 Advanced Persuasion 3 cr**

An advanced examination of an application of persuasive techniques in communication situations and contexts (e.g. field, laboratory, interpersonal, small group, nonverbal, mass communication).

**CA 411 Relational Communication 3 cr**

An examination of issues, theories, research and skills that apply to managing and nurturing close relationships. Emphasis is given to applying course concepts to promote relational growth and manage interpersonal conflict through interaction in relationships.

**CA 422 Rhetorical Theory 3 cr**

A broad survey of the Western rhetorical tradition designed to give students a working knowledge of rhetoric and its historical and contemporary influence on communicative events and perspectives.

**CA 424 Rhetorical Criticism - W 3 cr**

This course is designed to introduce students to the process of rhetorical analysis. Through criticism of communication artifacts, students learn to identify key elements of the rhetorical process and to develop critical thinking, writing, and viewing skills. The course prepares students to interpret, understand, analyze, and critique communication in diverse contexts including speeches, advertisements, interpersonal conversations, films, and works of art to name a few. Culminating experience for communication studies students.

**Prerequisite:** (A01 27 or S01 610 or USEH P or (EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S)) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**CA 425 Issues in Rhetoric 3 cr**

Close examination of a single contemporary rhetorical phenomenon. Topics will rotate based upon disciplinary relevance and student needs. May be repeated once for credit when content varies for a maximum of six credits.

**CA 430 Adv Organizational Communicatn 3 cr**

Study and application of organizational and communication theory of assessment of organizational and communication needs. Critical analysis of intervention programs and strategies.

**Prerequisite:** CA 230 Minimum Grade of D

**CA 435 Comm Training-Dev Programs - W 3 cr**

Review and analysis of communication training and development programs designed to solve communication problems in groups and organizations. Students will develop and present a training or development program. Computer fee

**CA 443 Film History 3 cr**

An examination of the development of motion pictures from 1893 to the present. Films representing major periods, movements, and styles will be examined.

**CA 444 Film & TV Aesthetics 3 cr**

A study of the formation and evolution of film and television genres. Selected genres will be studied in terms of their structure and cultural history.

**CA 445 Ethics-Social Respons Comm 3 cr**

Study of social responsibility and ethics in communication. Acquaints student with ethical standards and expectations society has for communicators. Capstone Course. Requires Junior or Senior standing.

**CA 449 Mass Media Social Effects 3 cr**

Examination of the interaction between mass communication and American society. Current research literature in the field will be analyzed and methods of improving the system will be discussed.

**Prerequisite:** CA 101 Minimum Grade of D

**CA 453 Campaign and Election Comm 3 cr**

Provides students with a broad overview of political communication from both historical and contemporary perspectives so students may understand how the subject has evolved over time to become a unique field of theoretical and research interest. Special attention is paid to campaigns and elections, agenda-setting research, and media power. The major focus is on the United States.

**Prerequisite:** CA 100 Minimum Grade of C or CA 101 Minimum Grade of C or PSC 130 Minimum Grade of C

**Cross-Listed:** PSC 453

**CA 455 Law of Communication 3 cr**

Study of the broad application of principles of law to American Communication, including study of free speech, freedom of information, mass media law and regulation including libel, copyright, and right of privacy.

**CA 456 Social Media and Politics 3 cr**

An examination of how and why digital information technologies are used by citizens, activists, journalists, and politicians to shape and influence individual's political participation and engagement and public policy and society.

**Prerequisite:** (PSC 130 or CA 100 or CA 101)

**Cross-Listed:** PSC 456

**CA 460 Comm. Technology Systems 3 cr**

An examination of the new communication technology systems with an emphasis on how they reconfigure patterns of communication organizations, production, storage, and dissemination. The role of communication technology systems today and tomorrow, and implications for organizational, local, national, and international contexts will be studied. Computer fee.

**CA 475 Comm-Group Processes 3 cr**

The nature of small group processes. Leadership, communication, and decision making in small groups.

**CA 476 Advertising Campaigns I 3 cr**

The course is one of a two course sequence and is the first half of the advertising concentration capstone. It synthesizes previous courses within the communication curriculum. Students will research and develop a strategic advertising plan for a national client.

**Prerequisite:** (CA 321 Minimum Grade of D or CA 365 Minimum Grade of D) and CA 322 Minimum Grade of D

**CA 478 Advertising Campaigns II 3 cr**

Students develop a strategic integrated advertising campaign for a selected client. Campaign development includes the integration of research, planning and objective setting, branding, message, media and creative strategies, promotions, budgeting and evaluations. Culminating experience for advertising and brand communication students. Prerequisite: CA 476.

**Prerequisite:** CA 476 Minimum Grade of D

**CA 484 Managing Public Relations 3 cr**

Study of the operation and objectives of corporate and agency public relations using the case study approach. Emphasis is given to relating the management function of decision-making and policy formation to the communication process.

**Prerequisite:** CA 300 Minimum Grade of D and CA 386 Minimum Grade of D

**CA 490 Special Topics 1-3 cr**

An advanced variable-topic course treating communication concepts and topics relevant to the discipline. May be repeated twice for up to six hours credit.

**CA 492 Seminar - 1-3 cr**

An investigation of advanced topics and concepts of communication. Topics will rotate based upon disciplinary relevance and student need. May be repeated once for credit when content varies for a maximum of six credit hours.

**CA 494 Directed Studies 1-3 cr**

Investigation of questions of special interest in communication. May be repeated to a maximum of six semester hours, provided no repetition of subject matter occurs. Students are required to file a description of their goals and objectives for their study. This description is to be specific so that it can serve in place of a syllabus for this course.

**CA 496 Prof Studies - Internship 1-3 cr**

On-the-job experience in a selected communication area related to potential career selection. Supervision by communication advisor and off-campus agency required. The Internship Program may be repeated for up to six credits. Requires prior approval of internship coordinator and student's advisor. Internship candidates must have at least a 2.5 overall GPA and at least a 2.75 major GPA.

**CA 499 Senior Honors Project - H 3-6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project, relevant to the field of Communication study, that will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty chaired by the honors mentor. This course is required for Honors recognition and may be repeated for up to six credit hours.

**CA 500 Found Graduate Study Comm 3 cr**

This three-hour course provides an introduction to graduate study in the University of South Alabama Communication Department and an introduction to academic writing. This is a web-enhanced course. We will meet throughout the semester face-to-face in seminar format and in an informal "Meet and Greet" for graduate students and faculty.

**CA 501 Qualitative Research Methods 3 cr**

An in-depth study of a variety of qualitative research methodologies and their use in communication research, along with study of the use and practical applications of mixed-method and triangulation research methods.

**CA 502 Communication Theory 3 cr**

A survey of the theoretical perspectives that guide the study of communication. Competing and complementary epistemological frameworks will be compared.

**CA 503 Quantitative Research Methods 3 cr**

An investigation of research used in the study of communication; in-depth study of a variety of quantitative methodologies used in basic and applied communication research settings; study of statistical applications and practical interpretations.

**CA 510 Persuasion in Professional Com 3 cr**

Advanced analysis and development of persuasive messages and argumentative strategies. Ethical responsibilities of the message sender will also be addressed.

**CA 511 Theor Found in Interper Comm 3 cr**

Review of the interpersonal communication research literature with respect to the process of mutual adaptation and negotiation. The social and psychological processes constraining and organizing interpersonal communication will be studied. Topics include verbal and nonverbal codes, message production and interpretation, conversation management, relationship definition, and interpersonal communication competence.

**CA 522 Rhetorical Strategy Prof Comm 3 cr**

A broad survey of the Western rhetorical tradition designed to give students a working knowledge of rhetoric and its historical and contemporary influence on communicative events and perspectives.

**CA 524 Rhetorical Criticism 3 cr**

This course is designed to introduce students to the process of rhetorical analysis. Through criticism of communication artifacts, students learn to identify key elements of the rhetorical process and to develop critical thinking, writing, and viewing skills. This course prepares students to interpret, understand, analyze, and critique communication in diverse contexts including speeches, advertisements, interpersonal conversations, films, and works of art to name a few.

**CA 525 Issues in Rhetoric 3 cr**

Close examination of a single contemporary rhetorical phenomenon. Topics will rotate based upon disciplinary relevance and student needs. May be repeated once for credit when content varies for a maximum of six credits.

**CA 530 Analysis of Comm in Orgs. 3 cr**

Analysis of interpersonal, dyadic, group, and organization-wide communication events that occur in organizational settings. Attention will be directed to the network of messages that occur in organizations and the organizational change that occurs when a message system is disrupted or changed. Organizational communication research methodologies will be introduced.

**CA 535 Comm. Training & Develop Prog. 3 cr**

Review and analysis of communication training and development programs designed to solve communication problems in groups and organizations. Students will develop and present a training or development program.

**CA 542 Moving Image Structure 3 cr**

An analysis of moving-image form and process makers who supervise, produce, and/or evaluate electronic and/or film media for organizations. Theories of narrative and of moving-image syntax provide principles for structuring media content and managing the production process.

**CA 545 Communication Ethics 3 cr**

Advanced analysis and interaction between organizations and the social institutions of American society. Study of the literature and communication ethics and social responsibility.

**CA 549 Media Effects 3 cr**

A study of the role of corporate and public communication in the American social structure, including mass media extensions and impact upon institutions. Consideration of historical, legal, social, and economic issues.

**CA 555 Corp. and Public Comm. Law 3 cr**

A survey of the law as it deals with public communication. The course provides a working knowledge of First Amendment theory, copyright, trademark, advertising, contracts, access and administrative laws as they relate to the public relations environment.

**CA 560 Social Media Management 3 cr**

This course explores the roles, scopes, functions and impact of social media in communication, society, and business. Social media have caused a paradigm shift in the communication landscape. This course will teach students how to critically examine the dynamics of social media in different areas of global communication. We will investigate theoretical and research phenomena of social media management.

**CA 561 Teaching & Professionalism 3 cr**

This course will explore the practice of teaching and learning. In this course, the primary goal is to help students to make the transition from student to future colleague, thus there will also be a heavy emphasis on professionalization in the communication studies discipline.

**CA 570 Audience Dynamics 3 cr**

CA 570 explores how audience dynamics (attitudes, feelings, beliefs, experiences, values, needs, and behavior) influence message development in public relations and advertising campaigns.

**CA 575 Investigation of Group Comm. 3 cr**

An in-depth analysis of group communication theories. Topics to be covered include decision making, conflict, conformity, leadership, and observation methods.

**CA 576 Historical Perspectives of SC 3 cr**

An in-depth study of the field of strategic communication focusing specifically on the cultural history of advertising and public relations, as well as the contemporary issues, problems, and challenges facing these industries.

**CA 585 Reputation Management 3 cr**

CA 585 is designed to provide graduate students with a working knowledge of public relations crisis management. Course material focuses on actions to take and actions to avoid in handling a crisis situation from a public relations perspective, and how to work with management, employees, affected publics and the media.

**CA 587 Tideline Student Agency 3 cr**

This course allows graduate students to create and execute advertising and public relations strategies in an agency setting for select clients. Graduate students will have a supervisory role on assigned projects.

**CA 590 Sp Top in Comm - 1-3 cr**

A detailed examination of selected topics in communication theory. Topic announced prior to registration. Course may be repeated once when subject matter varies.

**CA 592 Seminar in Comm Theory 1-3 cr**

Departmental seminar investigating a selected field of communication theory through in-depth evaluation of its accompanying body of literature. Topic announced prior to registration. Course may be repeated once when subject matter varies.

**Prerequisite:** CA 500 (may be taken concurrently)

**CA 594 Dir St in Communication - 1-3 cr**

Independent research in field, laboratory, or library under the direction of a member of the graduate faculty.

**CA 596 Professional Studies - Intern 1-3 cr**

This course offers on-the-job experience related to student's course work in the Master of Arts in Communication program. Before enrolling in CA 596 students will consult with the Communication Department Graduate Coordinator regarding internship opportunities and eligibility.

**CA 599 Thesis 1-3 cr**

Students work independently to plan, research, and write results of an original research project. Students must have completed 24 hours of course work before enrolling in this course. Six credit hours of this course is required to complete the MA Thesis Option Degree in Communication. However, no more than 3 credit hours may be taken in any one semester without the expressed permission of the graduate faculty.

## Communication Scs Disord (CSD) (CSD)

### CSD 600 Doctoral Colloquium 1 cr

This seminar is designed to provide a forum for presentation and discussion of faculty and doctoral student research projects. Topics may also include: teaching and learning styles and grant writing. Must be repeated until candidacy is achieved.

### CSD 650 Research Methods in CSD 3 cr

Current methods and strategies used in research of communication processes.

### CSD 651 Speech and Hearing Sci & Inst 3 cr

Advanced review of the process of speech production, acoustic phonetics, coarticulation, and speech perception with emphasis on laboratory research methods.

### CSD 662 Studies in Speech Science 3 cr

Basic and advanced principles of the acoustics and physiology of speech production.

### CSD 663 Studies in Hearing Science 3 cr

Advanced study of psychological and physiological acoustics.

### CSD 664 Studies in Language Science 3 cr

Intensive study of the theoretical foundations underlying syntax, semantics, pragmatics, phonology, psycholinguistics, neurolinguistics, sociolinguistics, and applied pragmatics.

### CSD 665 Studies in Commun Neuroscience 3 cr

Advanced study of neurosciences as they relate to processes and pathologies of human communication, including functional neuroanatomy and clinical neurology. Interdisciplinary research paradigms will also be discussed.

### CSD 672 Laboratory in Speech Science 1 cr

Laboratory experiences in speech science.

### CSD 673 Laboratory in Hearing Science 1 cr

Laboratory experiences in hearing science.

### CSD 674 Laboratory in Language Science 1 cr

Laboratory experiences in language science.

### CSD 675 Lab in Communic Neuroscience 1 cr

Laboratory experiences in communication neuroscience.

### CSD 682 Seminar in Speech Science 3 cr

Intensive review of current research in speech production. May include normal and disordered processes. Topics may include acoustic phonetics, physiological phonetics, prosody, production and perception, fluency and voice. May be repeated.

### CSD 683 Seminar in Hearing Science 3 cr

Intensive literature review of current knowledge and research in hearing and hearing disorders. Topics may include cochlear mechanics, complex signal processing, electrophysiological measures, development of hearing, hearing in the elderly, and hearing in other species. May be repeated.

### CSD 684 Seminar in Language Science 3 cr

Intensive literature review of current methods, problems, and strategies in language research. Topics may include normal language acquisition, language-learning disorders, clinical aphasiology, and neurolinguistics. May be repeated.

### CSD 694 Directed Study - 1-3 cr

Independent study under the direction of a graduate faculty member. May be repeated. Requires special permission.

### CSD 695 Directed Research 1-3 cr

Research under the direction of a graduate faculty member. May be repeated. Requires special permission.

### CSD 696 Profess Pract - Administration 2 cr

Supervised professional experiences in administration under the guidance of faculty mentors. May be repeated.

### CSD 697 Profess Pract-Clin Supervision 2 cr

Supervised professional experiences in clinical teaching under the guidance of faculty mentors. May be repeated.

### CSD 698 Profess Practicum - Teaching 1-5 cr

Supervised professional experiences in academic teaching under the guidance of faculty mentors. May be repeated.

### CSD 799 Dissertation Research 1-9 cr

Independent research under the direction of a graduate faculty member. May be repeated. Requires special permission.

## Computer Engineering (CPE)

### CPE 260 Intro to C++ Programming 3 cr

Introduction and fundamentals of C++ programming, input-output operations, variables, data types, arithmetic expressions, control statements, looping, functions, arrays, pointers, strings, structures, and abstract data types.

**Prerequisite:** MA 125 (may be taken concurrently) Minimum Grade of C  
**Cross-Listed:** CIS 210

## Computer Info Sciences (CIS) (CIS)

### CIS 010 Computer Proficiency Exam 0 cr

The purpose of this course is to administer the Computer Proficiency Exam (CPE) for enrolled students. The CPE consists of multiple choice and performance-based questions for general computer, internet, WWW, e-mail, and office application concepts. Performance-based questions require a series of actions in a simulated environment to demonstrate specific skills being assessed. No outside materials or assistance from the applications' Help files are allowed.

### CIS 100 Information Tech in Society 1 cr

A discussion of the impact of information technology on personal, local, national, and global issues. Not to be taken with CIS 110.

### CIS 101 Freshman Seminar CIS 2 cr

A course for first-time students that assists with maximizing the student's potential to achieve academic success and to adjust responsibly to the individual and interpersonal challenges presented by college life for a major in the School of CIS. Taught in small groups, the course provides an introduction to the nature of higher education and a general orientation to the functions and resources of the University and the School of CIS. Extensive reading and writing assignments relevant to the student's first year experience are required.

### CIS 110 Intro to Comp-Info Sciences 3 cr

An introduction to information technology using a programming language to study applications in text searching, in real-time 3-D animation, and in sound production. A discussion of the social, ethical, economic, and philosophical implications of computing.

**CIS 115 Beginning Programming 3 cr**

A first course in programming uses an interpreted, interactive, object-oriented programming language. Coverage includes algorithmic problem solving, logical thinking, fundamentals of programming, variables and static values, sequential coding, decisions, and repetition.

**Prerequisite:** MMT 080 or A02 23 or (MA 112 Minimum Grade of C or MA 171 Minimum Grade of C) or MA 267 Minimum Grade of C or (MA 125 Minimum Grade of C or MA 132 Minimum Grade of C)

**CIS 121 Prob Solv-Prog Concepts II 4 cr**

Continuation of CIS 120. Topics include: design concepts, abstract data types, use of object libraries, dynamic storage allocation, stacks, queues, link lists, random access files, testing and software engineering practices.

**Prerequisite:** (CIS 120 Minimum Grade of C or CIS 141 Minimum Grade of C)

**CIS 140 Intro to Tech for Healthcare 3 cr**

This course is designed to provide a broad-based introduction to the use of computers and productivity software technologies for healthcare providers. Topics to be covered include use of a current Operating System and basic file management; the fundamentals of word processing, spreadsheet and graphics-based presentation software; basic image management related to documents and reports; as well as electronic health records systems. Other topics covered include information assurance, protecting patient privacy, social networks, computing safety, and professional coping skills.

**CIS 150 Intro to Computer Applications 3 cr**

This course is designed to provide a broad based introduction to the use of computers and productivity software technologies. Topics to be covered include: use of a current Operating System and basic file management; the fundamentals of word processing, spreadsheet and graphics-based presentation software; and basic image management related to documents and reports. Other topics covered include information assurance and computing safety as related to PC/Internet usage.

**CIS 150L Intro to Comp Applications Lab 0 cr**

Laboratory course for CIS 150, Introduction to Computer Applications.

**CIS 190 Special Topics- 1-3 cr**

Selected topics in computer and information sciences. Requires permission of Specialization Coordinator.

**CIS 210 Intro to C++ Programming 3 cr**

Introduction and fundamentals of C++ programming, input-output operations, variables, data types, arithmetic expressions, control statements, looping, functions, arrays, pointers, strings, structures, and abstract data types.

**Prerequisite:** MA 125 (may be taken concurrently) Minimum Grade of C  
**Cross-Listed:** CPE 260

**CIS 211 Advanced C++ Programming 1 cr**

Advanced concepts in C++ programming, constructors, destructors, classes and operation overloading.

**Prerequisite:** (CIS 121 Minimum Grade of C or CIS 210 Minimum Grade of C)

**CIS 227 Numerical Computation I 3 cr**

Floating point numbers, representation, and errors; software tools for scientific computing; elementary problems in scientific computing.

**Prerequisite:** MA 126 Minimum Grade of C or MA 233 Minimum Grade of C

**CIS 230 Adv Data-File Structures 3 cr**

Extension of elementary data structures as covered in CIS 121, techniques to organize and access collections of data. Definition, implementation, and use of Classes and Abstract Data Types (ADT). The use of ADTs and objects for solving CIS problems. Network, hierarchical, and relational data models leading to Database Management Systems. Topics include: recursion, search trees, algorithmic complexity, advanced searching and sorting algorithms, and graphs.

**Prerequisite:** (CIS 121 Minimum Grade of C or CIS 142 Minimum Grade of C or CIS 211 Minimum Grade of C) and MA 267 Minimum Grade of C

**CIS 235 Programming Language Seminar 3 cr**

Fundamentals of syntax and style for a relevant, or current programming language. Includes application development in that language.

Recommended: Knowledge of a programming language.

**CIS 250 Advanced Comp Applications 3 cr**

This course is designed to provide continuing, advanced coverage of productivity software technologies. Topics to be covered in depth include: fundamental and advanced features of spreadsheet and database management software. Other topics covered include information assurance and computing safety as related to PC/Internet usage.

**CIS 250L Adv Comp Applications Lab 0 cr**

Laboratory course for CIS 250, Advanced Computer Applications.

**Prerequisite:** CIS P or CIS 150 Minimum Grade of C

**CIS 300 Information Tech in Society 1 cr**

A discussion of personal, local, national, and global impact of information technology on ethical, legal, and social issues. Requires Junior standing in the School of Computing.

**CIS 321 Data Comm and Networking 3 cr**

An introduction to data communications, computer networking and network operating systems. Topics include: basic concepts of data transmission, network architectures, communications devices, and communication protocols.

**Prerequisite:** ISC 245 Minimum Grade of C or ITE 271 Minimum Grade of C or CIS 120 Minimum Grade of C or CSC 120 Minimum Grade of C

**CIS 322 Operating Systems 3 cr**

This course covers the development of operating systems that control computing systems. Topics include: file systems, process management, scheduling, memory management (real and virtual), security, and concurrency. Case studies of operating systems are examined.

**Prerequisite:** (CIS 230 Minimum Grade of C or CIS 263 Minimum Grade of C)

**CIS 324 Database Design-Dev-Mgt 3 cr**

Analysis, design, and development of desktop database systems. Coverage of normalization concepts, DBMS models, E-R/Semantic modeling, and query processing.

**Prerequisite:** ((MA 112 Minimum Grade of C or MA 171 Minimum Grade of C) or (MA 120 Minimum Grade of C or MA 287 Minimum Grade of C) or MA 267 Minimum Grade of C or (MA 125 Minimum Grade of C or MA 132 Minimum Grade of C) or A02 23) or MMT 080 and (ISC 245 Minimum Grade of C or ITE 271 Minimum Grade of C) or (CSC 121 Minimum Grade of N or CIS 121 Minimum Grade of C)

**CIS 401 Accelerated Programming 3 cr**

This course presents programming concepts in an accelerated manner. Coverage includes ADT's, Classes and Class Libraries, and simple data structures such as linked lists, stacks, queues. Laboratory assignments will be done in a high level, object-oriented language. This course does not count towards a graduate degree in CIS. Requires prior programming experience and permission of Coordinator.

**Cross-Listed:** CIS 121, CIS 123, CIS 501

**CIS 402 Accelerated OS-Comp Arch 3 cr**

This course presents computer architecture and operating systems concepts in an accelerated manner. Coverage includes machine and assembly languages, functioning of a simple processor, machine level data flow, microprogramming, I/O, interrupts and processing drivers, memory management, dynamic process scheduling, and multi-tasking. This course does not count toward a graduate degree in CIS. Requires prior programming experience desired and permission of Coordinator.

**Cross-Listed:** CIS 322, CIS 502

**CIS 403 Accelerated Data-File Structs 3 cr**

This course applies advanced programming concepts and techniques to data structures such as linear and linked list trees, records, files, and database. Sequential and random access file processing methods; searching and sorting methods. Laboratory assignments will be done in a high-level, object-oriented language. This course does not count toward a graduate degree in CIS.

**Prerequisite:** CIS 121 Minimum Grade of B or CIS 123 Minimum Grade of B or CIS 142 Minimum Grade of B or CIS 401 Minimum Grade of B or CIS 501 Minimum Grade of B

**Cross-Listed:** CIS 230

**CIS 404 Accelerated Networks-Comm 3 cr**

This course presents network and communications concepts in an accelerated manner. Coverage includes signaling concepts, communication devices, switching, network architectures and protocols, OSI reference model, network management and planning. This course does not count toward a graduate degree in CIS.

**Prerequisite:** CIS 222 Minimum Grade of B or CIS 322 Minimum Grade of B or CIS 402 Minimum Grade of B or CIS 502 Minimum Grade of B

**Cross-Listed:** CIS 321, CIS 504

**CIS 405 Programming Languages 3 cr**

This course examines formal language concepts of programming languages including syntax and basic grammars. Language features such as data types and structures, control structures, and data flow will be studied. Laboratory assignments include the use of high level languages as well as the use of windows API.

**Prerequisite:** CIS 230 Minimum Grade of B or CIS 263 Minimum Grade of B or CIS 403 Minimum Grade of B

**Cross-Listed:** CIS 333

**CIS 406 IS in Organizations 3 cr**

An examination of the relationship of information systems in organizations and the impact on people in the organization with respect to planning and decision making. Other topics covered include general systems theory, data security and integrity, application access control, project management, and large group behaviors.

**Prerequisite:** (CIS 230 Minimum Grade of B or CIS 263 Minimum Grade of B or CIS 403 Minimum Grade of B or CIS 503 Minimum Grade of B or (ITE 285 Minimum Grade of B or ISC 508 Minimum Grade of B) or ITE 451 Minimum Grade of B)

**CIS 407 Database Programming 3 cr**

This course examines implementation and access of databases via event-driven applications developed with visual programming tools. Other topics covered are elementary E-R modeling, data integrity, referential integrity, report development, interface design. This course does not count towards a graduate degree in CIS.

**Prerequisite:** (CIS 230 Minimum Grade of B or CIS 263 Minimum Grade of B or CIS 403 Minimum Grade of B)

**Cross-Listed:** CIS 324

**CIS 439 Windows Programming 3 cr**

This course continues and expands the study of programming begun in either ITE 285 or CIS 121. Concepts previously learned are extended to application programming in the windows (GUI) environments. Students will make use of the OLE, DDE, API features of windows in programming projects. Students will write and use their own DLL's in producing user interfaces and applications projects.

**Prerequisite:** CIS 230 Minimum Grade of C or CIS 263 Minimum Grade of C or ITE 285 Minimum Grade of C or ITE 451 Minimum Grade of C or CSGD 030

**CIS 490 CIS Sp Top - 3 cr**

Advanced selected topics in computer and information sciences.

Requires permission of the specialization coordinator.

**Prerequisite:** CSPC 30

**CIS 494 Directed Studies 1-3 cr**

May be taken for a maximum of six credits, only three of which may be applied to the CIS major or minor. Requires permission of the specialization coordinator.

**CIS 496 CIS Internship 3 cr**

CIS internship program is designed to give advanced students practical experience in the computer industry. Students will work on sponsored projects with faculty advisors. Credit may apply to degree with approval of the dean. Requires GPA 2.75 or higher and permission of the Dean.

**CIS 497 Senior Capstone Experience-W 3 cr**

A comprehensive team project will be completed and documented. Writing assignments will reinforce the importance of life-long learning, leadership skills, and the ethical issues of computing as well as appropriate resume and job application cover letter creation. Oral and written reports will be required. This course is to be taken the final semester of the student's degree program. Requires application for graduation filed the semester before registering for the course. Completion of the following courses according to major: Computer Science-CSC 322 and CSC 333; Information Systems-ISC 360; Information Technology-ITE 370.

**Prerequisite:** (EH 372 Minimum Grade of C or EH 373 Minimum Grade of C) and (CSC 322 Minimum Grade of C and CSC 333 Minimum Grade of C) or ISC 360 Minimum Grade of C or ITE 370 Minimum Grade of C

**Corequisite:** CIS 498

**CIS 498 CIS Senior Seminar 0 cr**

A series of mini-seminars designed to prepare graduating seniors for transition to professional careers in computing or graduate study and to assess student learning outcomes in the curriculum. Mini-seminars would include, but would not be limited to: resume development, interviewing tips and techniques, career planning, professionalism and ethics in the workplace, and advanced graduate study and professional development. Each student will be required to complete one or more senior exit exams and a senior exit survey. Prerequisite: Computer Science: CSC 331; Information Systems: ISC 360; Information Technology: ITE 370.

**Prerequisite:** CIS 497 (may be taken concurrently) Minimum Grade of C and (CSC 331 Minimum Grade of C or ISC 360 Minimum Grade of C or ITE 370 Minimum Grade of C)

**Corequisite:** CIS 497

**CIS 499 CIS Senior Honors Project - H 3-6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project, relevant to the field of computing, that will lead to a formal presentation at the annual Honors Student Colloquium. The senior honors project will be judged and graded by three faculty chaired by the honors mentor. This course is required for Honors recognition and may be repeated for up to 6 credit hours. Requires completion of an approved project prospectus and permission of the appropriate Coordinator.

**Prerequisite:** CSPC 30

**CIS 500 Basic Computing Prin and Appl 3 cr**

Introduction to computers and computer applications. Components of a computer system will be presented. Word processing, systems design and implementation, and programming concepts will be introduced. Not to be taken for CIS graduate credit.

**CIS 501 Accelerated Programming 3 cr**

This course presents programming concepts in an accelerated manner. Coverage includes ADT's, Classes and Class Libraries, and simple data structures such as linked lists, stacks, queues. Laboratory assignments will be done in a high level, object-oriented language. This course does not count towards a graduate degree in CIS. Prerequisite: Prior programming experience desired and permission of Coordinator.

**Cross-Listed:** CIS 121, CIS 401

**CIS 502 Accelerated OS-Comp Arch 3 cr**

This course presents computer architecture and operating systems in an accelerated manner. Coverage includes machine and assembly languages, functioning of a simple processor, machine level data flow, microprogramming, I/O, interrupts and processing drivers, memory management, dynamic process scheduling, and multi-tasking. This course does not count towards a graduate degree in CIS. Prerequisites: Prior programming experience and permission of Coordinator.

**Cross-Listed:** CIS 322, CIS 402

**CIS 503 Accelerated Data-File Structs 3 cr**

This course applies advanced programming concepts and techniques to data structures such as linear and linked list, trees, records, files, and database. Sequential and random access file processing methods; searching and sorting methods. Laboratory assignments will be done in a high-level object-oriented language. This course does not count towards a graduate degree in CIS.

**Prerequisite:** (CIS 121 Minimum Grade of B or CIS 123 Minimum Grade of B or CIS 142 Minimum Grade of B or CIS 501 Minimum Grade of B) or CIS 401 Minimum Grade of B

**Cross-Listed:** CIS 230, CIS 403

**CIS 504 Accelerated Networks - Comm 3 cr**

This course presents networks and communications concepts in an accelerated manner. Coverage includes signaling concepts, communications devices, switching, network architectures and protocols, OSI reference model, network management and planning. This course does not count towards a graduate degree in CIS.

**Prerequisite:** (CIS 222 Minimum Grade of B or CIS 322 Minimum Grade of B or CIS 402 Minimum Grade of B or CIS 502 Minimum Grade of B or ISC 506 Minimum Grade of B)

**Cross-Listed:** CIS 321, CIS 404

**CIS 505 Programming Languages 3 cr**

This course examines formal language concepts of programming languages including syntax and basic grammars. Language features such as data types and structures, control structures, and data flow will be studied. Laboratory assignments include the use of high level languages as well as the use of windows API.

**Prerequisite:** (CIS 230 Minimum Grade of B or CIS 263 Minimum Grade of B or CIS 403 Minimum Grade of B or CIS 503 Minimum Grade of B or ISC 508 Minimum Grade of B)

**Cross-Listed:** CIS 333, CIS 405

**CIS 506 IS in Organizations 3 cr**

An examination of the relationship of information systems in organizations and the impact on people in the organization with respect to planning and decision making. Other topics covered include general systems theory, data security and integrity, application access control, project management, and large group behaviors. This course does not count toward a graduate degree in CIS.

**Prerequisite:** (CIS 230 Minimum Grade of B or CIS 263 Minimum Grade of B or CIS 403 Minimum Grade of B or CIS 503 Minimum Grade of B or ISC 508 Minimum Grade of B) or (ITE 285 Minimum Grade of B or ITE 451 Minimum Grade of B)

**Cross-Listed:** CIS 406

**CIS 507 Database Programming 3 cr**

This course examines implementation and access of databases via event-driven applications developed with visual programming tools. Other topics covered are elementary E-R modeling, data integrity, referential integrity, report development, interface design. This course does not count towards a graduate degree in CIS.

**Prerequisite:** (CIS 230 Minimum Grade of B or CIS 263 Minimum Grade of B or CIS 403 Minimum Grade of B or CIS 503 Minimum Grade of B or ISC 508 Minimum Grade of B)

**Cross-Listed:** CIS 324, CIS 407

**CIS 518 CIS Research Methodologies 3 cr**

A review of computer and information science literature and research topics. Techniques for defining research goals will be described. Students will be expected to identify a research area and conduct a complete review of the literature.

**Prerequisite:** CSGR P

**CIS 530 Information Assurance/IT Audit 3 cr**

This course covers the understanding and managing of risks and threats to information and information systems. This includes protecting and defending information and information systems by ensuring through authorization and other means concepts such as accessibility, reliability, and authentication.

**Prerequisite:** CSGR P

**CIS 535 Digital Forensic Analysis 3 cr**

This course provides students with advanced tools, techniques, and methodologies for accumulating, securing, analyzing, managing, and reporting evidence related to a forensics examination. The professional communication and presentation of the results of forensic investigations will be emphasized.

**Prerequisite:** CSGR P

**CIS 538 OS Concepts and Security 3 cr**

This course examines the concepts of operating systems such as memory and virtual memory management, as well as processor, process, device, and file management. Topics include the management and organization of network operating systems and operating system security and ethics. Students will manage, configure, and secure operating systems such as Windows, Unix, and Linux in laboratory environments.

**Prerequisite:** CSGR P

**CIS 539 Windows Programming 3 cr**

The practice and principles of developing interactive desktop computer applications. Aspects to be covered will include graphical user interface; use of sophisticated widget, container, and utility libraries; event-driven programming; two-dimensional graphics; in-memory database; and deployment.

**Prerequisite:** CSGR P

**CIS 540 Network Security Management 3 cr**

This course examines network and web security issues including: risks and threats, system access points, hardware and software defense methods, and organizational security policies. The course will cover the analysis of systems for vulnerabilities, the implementation of security procedures, the monitoring of systems for security breaches, and the recovery or restoration of breached systems.

**CIS 590 CIS Sp Top - 3 cr**

Advanced selected topics in computer and information sciences.

Requires permission of the CSC Coordinator

**Prerequisite:** CSGR P

**CIS 594 Directed Studies - 1-3 cr**

May be taken for a maximum of three credits to count toward the degree.

Requires permission of the Director of Graduate Studies.

**CIS 595 CIS Research Development 1-3 cr**

Development of the research proposal for master's thesis. Graduate Professional Component. Requires permission of the Director of Graduate Studies.

**Prerequisite:** CIS 518 Minimum Grade of S

**CIS 596 CIS Graduate Internship 3 cr**

CIS graduate internship program is designed to give graduate students practical experience in the computer industry. Students will work on sponsored projects with faculty advisors. Up to three hours may be counted toward the degree. Requires permission of the Director of Graduate Studies.

**CIS 597 CIS Graduate Seminar 1 cr**

This course prepares graduate assistants in the School of CIS to provide support and assistance to faculty for instruction in School of CIS classes. Topical coverage includes but is not limited to: graduate assistant expectations and responsibilities, protection of student educational information (FERPA), practical skills in assisting in computing instruction, graduate assistant best practices, and tips from faculty and experienced graduate assistants. This course does not count towards a graduate degree in CIS. Requires permission of the Director of CIS Graduate Studies.

**CIS 598 CIS Project 1-3 cr**

Approved investigation of original problems under direction of a faculty member. This course may be repeated for a maximum of three hours of credit towards the degree. Requires permission of the Director of Graduate Studies.

**CIS 599 CIS Thesis 1-9 cr**

This course may be repeated for a maximum of six credits. A thesis committee will provide direction during the thesis. Requires approval of the thesis project by graduate faculty and the Director of Graduate Studies.

**Prerequisite:** CIS 595 Minimum Grade of B

**CIS 694 Directed Study - 3 cr**

This course focuses on the development of the doctoral prospectus leading to the the defense of a dissertation.

**CIS 799 Dissertation 1-9 cr**

This course focuses on the development of the dissertation.

## Computer Science (CSC) (CSC)

**CSC 108 Introduction to Programming 2 cr**

Problem-solving and pre-programming skills developed using hands-on activities in preparation for the introductory programming course.

**Prerequisite:** MA 112 Minimum Grade of C or A02 22 or MMT 070

**CSC 120 Prob Solv and Prog Concepts 4 cr**

An introduction to the design of algorithms and their implementation in a high-level programming language. Topics include: problem solving strategies, programming concepts, programming environment, control structures, methods, arrays, searching, sorting, object-oriented programming, and file input/output.

**Prerequisite:** (MA 113 Minimum Grade of C or MA 172 Minimum Grade of C) or (MA 115 Minimum Grade of C or MA 121 Minimum Grade of C) or (MA 125 Minimum Grade of C or MA 132 Minimum Grade of C) or A02 27 or MMT 090

**CSC 121 Prob Solv and Prog Concepts II 4 cr**

Continuation of CSC 120. Topics include: object-oriented programming concepts, abstract data types, graphical user interfaces and event-driven programming, exception handling, text and binary file I/O, and an overview of dynamic data structures.

**Prerequisite:** CSC 120 Minimum Grade of C or CIS 120 Minimum Grade of C

**CSC 190 CSC Special Topics - 1 cr**

Selected topics in computer science. Prerequisite: Permission of the CSC coordinator.

**CSC 228 Digital Logic Computer Arch 3 cr**

Topics include: Boolean algebra, minimization techniques, combinatorial and sequential circuit analysis, memory organization, microprocessor concepts, and CPU architecture.

**Prerequisite:** (MA 113 Minimum Grade of C or MA 115 Minimum Grade of C or MA 125 Minimum Grade of C or A02 27 or MMT 090)

**CSC 231 Intro Data Structures Algs 4 cr**

The course will cover techniques to organize and access collections of data, definition, implementation, and use of Classes and Abstract Data Types(ADT). Topics include: stacks, queues, heaps, search trees, recursion, algorithmic complexity, advance searching and sorting algorithms, and graphs and their application to problems.

**Prerequisite:** (CSC 120 Minimum Grade of C or CIS 210 Minimum Grade of C or CPE 260 Minimum Grade of C)

**CSC 311 Networking and Communications 3 cr**

An introduction to computer networks. Topics include: data transmission, network architectures, file compression algorithms, communication devices and protocols, network routing and flow algorithms.

**Prerequisite:** CSC 231 Minimum Grade of C or CSC 230 (may be taken concurrently) Minimum Grade of C

**CSC 320 Computer Org-Architect 3 cr**

An introduction to computer organization using a top down approach from system component to the register level, internal representation of data, general assembly and linking concepts, addressing modes, and introduction to a specific processor, its architecture and operating system.

**Prerequisite:** CSC 228 Minimum Grade of C and CSC 230 Minimum Grade of C or CSC 231 Minimum Grade of C

**CSC 322 Operating Systems 3 cr**

This course covers the development of operating systems that control computing systems. Topics include: file systems, process management, scheduling, memory management (real and virtual), security, and concurrency. Case studies of operating systems are examined.

**Prerequisite:** CSC 231 Minimum Grade of C

**CSC 324 Database Concepts 3 cr**

Introduction to database design and implementation. Aspects of data modeling, database design theory, storage, indexing, and database application development. Entity-relationship model, relational data model, schema refinement, normal forms, file organizations, index structures, and embedded SQL application development.

**Prerequisite:** CSC 231 Minimum Grade of C

**CSC 331 Software Engineering Prin - W 3 cr**

Models, techniques, and tools used in project management. Topics include: software development process, task scheduling, estimation and progress measurement. Coordination of development teams. Standards, testing plans, configuration management, metrics and use of CASE tools, system delivery and maintenance strategies.

**Prerequisite:** ((CSC 231 Minimum Grade of C or CSC 230 Minimum Grade of C or CIS 230 Minimum Grade of C)) and CA 275 (may be taken concurrently) Minimum Grade of C

**CSC 332 Adv Data Structures and Algs 3 cr**

Techniques for the design and analysis of efficient algorithms, emphasizing methods useful in practice. Topics covered include: mathematical foundations; all five asymptotic notations; analytic, empirical, and qualitative evaluation techniques; sorting algorithms; balanced trees (2-3-4 trees and red-black trees); dynamic programming; and NP-completeness.

**Prerequisite:** CSC 231 and MA 267

**CSC 333 Prog Language Theory 3 cr**

Formal examination of programming languages. Formal Language concepts including syntax and basic grammars are studied. Language features such as data types and structures, control structures, and data flow are examined. The run-time environment and the process of interpretation/compilation are covered. Interpreter and compilation techniques are introduced.

**Prerequisite:** (CSC 231 Minimum Grade of C)

**CSC 340 Secure Software Engineering 3 cr**

The objective of this course is to enhance the security of software by introducing sound security principles that should be incorporated into the software development process. Students will learn a risk management framework and best practices for software security including code reviews, architectural risk analysis, penetration testing, risk-based security test, abuse cases, security requirements, and security operations. Students will also learn common flaws that lead to exploitation and be able to identify and mitigate such errors in practice. Out of class labs and exercises reinforce concepts presented in class. Prerequisite: CSC 331.

**Prerequisite:** (CSC 331 Minimum Grade of C or CIS 231 Minimum Grade of C)

**CSC 399 Conc and Distributed Comp 3 cr**

This course focuses on software development principles for concurrent and distributed systems. Topics include shared versus distributed systems, heterogeneous concurrent computing, high performance computing, concurrent design patterns and more.

**Prerequisite:** CSC 322 Minimum Grade of C

**CSC 404 Web Tech & Knowledge Modeling 3 cr**

The students will learn knowledge service design based on Web technologies and will develop a knowledge service project during the course. The course will highlight the features of different Web Services Technologies and introduce various Scripting Languages, provide an up-to-date survey of developments in Web Services Technologies, and Knowledge Modeling.

**Prerequisite:** (CSC 320 Minimum Grade of C or CSC 331 Minimum Grade of C)

**CSC 410 Compiler Design-Construction 3 cr**

Lexical analysis, syntactic analysis, intermediate code generation, object code generation, optimization, memory use, generators for scanners and parsers.

**Prerequisite:** CSC 332 Minimum Grade of C and CSC 333 Minimum Grade of C and CSC 320 Minimum Grade of C or EE 264 Minimum Grade of C

**CSC 411 Comm - Network Analysis 3 cr**

Data communications and computer networks. An in-depth treatment of network architectures and protocols for both WANS and LANS. Topics include: network routing and flow algorithms, internet working, and distributed systems.

**Prerequisite:** CSC 311 Minimum Grade of C and (CSC 322 Minimum Grade of C or CIS 322 Minimum Grade of C)

**CSC 412 Real-Time Software Systems 3 cr**

Design and implementation of software for real-time computer systems. Survey of typical real-time systems; techniques for code-conversion, error checking, and transmission monitoring.

**Prerequisite:** CSC 311 Minimum Grade of C and CSC 322 (may be taken concurrently) Minimum Grade of C and CSC 332 Minimum Grade of C

**CSC 413 Computer Graphics 3 cr**

An in-depth study of hardware and software techniques used in computer graphics. Study of display and entry devices, including refresh, storage, and raster scan topics. Software techniques will include display files, windowing, clipping, two and three-dimensional transformations, and hidden-surface removal.

**Prerequisite:** (CSC 231 Minimum Grade of C) and (MA 237 Minimum Grade of C or MA 227 Minimum Grade of C)

**CSC 414 Modeling and Simulation 3 cr**

Analytic and simulation models developed using deterministic and stochastic techniques. Topics include: event-driven simulations, queuing theory, Markov processes, and dynamical systems. "Real World" project required.

**Prerequisite:** (CSC 230 Minimum Grade of C or CIS 230 Minimum Grade of C) and (MA 126 Minimum Grade of C or MA 233 Minimum Grade of C) and (ST 310 Minimum Grade of C or ST 275 Minimum Grade of C) or ST 315 Minimum Grade of C or ST 320 Minimum Grade of C

**CSC 415 Numerical Analysis 3 cr**

Mathematical preliminaries, solving linear systems numerical solution of ordinary and partial differential equations.

**Prerequisite:** (CSC 230 Minimum Grade of C or CIS 230 Minimum Grade of C) and (MA 126 Minimum Grade of C or MA 233 Minimum Grade of C)

**CSC 416 AI Theory and Programming 3 cr**

Introduction to basic concepts, implementation techniques, and philosophies of artificial intelligence and intelligent systems. Introduction to expert systems, fuzzy logic systems, neural networks, and techniques for artificial intelligence programming. The fundamentals of an AI programming language (LISP or PROLOG) will be presented. The language will then be used to solve problems in typical AI applications.

**Prerequisite:** CSC 332 Minimum Grade of C or CSC 231 Minimum Grade of C

**CSC 417 Computer Game Development 3 cr**

Introduction to computer game development, including a variety of related topics. The course will be driven by research/technical paper discussions, student presentations and projects. The direction of the course will be guided to some extent by student interest.

**Prerequisite:** CSC 331 Minimum Grade of C or EE 368 Minimum Grade of C

**CSC 418 Adv Game & Simulation Dev 3 cr**

This course will cover advance topics related to the development of game and simulation software. Topics include game physics, collision techniques, game mechanics, level design, artificial intelligence, and security. Students will design and implement a game or simulation program that includes elements of artificial intelligence.

**Prerequisite:** CSC 417 Minimum Grade of C

**CSC 426 Data Mining 3 cr**

This course provides an in-depth study of data mining. Course content includes data preparation, feature selection, pattern mining, classification, clustering, and sequence mining. New research areas in data mining will also be discussed.

**Prerequisite:** CSC 332 Minimum Grade of C

**CSC 428 Introduction to Bioinformatics 3 cr**

Students in this course will study algorithms pertaining to bioinformatics (e.g. sequence alignment, biological database search, and phylogeny reconstruction); gain hands-on experience using bioinformatics tools; and understand the interaction of computer science and modern biology within the context of data-driven knowledge discovery.

**Prerequisite:** CSC 230 Minimum Grade of C

**CSC 433 Adv AI Theory and Programming 3 cr**

A study of advanced AI theory and implementation. Topics include neural networks, probability learning, and a variety of related topics. A programming language (LISP or R) will be utilized to solve complex industry problems associated with AI applications.

**Prerequisite:** CSC 416 Minimum Grade of C

**CSC 434 Form Lang - Automata Theory 3 cr**

Mathematical preliminaries, languages, context-free grammars, parsing, normal forms, finite automata, regular languages, pushdown automata, Turing machines.

**Prerequisite:** (CSC 333 Minimum Grade of C or CSC 340 Minimum Grade of C)

**CSC 440 Secure Software Engineering 3 cr**

The objective of this course is to enhance the security of software by introducing sound security principles that should be incorporated into the software development process. Students will learn a risk management framework and best practices for software security including code reviews, architectural risk analysis, penetration testing, risk-based security test, abuse cases, security requirements, and security operations. Students will also learn common flaws that lead to exploitation and be able to identify and mitigate such errors in practice. Out of class labs and exercises reinforce concepts presented in class.

**Prerequisite:** CSC 331 Minimum Grade of C and CSC 320 (may be taken concurrently) Minimum Grade of C or EE 264 Minimum Grade of C

**Cross-Listed:** CSC 340

**CSC 450 Surreptitious Software 3 cr**

Students in this course will learn about algorithms for software protection and learn how to use tools for program transformation. Specific topics include obfuscation, watermarking, tamperproofing, birthmarking, and hardware protection. Programming projects will be required in several different languages and course activities will involve preparing student-led lectures, working on programming projects, and writing reports.

**Prerequisite:** CSC 440 Minimum Grade of C

**CSC 457 Data Warehousing 3 cr**

This course focuses on the design, development and usage of data warehouses. Course content includes dimensional modeling, ETL processes, physical design, and analytical processing. New research areas related to data warehousing technology will also be discussed.

**Prerequisite:** CIS 324 Minimum Grade of C or CSC 324 Minimum Grade of C

**CSC 460 Security of HW Implementations 3 cr**

The objective of this course is for the student to build upon logic and architectural principles as applied to hardware designs. The key theme of the course is the security impacts of hardware design implementations.

**Prerequisite:** (CSC 320 Minimum Grade of C or EE 264 Minimum Grade of C)

**Cross-Listed:** CSC 560

**CSC 485 Cyber-Physical Security 3 cr**

This course focuses on the Security of Cyber-Physical Systems (CPS) and Internet of Things (IoT) that go beyond topics commonly considered in Computer and Network Security. This course aims to prepare participants for the cutting edge research undergoing in both areas. The successful participation in this course will require reading number of research papers, presenting learned material, active participation in in-class discussions, and successful accomplishment of a small research project.

**Prerequisite:** CSC 311 Minimum Grade of C and CSC 322 Minimum Grade of C

**CSC 490 Special Topics 3 cr**

Advanced selected topics in computer science. Prerequisite: Permission of the CSC Coordinator.

**CSC 504 Web Tech & Knowledge Modeling 3 cr**

The students will learn knowledge service design based on Web technologies and will develop a knowledge service project during the course. The course will highlight the features of different Web Services Technologies and introduce various Scripting Languages, provide an up-to-date survey of developments in Web Services Technologies, and Knowledge Modeling.

**CSC 510 Compiler Design-Construction 3 cr**

Lexical analysis, syntactic analysis, intermediate code generation, object code generation, memory use, generators for scanners and parsers.

**Prerequisite:** CSGR P

**CSC 511 Comm-Network Analysis 3 cr**

Data communications and computer networks. An in-depth treatment of network architectures and protocols for both WANs and LANs. Topics include: network routing and flow algorithms, internet working, and distributed systems.

**Prerequisite:** CSGR P

**CSC 512 Real -Time Software Systems 3 cr**

Design and implementation of software for real-time computer systems. Survey of typical real time systems; techniques for code conversion, error checking, and transmission monitoring.

**Prerequisite:** CSGR P

**CSC 513 Computer Graphics 3 cr**

An in-depth study of hardware and software techniques used in computer graphics. Study of display and entry devices, including refresh, storage, and raster scan topics. Software techniques will include display files, windowing, clipping, two and three-dimensional transformation, and hidden-surface removal.

**Prerequisite:** CSGR P

**CSC 514 Modeling and Simulation 3 cr**

Analytic and simulation models developed using deterministic and stochastic techniques. Topics include: event-driven simulations, queueing theory, Markov processes, and dynamical systems. "Real World" project required.

**Prerequisite:** CSGR P

**CSC 515 Numerical Analysis 3 cr**

Mathematical preliminaries, solving linear systems, numerical solution of ordinary and partial differential equations.

**Prerequisite:** CSGR P

**CSC 516 AI Theory and Programming 3 cr**

Introduction to basic concepts, implementation techniques, and philosophies of artificial intelligence and intelligent systems. Introduction to expert systems, fuzzy logic systems, neural networks, and techniques for artificial intelligence programming. The fundamentals of an AI programming language (LISP or PROLOG) will be presented. The language will then be used to solve problems in typical AI applications.

**Prerequisite:** Graduate Professional Component Standing

**CSC 517 Computer Game Development 3 cr**

Introduction to computer game development, including a variety of related topics. The course will be driven by research/technical paper discussions, student presentations, and projects. The direction of the course will be guided to some extent by student interest.

**Prerequisite:** CSGR P

**CSC 520 Computer Architecture 3 cr**

Instruction set design, pipelining, instruction-level parallelism, memory hierarchy design, and multiprocessors.

**Prerequisite:** CSGR P

**CSC 522 Performance Eval of Algorithms 3 cr**

Mathematical foundations; analytic, empirical, and qualitative evaluation techniques; dynamic programming, greedy algorithms, graph algorithms; and selected advanced topics.

**Prerequisite:** CSGR P

**CSC 524 Computer Language Design 3 cr**

A study of programming language design and specification, including the compiling process, parsing, BNF grammars, and models of semantics. Differences between interpreters, assemblers, and compilers will be studied.

**Prerequisite:** CSGR P

**CSC 525 Complexity Theory 3 cr**

Mathematical preliminaries, languages, finite automata, Turing machines, decidability, recursive function theory, complexity, tractability and NP-complete problems.

**Prerequisite:** CSGR P

**CSC 526 Data Mining 3 cr**

This course provides an in-depth study of data mining. Course content includes data preparation, feature selection, pattern mining, classification, clustering, and sequence mining. New research areas in data mining will also be discussed. Laboratory assignments will provide students with opportunities to interact with and develop data mining technologies.

**Prerequisite:** CSGR P

**CSC 527 Software Engineering Princ 3 cr**

Advanced concepts of software engineering will be discussed. Program testing techniques including: structured design and walk throughs, proving program correctness and verifiability, and system coding standardization and integration will be covered in depth. Software team formulation and management techniques will be discussed.

**Prerequisite:** CSGR P

**CSC 528 Introduction to Bioinformatics 3 cr**

Bioinformatics is a highly interdisciplinary course between computer science and biology. It focuses on the analysis of proteins, genes, and genomes using computing technologies such as computer algorithms and computer databases. Students in this course will learn algorithms and databases pertaining to bioinformatics (e.g., sequence alignment, suffix tree and its biological/biomedical applications, genome alignment, biological/biomedical database search, and phylogeny reconstruction); gain knowledge and hands-on experience of bioinformatics tools; understand the interaction between computer science (in particular, semantic technologies) and modern biology within the context of data-driven knowledge discovery.

**Prerequisite:** CSGR P

**CSC 532 Distributed Systems 3 cr**

This course will further enhance the students understanding of the details of how an operating system functions. It will focus on the advanced concepts associated with distributed systems. The student will learn the underlying concepts of such systems and the algorithms needed to provide the required synchronization and communication.

**Prerequisite:** CSGR P

**CSC 533 Adv AI Theory and Programming 3 cr**

This course provides a broad introduction to machine learning and statistical pattern recognition. Topics include: supervised learning (generative/discriminative learning, parametric/non-parametric learning, neural networks, and support vector machines); unsupervised learning (clustering, dimensionality reduction, kernel methods); learning theory (bias/variance tradeoffs, practical advice); reinforcement learning and adaptive control. The course will also discuss recent applications of machine learning, such as to robotic control, data mining, autonomous navigation, bioinformatics, speech recognition, and text and web data processing.

**Prerequisite:** CSGR P

**CSC 550 Surreptitious Software 3 cr**

Students in this course will learn about Algorithms for software protection and learn how to use tools for program transformation. Specific topics include obfuscation, watermarking, tamperproofing, birthmarking and hardware protection. Programming projects will be required in several different languages and course activities will involve preparing student-led lectures, working on programming projects, and writing reports.

**Prerequisite:** CSGR P

**CSC 557 Data Warehousing 3 cr**

This course focuses on the design, development and usage of data warehouses. Course content includes dimensional modeling, ETL processes, physical design, and analytical processing. New research areas related to data warehousing technology will also be discussed.

**Prerequisite:** CSGR P

**CSC 560 Security of HW Implementations 3 cr**

The objective of this course is for the student to build upon logic and architectural principles as applies to hardware designs. The key theme of the course is the security impacts of hardware design implementations.

**Prerequisite:** CSGR P

**Cross-Listed:** CSC 460

**CSC 580 Data Security 3 cr**

The objective of this course is to introduce the inherent strengths and limitations of cryptography in data security applications, focusing on the basic principles of message privacy, key negotiation, and key management. The course covers various aspects of symmetric and asymmetric ciphers and provides a broad coverage of the core areas for engineering cryptographic systems. Students will be expected to implement and analyze simple cryptographic schemes and read supporting articles and papers for presentation. Prerequisite: CIS Graduate Professional Component.

**Prerequisite:** CSGR P

**CSC 582 Network Security 3 cr**

The objective of this course is to provide students with the knowledge and skills to begin supporting network security within an organization. Students will gain an understanding of fundamental network security concepts and mechanisms, be able to identify security threats and vulnerabilities, and help respond to and recover from security incidents. The course will provide an understanding of how to design and build secure network algorithms and environments while gaining an in-depth knowledge of protocol security, intrusion detection, and principles of cyber defense.

**Prerequisite:** CSGR P

**CSC 585 Cyber-Physical Security 3 cr**

This course focuses on the Security of Cyber-Physical Systems (CPS) and Internet of Things (IoT) that go beyond topics commonly considered in Computer and Network Security. This course aims to prepare participants for the cutting edge research undergoing in both areas. The successful participation in this course will require reading number of research papers, presenting learned material, active participation in in-class discussions, and successful accomplishment of a small research project.

**Prerequisite:** CSGR P

**CSC 590 CSC Sp Top - 3 cr**

Advanced selected topics in computer science. Prerequisite: Permission of the CSC coordinator.

**Prerequisite:** CSGR P

**CSC 595 CS Project Proposal Develop 1-3 cr**

Development of the project proposal for the Computer Science specialization master's project. Prerequisite: Graduate Professional Component and Permission of the Director of Graduate Studies.

**Prerequisite:** CIS 518 Minimum Grade of S

**CSC 598 Computer Science Project 1-3 cr**

This course may be repeated for a maximum of six (6) credits. A CIS project committee will provide direction during the project. Prerequisites: Approval of project proposal by student's project committee and permission of the Director of CIS Graduate Studies.

**Prerequisite:** (CSC 595 Minimum Grade of B and CSCS P)

**CSC 612 Cybersecurity 3 cr**

This course focuses on developing expertise and preparation for independent research in Cybersecurity through an in-depth review of the Cybersecurity literature. The student will be conversant in broad issues and trends in Cybersecurity as defined by skill sets and occupations.

**CSC 626 Advanced Big Data 3 cr**

This course focuses on developing expertise and preparation for independent research in big data through an in-depth review of the big data and data science literature. The student will be conversant in broad issues and trends in big data as defined by current tools and technologies.

## Counselor Education (CED) (CED)

**CED 560 Diagnosis/Treatment Planning 3 cr**

The Diagnostic and Statistical Manual of Mental Disorders (DSM) is used to develop a basic understanding of mental disorders. Students learn to utilize the DSM classification system to identify counseling techniques and develop counseling plans.

**CED 561 Marriage and Family Counseling 3 cr**

The theories, principles, and techniques of counseling couples and families are examined. Other topics include ethical and multicultural issues, assessment, and current research in marriage and family counseling.

**CED 562 Addictions Counseling 3 cr**

This course provides an overview of research and theory in regards to the etiology, assessment, diagnosis and treatment of addictive disorders, e.g. alcoholism, drug addiction, gambling, etc. The course will review theoretical and evidence-based models of counseling for addictive disorders as well as considerations for treating addictive disorders among various special populations and with culturally diverse clients.

**CED 563 Divorce Mediation 3 cr**

This course will introduce students to the techniques of divorce mediation. Legal, ethical and psychological issues in the divorce mediation process will be examined with special emphasis on the neutral role of the mediator explored.

**CED 564 Gerontological Counseling 3 cr**

Emphasis is on a basic knowledge of the theories, principles and techniques of counseling elderly individuals, couples and their families. Includes such topics as assessment, ethical and cultural issues, model programs, and current research in gerontological counseling.

**CED 565 Found of Prof School Couns 3 cr**

Provides an overview of the history, philosophical foundations, and professional duty of professional school counseling. Review of historical and contextual forces that shaped the evolution of professional school counselors' roles and functions within schools. Special emphasis will be placed on current trends and best practices as identified by ASCA and current literature.

**CED 566 Multicultural Counseling 3 cr**

Includes a study of historical and current theories and issues in multicultural counseling, provides an understanding of societal trends and changes, and demonstrates strategies/techniques for cross-cultural counseling techniques through class exercises, case studies, and demonstrations. Reflective experiences are used to allow for the development of cultural self-knowledge.

**CED 567 Couples Counseling 3 cr**

This course will provide an overview of various theoretical approaches and related research findings for couples counseling. The course will also provide an overview of current theory and research in human sexuality, including sexual development, sexual well-being/wellness, sexual orientation and sexual dysfunction and disorders. The course will apply particular focus to sexuality issues as they are an aspect of individual and couples counseling work.

**CED 568 Comm Mental Health Counseling 3 cr**

This course examines community mental health counseling and includes a survey of its organizational, fiscal, and legal dimensions; of community needs assessment, program delivery, advocacy, funding, and intervention; of the principles of consultation, education and outreach; of client and community characteristics; and of the various practice settings and roles.

**CED 569 Child Counseling 3 cr**

This course provides an overview of current theoretical perspective and evidence-based intervention paradigms regarding psychological, behavioral, cultural and social context/environmental problems commonly occurring during childhood and adolescence. A focus will be upon knowledge of basic counseling skills for use with children and adolescents as well as learning to conceptualize childhood problems at various levels of social ecology: individual, cultural, academic, familial, community and societal.

**CED 571 Foundations of CMHC 3 cr**

This course is an introduction to the historical and philosophical foundation of Clinical Mental Health Counseling as well as overview of contemporary clinical practice issues within this counseling specialty.

**CED 572 Princ and Theories of Couns 3 cr**

Includes a study of various theories, principles, and techniques in counseling. Opportunity is provided for the implementation of counseling techniques through the study of case studies and transcripts.

**CED 573 Ed Occup Info Sys - Mats - Res 3 cr**

The study of educational, vocational, psychological, and individual resources needed to make employment decisions. Emphasis is on the collection and evaluation of information, procedures and strategies for researching employment opportunities, and the management of information services.

**CED 574 Group Couns Theory and Process 3 cr**

Includes both the theory and practice of group counseling, counseling with clients of diverse backgrounds, and selecting group work suitable to multicultural needs. Emphasis is on the developmental level and background of clients with which the counselor expects to work.

**CED 575 Intro to Community Rehab 3 cr**

Introduces the student to a broad field of community rehabilitation. Included is the history, philosophy, present activities and future trends in rehabilitation. A multidisciplinary approach to the study of the "whole person" is emphasized and direct contact with community social service agencies is an integral part of the course.

**CED 576 Supv Practicum in Couns 3 cr**

This course requires the student to demonstrate the appropriate use of a variety of counseling skills and techniques. Audio and video tapes of individual counseling sessions are critiqued in class by the instructor. Requires special permission of the instructor.

**Prerequisite:** (CED 571 Minimum Grade of B or CED 565 Minimum Grade of B) and CED 586 Minimum Grade of B and CED 572 Minimum Grade of B and CED 574 Minimum Grade of B and CED 566 Minimum Grade of B and CED 584 Minimum Grade of B

**CED 578 Supv Pract-Group Counseling 3 cr**

Supervised practice is provided in group counseling and other group work experience appropriate for a counselor. Practicum experience is offered in the setting in which the student plans to work.

**CED 579 Soc and Psych Asp of Disabil 3 cr**

The theory, research, and practices in related disciplines which contribute to an understanding of human disability. Field work and case study serve as integrating activities.

**CED 580 Student Personnel Services 3 cr**

Included is a survey of historical developments and current practices in student personnel services in post-high school educational institutions. The organization, administration, and functions of the various services are stressed.

**CED 581 Rehab Case Management 3 cr**

This course provides for critical analysis of representative rehabilitation case studies. Case records are used as a basis for developing an understanding of the clients with handicaps and their problems, the rehabilitation case work process, diagnosis, eligibility requirements, and the provision of services.

**CED 582 Data-Driven School Counseling 3 cr**

Provides an overview of how school counselors can access, interpret, and use achievement data, demographic data, school process data, and perception data to inform school counseling programmatic decisions. Assessment of systemic data, using data to guide program development, formative and summative evaluation methods, and strategies for dissemination of data are reviewed.

**CED 583 Indiv and Group Testing Lab 3 cr**

Supervised experience in the selection, administration, and scoring of educational and psychological tests, and the interpretation and reporting of test results.

**Prerequisite:** EPY 555 Minimum Grade of B

**CED 584 Sem Ethical and Legal Issues 3 cr**

Ethical standards of the profession and current legal issues will be examined in the context of case studies and current literature. Critical analysis by each student of legal and ethical issues faced by counselors and psychometrists will be stressed.

**CED 585 Medical Aspects of Rehab 3 cr**

Common symptomology, treatment, and medical management techniques of rehabilitation and physical medicine are emphasized. Other topics include assessment of client's functional limitations, interpretation of medical information, and planning for the client's rehabilitation.

**CED 586 Counseling Skills and Process 3 cr**

Emphasis is placed on the counseling procedures involved in developing and maintaining the therapeutic relationship. Students are required to model the basic skills of counseling using videotaped incidents and observations for feedback on skill development.

**CED 588 Career Devel, Assess, & Interv 3 cr**

Emphasis is placed on a basic knowledge of the theories, principles, and techniques of career counseling used for a wide range of ages. Other topics include model career development programs, assessment, population and age diversity, individual characteristics, placement and current research.

**CED 590 Special Topics - 3 cr**

Guided supervision in the completion of learning tasks in counselor education such as program design and revision study of a significant topic, theory, model and supervision of selected learning activities to acquire specific counseling and testing skills.

**CED 591 Advocacy, Collab. & Consult. 3 cr**

This course will provide an overview of advocacy, collaboration and consultation models and essential skills for professional school counselors and clinical mental health counselors. The role that each of these skills play in the professional identity of the school and mental health counselor and strategies for using these skills to promote systemic change and equitable social systems will be examined.

**CED 592 Crisis & Trauma Counseling 3 cr**

Students will gain knowledge of research-informed theoretical models of etiology and development of problems such as suicidality and other forms of mental health crisis, as well as grief, trauma, and disaster-related mental health symptoms. Students will also gain knowledge of evidence-based models of counseling and intervention in these areas such as comprehensive risk assessment strategies, psychological first aid and systems of mental health crisis management.

**CED 594 Dir St and Research 1-3 cr**

Students explore through directed study problems and issues of special interest or significance in Counselor Education. Not more than three semester hours of any departmental 594 courses can be accepted toward a degree program.

**CED 595 Internship - School Counseling 1-9 cr**

The internship is a supervised learning experience in a work setting similar to that in which a school counselor eventually will be employed. The internship provides the student with an opportunity to apply the theories and concepts learned during the graduate program. Not more than 12 hours may be taken. Prerequisite: Special permission of the instructor and a grade of B or above in CED 586 and CED 576.

**Prerequisite:** (5421 156) and CED 576 Minimum Grade of B and CED 586 Minimum Grade of B and CED 584 Minimum Grade of B

**CED 596 Internship-School Psychometry 1-9 cr**

The internship is a supervised learning experience in a work setting similar to that in which a school psychometrist eventually will be employed. The internship provides the student with an opportunity to apply the theories and concepts learned during the graduate program. Not more than 12 hours may be taken. Requires special permission of the instructor.

**Prerequisite:** EPY 556 Minimum Grade of B and CED 584 Minimum Grade of B and EPY 558 Minimum Grade of B and CED 583 Minimum Grade of B

**CED 597 Internship in CMHC 1-9 cr**

The internship is a supervised learning experience in a work setting similar to that in which a community counselor eventually will be employed. The internship provides the student with an opportunity to apply the theories and concepts learned during the graduate program. Not more than 12 hours may be taken. Requires special permission of the instructor.

**Prerequisite:** CED 576 Minimum Grade of B and CED 584 Minimum Grade of B and CED 586 Minimum Grade of B

**CED 598 Internship-Rehab Counseling 1-9 cr**

The internship is a supervised learning experience in a work setting similar to that in which a rehabilitation counselor eventually will be employed. The internship provides the student with an opportunity to apply the theories and concepts learned during the graduate program. Not more than 12 hours may be taken. Requires special permission of the instructor.

**Prerequisite:** CED 576 Minimum Grade of B and CED 584 Minimum Grade of B and CED 586 Minimum Grade of B

**CED 599 Thesis 1-9 cr**

A student selects a project, study or investigation which is related to an area of specialization in Counselor Education. The project forms a basis for the thesis. A thesis committee will provide direction during the writing of the thesis.

**CED 672 Adv Couns Theory and Practice 3 cr**

An advanced study of counseling theories and strategies as they apply to practical situations and special populations.

**Prerequisite:** CED 572 Minimum Grade of B

**CED 674 Adv Theory and Pract Grp Couns 3 cr**

This course provides the student with advanced skills and knowledge designed to facilitate working with groups. The course emphasizes group theory, research, and participation in group dynamics.

**Prerequisite:** CED 574 Minimum Grade of B

**CED 676 Advanced Practicum-Counseling 3 cr**

Supervised field experience in appropriate settings. Required weekly seminar. Requires special permission of the instructor.

**CED 678 Negotiation Training 3 cr**

This course focuses on the development of negotiation, conflict resolution, and communication skills needed to be effective in resolving a variety of training-related problems. Students will have an opportunity to research and practice in the negotiation process by applying communication and conflict resolution techniques in simulated and real situations.

**CED 690 Sp Top - 3 cr**

Guided supervision in the completion of learning tasks in counselor education such as program design and revision, study of a significant topic, theory, model, and supervision of selected learning activities to acquire specific counseling and testing skills.

**CED 694 Dir St and Research 1-3 cr**

Students explore through directed study problems and issues of special interest or significance in Counselor Education. Not more than three semester hours of any departmental 694 courses can be accepted toward a degree program.

**CED 699 Research Project 3 cr**

A supervised field project, or investigation in the Counselor Specialist Program, serving as the culminating experience in the program. Applying concepts and skills learned during the sixth-year program, the student will conduct an investigation and prepare a field project report in standard form.

**Prerequisite:** CED 576 Minimum Grade of B

## Criminal Justice (CJ) (CJ)

**CJ 105 Introduction to Criminal Justice 3 cr**

An overview of crime in the U.S. and the three major criminal justice agencies: law enforcement, courts, and corrections. CJ majors must pass with a grade of "C" or better.

**Cross-Listed:** CJ 205

**CJ 210 Policing and Society 3 cr**

An overview of the police functions in U.S. society, including law enforcement, maintenance of order, and public service—and of police responsibilities, including organizational and managerial aspects of policing in our democracy.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C

**Cross-Listed:** CJ 320

**CJ 215 Correctional Policies and Proc 3 cr**

An overview of the policies and procedures of U.S. correctional systems, and the methods of treatment of offenders.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C

**Cross-Listed:** CJ 340

**CJ 223 Intro to Forensic Science 3 cr**

Survey of scientific crime detection methods; crime scene search, identification and preservation of evidence; uses of the laboratory for criminal investigation.

**Cross-Listed:** CJ 423

**CJ 310 Research Methods-W 3 cr**

This course examines research methodologies in the social sciences, covering the tools and techniques for designing and conducting research, including collecting and analyzing data, and presenting findings. (Cross-listed as PSC 310).

**Prerequisite:** (CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or PSC 130 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** PSC 310

**CJ 321 Public and Private Security 3 cr**

An overview of security in modern society, including public and private security, covering the role and administration of security and security personnel.

**Prerequisite:** (CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C)

**CJ 330 Judicial Process 3 cr**

The study of U.S. judicial process at both the federal and state court levels. (Cross-listed as PSC 330)

**Prerequisite:** (CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or PSC 130 Minimum Grade of C)

**Cross-Listed:** PSC 330

**CJ 331 Constitutional Law 3 cr**

The study of the principles of constitutional powers and liberties examined through a analysis of decisions and opinions by the U.S. Supreme Court. (Cross-listed as PSC 331 and PHL 331)

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or PSC 130 Minimum Grade of C

**Cross-Listed:** PHL 331, PSC 331

**CJ 332 Criminal Law 3 cr**

An overview of what constitutes crime and of the body of law governing the punishment of crime. (Cross-listed as PSC 332)

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or PSC 130 Minimum Grade of C

**Cross-Listed:** PSC 332

**CJ 336 The Law and Legal Theory 3 cr**

Explores issues and problems in the area of law, including the nature and rule of law, the aims and roles of legal systems, morality and law, obligations to obey the law, and systematic injustices related to race, ethnicity, and gender. (Cross-listed as PSC 336 and PHL 336)

**Prerequisite:** (CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or PSC 130 Minimum Grade of C)

**Cross-Listed:** PHL 336, PSC 336

**CJ 337 Liability and Punishment 3 cr**

Explores theoretical issues and problems in the areas of law—especially criminal law—concerning liability and punishment. Topics to be examined include diminished capacity, theories of punishment, and capital punishment. (Cross-listed as PSC 337 and PHL 337)

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or PSC 130 Minimum Grade of C

**Cross-Listed:** PHL 337, PSC 337

**CJ 360 Theories of Offending 3 cr**

A study of theories of criminal behavior and delinquent behavior.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C

**CJ 363 Crime and Politics in Latin Am 3 cr**

An examination of the violent crime epidemic affecting many parts of Latin America, with specific focus on the themes of democratic transition, political economy, and foreign relations with the United States. Same as PSC 363 and IS 363.

**Prerequisite:** (PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or IS 100 Minimum Grade of C)

**Cross-Listed:** IS 363, PSC 363

**CJ 372 Gender and Criminal Justice 3 cr**

This course examines the experiences of women in the criminal justice system—as criminals, as crime victims, and as criminal justice professionals—together with social values and institutions that shape perceptions and outcomes.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or GS 101 Minimum Grade of C

**CJ 374 Race, Ethnicity, and Crim Just 3 cr**

The study of the role and impact of race and ethnicity in the development and evolution of the criminal justice system. Topics include criminal victimization, the treatment of criminal offenders, and the impact of race and ethnicity on those in the criminal justice system.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or AFR 101 Minimum Grade of C

**CJ 380 Drugs and Crime 3 cr**

An examination of different types of illegal and legal drugs, their effects on the human body including addiction, and the relationship of drug abuse and crime.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C

**CJ 390 Special Topics - 3 cr**

Study of a significant topic or problem in criminal justice. May be repeated up to two times when content varies.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C

**CJ 403 Sexual Violence 3 cr**

This course focuses on the perpetration and experience of sexual violence in the United States and incorporates perspectives from criminal justice, gender studies, sociology, and psychology.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or GS 101 Minimum Grade of C

**CJ 411 Criminal Justice Admin 3 cr**

This course applies classical and modern management and organization theories to broad range of institutions, actors, and agencies, including police, courts and corrections, as well as drug traffickers, sexual offender treatment centers, and homeland security agencies.

**Prerequisite:** (CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or PSC 130 Minimum Grade of C)

**Cross-Listed:** PSC 411

**CJ 422 Criminal Investigations 3 cr**

Explores criminal investigations procedures including theory of investigations, case presentation, interrogation, and special problems in criminal investigations.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C

**CJ 423 Criminalistics 3 cr**

Survey of scientific crime detection methods; crime scene search, identification, and preservation of evidence; use of the laboratory for criminal investigation.

**Prerequisite:** (CJ 205 Minimum Grade of C or PSC 205 Minimum Grade of C)

**CJ 430 Criminal Procedure 3 cr**

An overview of the processes used by criminal investigators and the roles of those involved in the judicial process, as well as the interaction that occurs between the police, prosecutors, defense attorneys and the judiciary. (Cross-listed as PSC 430)

**Prerequisite:** (CJ 105 Minimum Grade of C or PSC 130 Minimum Grade of C)

**Cross-Listed:** PSC 430

**CJ 440 Community Based Corrections 3 cr**

Examine alternatives to incarceration in the community informed by current practice and research.

**Prerequisite:** CJ 105 Minimum Grade of C

**CJ 455 Juvenile Justice Administration and Policy 3 cr**

An examination of the policies, programs, and practices of crime involving youth and the administration of juvenile justice.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C

**Cross-Listed:** CJ 450

**CJ 469 Criminal Justice Policies 3 cr**

This course examines how public policy has shaped both the criminal justice system and its results, with particular emphasis on crime control.

**Prerequisite:** CJ 105 Minimum Grade of C or PSC 130 Minimum Grade of C or CJ 205 Minimum Grade of C

**Cross-Listed:** CJ 370, PSC 469

**CJ 471 Police Account and Community 3 cr**

This course examines the interaction of peace officers with the community and community oriented policing strategies. The class examines police accountability, which has increased since the inception of body cameras, social media and "cop watching" groups.

**Prerequisite:** (CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C)

**CJ 472 Comparative CJ Systems 3 cr**

An examination of differences and similarities in criminal justice systems globally, including criminal law, crime rates, crime control and law enforcement.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or IS 100 Minimum Grade of C

**Cross-Listed:** PSC 330

**CJ 473 International Law 3 cr**

The course covers major issues, cases and topics in public and private international law. Course coverage includes individuals and corporations, diplomatic relations, jurisdiction, human rights, economic relations, treaties, environmental law, and more.

**Prerequisite:** (CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or PSC 130 Minimum Grade of C or IS 100 Minimum Grade of C)

**Cross-Listed:** IS 473, PSC 473

**CJ 488 Armed Conflict 3 cr**

The study of armed conflict from an interdisciplinary perspective incorporating criminology, political science, security studies, conflict and peace studies, and international law.

**Prerequisite:** (CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or IS 100 Minimum Grade of C or PSC 130 Minimum Grade of C or PSC 270 Minimum Grade of D)

**Cross-Listed:** PSC 488

**CJ 490 Special Topics- 3 cr**

Study of a significant topic, problem, or issue in criminal justice. May be repeated up to two times when the content varies. Only 6 credit hours may be applied to the criminal justice major.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C

**CJ 491 Seminar on Terrorism 3 cr**

Study of a terrorism from a sociopolitical perspective with an emphasis on causes, policy, tactics and operational characteristics and counter-terrorism operations. Cross-listed with PSC 491 and IS 491.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or PSC 130 Minimum Grade of C or IS 100 Minimum Grade of C

**Cross-Listed:** IS 491, PSC 491

**CJ 492 Capstone Seminar CJ-W 3 cr**

The Capstone course brings together key components from across the criminal justice curriculum. As part of the course, students will write a research paper, present their research, and take a comprehensive exam. CJ majors must earn a grade of C or better for graduation.

**Prerequisite:** (CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C) and (PSC 130 Minimum Grade of D) and (CJ 210 Minimum Grade of D or CJ 320 Minimum Grade of D) and (CJ 215 Minimum Grade of D or CJ 340 Minimum Grade of D) and (CJ 310 Minimum Grade of D or PSC 310 Minimum Grade of D) and (CJ 330 Minimum Grade of D or PSC 330 Minimum Grade of D) and (CJ 360 Minimum Grade of D) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**CJ 493 Study Abroad - 3 cr**

Examines the principles of the United States Constitution and roles of Congress, the President, and the courts, the mass media, interest groups, and more in our U.S. political system. PSC majors and minors must pass with a grade of 'C' or better.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C

**CJ 494 Directed Studies - 1-3 cr**

Students will pursue directed research or readings on an approved topic in criminal justice.

**Prerequisite:** (CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C)

**CJ 496 Internship 3 cr**

An opportunity to gain experiential learning through a supervised internship offered by a variety of criminal related agencies.

**Prerequisite:** (CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C)

**CJ 497 Practicum in Polling 3 cr**

Supervised experience in all aspects of the survey research process including but not limited to literature review, research design, questionnaire development, sampling techniques, interviewing, data analysis, and interpretation and presentation of findings. Requires permission of instructor.

**Prerequisite:** (CJ 205 Minimum Grade of C or PSC 205 Minimum Grade of C) and PSC 130 Minimum Grade of C and (CJ 310 Minimum Grade of C or PSC 310 Minimum Grade of C)

**CJ 498 Practicum in Policy Studies 3 cr**

Students will be exposed to a variety of experiences associated with the operations of a fully operational research center, including in-service and management training, consulting, sponsored research, organizational assessments, strategic and programming planning, operations, program evaluation, intergovernmental fiscal processes including the search for funding, and grant writing. Research assignments will include basic research design, survey and focus group instrument development, administration of surveys, handling focus groups, curriculum preparation and administration data manipulation and analysis, and report writing. Requires permission of instructor.

**Prerequisite:** (CJ 205 Minimum Grade of C or PSC 205 Minimum Grade of C) and PSC 130 Minimum Grade of C and (CJ 310 Minimum Grade of C or PSC 310 Minimum Grade of C)

**CJ 499 Honors Thesis W 3-6 cr**

The research and writing of a major paper in the field of criminal justice. Registration is open to criminal justice majors in the Honors College or those pursuing Department Honors.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C

## Cybersecurity (CYB)

**CYB 530 Information Assurance/IT Audit 3 cr**

This course covers the understanding and managing of risks and threats to information and information systems. This includes protecting and defending information and information systems by ensuring through authorization and other means concepts such as accessibility, secrecy, reliability, and authentication.

**Prerequisite:** CSGR P

**CYB 535 Digital Forensic Analysis 3 cr**

This course provides students with advanced tools, techniques, and methodologies for accumulating, securing, analyzing, managing, and reporting evidence related to a forensics examination. The professional communication and presentation of the results of forensic investigations will be emphasized.

**Prerequisite:** CSGR P

**CYB 538 OS Concepts and Security 3 cr**

This course examines the concepts of operating systems such as memory and virtual memory management, as well as processor, process, device, and file management. Topics include the management and organization of network operating systems and operating system security and ethics. Students will manage, configure, and secure operating systems such as Windows, Unix, and Linux in laboratory environments.

**Prerequisite:** CSGR P

**CYB 540 Network Security Management 3 cr**

This course examines network and web security issues including: risks and threats, system access points, hardware and software defense methods, and organizational security policies. The course will cover the analysis of systems for vulnerabilities, the implementation of security procedures, the monitoring of systems for security breaches, and the recovery or restoration of breached systems.

**Prerequisite:** CSGR P

**CYB 555 Data Security 3 cr**

This course examines the major concepts of data security such as confidentiality, integrity, availability, authenticity, and non-repudiation. Topics include the four types of data security, the five major elements of data security, the three A's of data security, and the seven components of data security strategies. Students will conduct labs that will expose them to the techniques and tools used in data security management within an organization.

**CYB 570 Cybersecurity Ethics 3 cr**

This course examines the topic of ethics from a cybersecurity perspective. Topics include an introduction to the field of ethics; the three ethical frameworks; ethical hacking; issues related to privacy rights, surveillance, and intellectual property; and current cybersecurity codes of ethics. Students will further examine the topic of ethics through writing assignments, utilizing the major ethical frameworks: virtue, utilitarian, and communitarian.

## Digestive - MD (DIG)

### DIG 210 Digestive 6 cr

Studies in this module are focused on the mastery of clinical and scientific principles involving the normal anatomic and physiologic functions of the mouth, esophagus, stomach, small and large intestine, along with the role of the pancreas and hepatobiliary tree. Secretory, motility, and absorptive functions throughout the upper and lower GI tract are a major focus of study. Students will also develop an understanding of Nutritional and Metabolism disorders that are secondary complications of gastrointestinal and/or hepatobiliary disorders.

## Digital Film/Telev Prod (DFT)

### DFT 240 Digital Cinema Prod Basics 3 cr

This course will teach the basics of directing, composition, lighting, audio and editing in the digital realm. Techniques of working with actors and the technical and aesthetic considerations of moving-picture photography, audio design and storytelling through editing will be covered by lecture, example, and practical exercise. Technology

### DFT 241 Intro TV Studio Production 3 cr

Theory and practice of television production. Concentrates on exploring the uses of television in varied contexts, including corporate, community, and broadcasting applications.

### DFT 244 Radio Broadcasting 3 cr

A survey of radio broadcast operations. Examines terrestrial, Internet, and satellite radio. Emphasis on audience analysis, programming, promotions, production, performance, and regulatory standards.

### DFT 283 Chinese Film 3 cr

This course will introduce students to major topics in Chinese history, covering both ancient periods, such as the Three Kingdoms period, and twentieth-century events such as the war with Japan and the Cultural Revolution. Post-Tiananmen Chinese society will also be stressed. Students will explore these themes through Chinese film and literature, and will thus become familiar with major directors, including Zhang Yimou and Jia Zhangke and writers such as Yu Hua.

**Cross-Listed:** HY 283, LG 283

### DFT 320 Film and TV Scriptwriting-W 3 cr

Students will learn basic dramatic structure, especially as it pertains to film and television. Student will become proficient in the screenplay format through the use of professional scriptwriting software. Students will leave the class with a short-film script which will be ready for production

**Prerequisite:** EH 102 Minimum Grade of C

### DFT 340 Video Field Production 3 cr

The focus of this course is on production techniques, processes and skills. Analysis of television production as a communication process, program formats, production equipment and facilities, production and unit management and the role of the director.

### DFT 341 Intermediate TV Studio Prod 3 cr

This course will give students practical grounding in the concepts and technology associated with the production of studio-based news and information programs. Technology

**Prerequisite:** (DFT 241 Minimum Grade of D or CA 241 Minimum Grade of D)

### DFT 343 Film History 3 cr

An examination of the development of motion pictures from 1893 to the present. Films representing major periods, movements, and styles will be examined.

### DFT 344 Film and TV Genres 3 cr

A study of the formation and evolution of film and television genres. Selected genres will be studied in terms of their structure and cultural history.

### DFT 356 Digital Cinema Management 3 cr

A survey of the legal, budgeting, revenue stream and distribution issues associated with film and television production. Topics include preproduction and production management, script breakdown, scheduling, and above and below the line talent. Computer

### DFT 357 Basic Film Production 3 cr

This course will teach the basics of planning, scripting, shooting and editing short films in the 16mm format. Technology

**Prerequisite:** (DFT 240 Minimum Grade of D or CA 240 Minimum Grade of D) and (DFT 340 Minimum Grade of D or CA 340 Minimum Grade of D)

### DFT 358 Digit Comp, Animation & Graph 3 cr

This course will introduce the basics of digital special-effects, two-dimensional computer animation and two- and three-dimensional video graphics. Technology

**Prerequisite:** (DFT 240 Minimum Grade of D or CA 240 Minimum Grade of D) and (DFT 340 Minimum Grade of D or CA 340 Minimum Grade of D)

### DFT 440 Adv Video Field Production 3 cr

Theory and practice of television production. Concentrates on exploring and understanding the concepts and technology involved in advanced video production for a variety of applications including commercial, corporate, and community outlets. Culminating experience for digital cinema & television students.

**Prerequisite:** (DFT 340 Minimum Grade of D or CA 340 Minimum Grade of D)

### DFT 441 Adv TV Studio Production 3 cr

Advanced theory and practice of television production. Concentrates on exploring the advanced uses of television in varied contexts, including corporate, community, and broadcasting applications. Fee

**Prerequisite:** (DFT 341 Minimum Grade of D or CA 341 Minimum Grade of D)

### DFT 488 Screenwriting for Television-W 3 cr

Craft talks and guided workshops on how to create a television series and write the pilot episode. Same as EH 488.

**Prerequisite:** EH 102 Minimum Grade of C or EH 105 Minimum Grade of C

## Drama (DRA) (DRA)

### DRA 100 Theatre Practicum: Performance 1 cr

Practical experience in acting. May be repeated three times for a maximum of four credit hours. Prerequisite: Permission of department chair. Fulfills the Fine Arts and Humanities requirement in general education.

### DRA 101 Theatre Practicum: Tech 1 cr

Practical experience in backstage work. May be repeated three times for a maximum of four credit hours. Prerequisite: Permission of department chair. Fulfills the Fine Arts and Humanities requirement in general education.

**DRA 102 Theatre Practicum: Leadership 1 cr**

Practical experience in theatre areas other than acting or technical production. May be repeated three times for a maximum of four credit hours. Prerequisite: Permission of department chair. Fulfills the Fine Arts and Humanities requirement in general education.

**DRA 106 Theatre Cornerstone 1 cr**

An introductory course designed to familiarize incoming majors to the basics of professional theatre, the expectations for the upcoming 4-year degree, and the processes of the USA Department of Theatre and Dance.

**DRA 110 Introduction to Theatre 3 cr**

A basic survey of theatre practice. Fulfills the Fine Arts and Humanities requirement in general education.

**DRA 121 Acting II 3 cr**

A continuation of Acting I, this course emphasizes character development and analysis of classic American texts and introduces the work of Konstantin Stanislavski. Prerequisite: DRA 120 or permission of the instructor. Restrictions: Must be a drama major or minor or a dance minor. This course fulfills the Fine Arts and Humanities requirements in General Education

**Prerequisite:** DRA 120 Minimum Grade of D

**DRA 125 Fundamentals of Acting 3 cr**

An introductory class in acting for the stage, aimed at those with little or no previous experience. Students will be introduced to a basic acting vocabulary, begin to develop skills in necessary script analysis, observe acting through live and recorded performances, and gain practical experience in acting through exercise, rehearsal and performance.

**DRA 135 Fund of Technical Theatre I 3 cr**

A basic survey of fundamentals of scenery and lights for the theatre. This course prepares students for the Essential Skills in Entertainment Technician exams as proctored by the United States Institute of Theatre.

**DRA 136 Fund of Technical Theatre II 3 cr**

A basic survey of fundamentals of Costuming, Wigs/Stage Make-up and Properties for theatre. Course prepares students for the Essential Skills in Entertainment Technician exams as proctored by the United States Institute of Theatre.

**DRA 150 Text Analysis 3 cr**

Reading and analyzing play scripts as blueprints for dramatic actions, sights, sounds, characters, and productions. This course fulfills the Fine Arts and Humanities requirement in General Education.

**DRA 220 Stage Movement 3 cr**

Through exercises and scene study, student-actors explore movement for the stage.

**Prerequisite:** DRA 121 Minimum Grade of C

**DRA 221 Voice for Actors 3 cr**

A workshop-lecture course in speaking voice and articulation for performance.

**Prerequisite:** DRA 121 Minimum Grade of C

**DRA 235 Fund of Theatrical Design 3 cr**

A basic survey of theatrical design practices including the fundamental elements of line, shape, texture, composition, and color utilized for visual communication.

**Prerequisite:** DRA 135 Minimum Grade of C and DRA 136 Minimum Grade of C

**DRA 290 Special Topics - 1-3 cr**

Theatre and drama topics not covered in regular curriculum. May be repeated when subject varies for a total of 9 hours.

**DRA 300 Adv Wksp Rehearsal and Perform 1 cr**

Advanced practical experience in acting. May be repeated for a maximum of 4 hours. Prerequisites: Junior status and Permission of Instructor.

**DRA 301 Adv Wksp Technical Production 1 cr**

Advanced practical experience in backstage work. May be repeated for a total of 4 hours. Prerequisites: Junior status and permission of Instructor.

**DRA 302 Adv Wksp Spec Activities 1 cr**

Advanced practical experience in theatre areas other than acting or technical production. May be repeated three times for a total of four hours. Prerequisites: Junior status and permission of department chair.

**DRA 310 Playwriting 3 cr**

Studies in character, plot development, and the one-act play form. Prerequisite: Permission of Instructor.

**DRA 321 Acting IV 3 cr**

A continuation of Acting III, this course emphasizes the techniques of theatrical styles, typically "Shakespeare." Prerequisite: DRA 121 or permission of the instructor. Limited to undergraduate status.

**Prerequisite:** DRA 121 (may be taken concurrently) Minimum Grade of D

**DRA 323 Acting II 3 cr**

Course is designed to teach theory and techniques in character development and analysis, as used in Realistic theatre, through the use of scene study. Prerequisites: DRA 120 Acting I, DRA 220 Stage Movement, DRA 221 Voice of the Actor, or permission of the dept. chair.

**Prerequisite:** DRA 120 Minimum Grade of C or DRA 220 Minimum Grade of C or DRA 221 Minimum Grade of C

**Cross-Listed:** DRA 222

**DRA 330 Scene Design 3 cr**

The fundamentals of scene design for the stage. Prerequisite: Limited to undergraduate status.

**Prerequisite:** DRA 235 Minimum Grade of C

**DRA 331 Lighting Design 3 cr**

The course focuses on the fundamentals of lighting design for the Stage.

**Prerequisite:** DRA 235 Minimum Grade of C

**DRA 332 Costume Design 3 cr**

The fundamentals of costume design for the stage.

**Prerequisite:** DRA 235 Minimum Grade of C

**DRA 334 Costume Design 3 cr**

A class in basic design theory,, concentrating on design concept, characterization and research. Some instruction in figure drawing and rendering. Artistic and Technical concerns as they apply to Costume Design will be addressed through lectures, discussions, and critiques. The course will focus on the first half of the design process: research, direction and rendering of ideas. Special concentration will focus on character analysis and their physical manifestations. In-class critiques will help the student to identify and utilize the characteristics of good design.

**Cross-Listed:** DRA 432

**DRA 340 Directing I 3 cr**

The fundamental techniques involved in directing a stage play: analysis, casting, and blocking.

**Prerequisite:** DRA 120 Minimum Grade of C and DRA 150 Minimum Grade of C

**DRA 350 Theatre History I - W 3 cr**

A comprehensive study of the important developments in theatre art from its beginnings to 1642, including a computer component.

**Prerequisite:** DRA 120 Minimum Grade of C and DRA 150 Minimum Grade of C and EH 102 Minimum Grade of C

**DRA 351 Theatre History II - W 3 cr**

A continuation of DRA 350 from the Restoration to the present.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**DRA 400 Theatre Internship 6 cr**

Practical experience in stock, repertory, or touring theatre. Prerequisites: Junior status or permission of the department chair. May be repeated for a maximum of 6 credit hours.

**DRA 410 3-Dimensional Makeup and Masks 3 cr**

A class in basic face casting, theatrical masks and slush mold latex appliances for the Stage.

**Prerequisite:** DRA 210 Minimum Grade of C

**DRA 420 Studies in Acting Styles 3 cr**

Variable content course featuring acting styles found in different theatrical genres as well as for the camera. May be repeated twice for credit when topic varies.

**Prerequisite:** DRA 120 Minimum Grade of C and DRA 220 Minimum Grade of C and DRA 221 Minimum Grade of C

**DRA 431 Lighting Design 3 cr**

The fundamentals of lighting design for the stage.

**Prerequisite:** DRA 131 Minimum Grade of C and DRA 133 Minimum Grade of C

**DRA 432 Costume Design 3 cr**

The fundamentals of costume design for the stage. Prerequisite: DRA 132

**Prerequisite:** DRA 132 Minimum Grade of D

**DRA 435 Design Practicum - Main Stage 3 cr**

A class geared to giving the student practical application design theory, continued development of render/modeling skill, and actualization of design

**Prerequisite:** DRA 330 Minimum Grade of C or DRA 331 Minimum Grade of C or DRA 332 Minimum Grade of C

**DRA 480 Senior Capstone 3 cr**

A culminating experience for all theatre majors, this course will provide instruction in professional theatre business practices aimed at graduating students about to leave the university for early career opportunities, as well as afford the student the opportunity to prepare and present a major research project that builds upon and synthesizes the knowledge and skills acquired during their theatre studies. A presentation of the research project will be presented to the entire department, and adjudicated by the full-time theatre faculty.

**Prerequisite:** DRA 340 Minimum Grade of C

**DRA 490 Special Topics 1-3 cr**

Various topics of special interest to Theatre majors. Restrictions. Limited to undergraduate status. Prerequisite: Permission of department chair. May be repeated once for a maximum of six credit hours when topic varies.

**DRA 494 Directed Studies - 1-3 cr**

Independent study under faculty supervision, involving research readings, or artistic projects. Restrictions: Limited to undergraduate status.

Prerequisites: Permission of department chair. May be repeated seven times for a maximum of eight credit hours.

**DRA 496 Theatre Internship 6 cr**

Practical experience in stock, repertory, or touring theatre.

## Ear, Nose & Throat - MD (ENT)

**ENT 201 Ear, Nose & Throat 3 cr**

This module uses an integrated curriculum of basic science and clinical material to develop the student's knowledge and ability to describe and diagnose conditions of the head and neck from cranial fossa to larynx. We will use team-based and small-group learning exercises, lectures, anatomy labs, hands-on clinical skills labs, independent learning, clinical experiences and radiological imaging. The module will begin with an introduction to head and neck embryology. This will contrast the abnormal with normal development. In the anatomical segment, students will study the 12 cranial nerves as related to head and neck structures and learn to recognize the signs and symptoms resulting from nerve lesions. In addition, the students will learn the microbiology, physiology and pharmacology of the upper respiratory region. The goal of this module is to provide pre-clerkship medical students with a comprehensive pathophysiologic understanding of the head and neck. The knowledge and skills acquired in this module will ultimately enable students to appropriately evaluate, diagnose, treat and manage a broad spectrum of head and neck injuries and/or illnesses during their clinical years and beyond.

## Earth Sciences (ES) (ES)

**ES 301 Writing for the Earth Sci -W 3 cr**

This course is designed to introduce students to basic scientific writing skills. Participants will review the general principles of clear writing and will apply these principles to writing for a specific audience. Particular emphasis will be placed on conveying the significance of research, outlining the aims, and discussing the results for scientific papers.

**Prerequisite:** EH 101 Minimum Grade of C or EH 102 Minimum Grade of C

**ES 492 Honors Earth Sciences Sem - H 3-4 cr**

Multidisciplinary (Geography, Geology, Meteorology) topics not covered in current Department of Earth Sciences courses. Topic announced prior to registration. Prerequisites: acceptance into the University Honors Program, the Earth Sciences Departmental Honors Program, or by permission of the Chair of Earth Sciences. (Completion of this course is required for the Earth Sciences Departmental Honors students)

**ES 497 Senior Thesis Prospectus - H 2 cr**

With the guidance and advice of a Senior Thesis Committee, students will identify a suitable research project in Earth Sciences (Geography, Geology, Meteorology) and develop a thesis prospectus to conduct this research during their senior year. The Senior Thesis prospectus will be evaluated by the committee which must pass it before thesis research can formally begin. Prerequisites: establishment of a senior thesis committee; acceptance into the Departmental Honors Program.

**ES 499 Senior Honors Thesis - H - W 3 cr**

With the guidance and advice of a Senior Thesis Committee, students will carry out an in-depth research project in Earth Sciences (Geography, Geology, Meteorology) according to an accepted Thesis Prospectus during their senior year. This course will be repeated for up to six (6) credits. Prerequisites: Geography, Geology, Meteorology major, senior status; acceptance into the Departmental or University Honors Program.

**Prerequisite:** ES 497 Minimum Grade of C or HON 301 Minimum Grade of C and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

## Economics (ECO) (ECO)

### ECO 215 Prin of Microeconomics 3 cr

Functions of the price system in a market economy; role of households and business firms in mobilizing resources to meet human needs.

The functional and personal distribution and use of income. Relevant problems are discussed.

### ECO 216 Prin of Macroeconomics 3 cr

Economics as a science; its nature and functions. Analysis of the American economy from the macroeconomic viewpoint, stressing full employment, monetary and fiscal policy, national income accounting, and their application to current problems and issues.

### ECO 300 Introduction to Economics 3 cr

Intensive study of micro-and macroeconomic principles with emphasis on application to current economic issues and problems of interest to public school teachers and students.

### ECO 315 Intermediate Microeconomics 3 cr

Operation of the price system, with special reference to a market economy and to related public policies and business issues; analysis of the distribution of income; theories of consumer behavior, the firm, resource allocation, and product distribution.

**Prerequisite:** ECO 215 Minimum Grade of D or ECO 300 Minimum Grade of D and ACC 212 Minimum Grade of D and ECO 216 Minimum Grade of D and BUS 255 Minimum Grade of D and BUS 265 Minimum Grade of D and CIS 250 Minimum Grade of D

### ECO 316 Intermediate Macroeconomics 3 cr

The nature and control of forces in a developed economy which determine levels of employment, income and use of resources, and rate and direction of economic growth.

**Prerequisite:** ECO 214 Minimum Grade of D or ECO 216 Minimum Grade of D or ECO 300 Minimum Grade of D

### ECO 318 Prin of Managerial Economics 3 cr

Study of economic principles and methods in analyzing problems faced by management of a business or other type of organization; application of economic concepts to finding solutions of such problems that advance the best interest of such organizations.

**Prerequisite:** ECO 215 Minimum Grade of D or ECO 300 Minimum Grade of D

### ECO 322 Economics of Industrial Org 3 cr

An analysis of the effect of modern industrial structure on competitive behavior and performance, in the light of contemporary price theory and the theory of workable competition; a critical evaluation of the legislative content, judicial interpretation, and economic effects of antitrust laws, current problems and proposed remedies.

**Prerequisite:** ECO 215 Minimum Grade of D or ECO 300 Minimum Grade of D

### ECO 323 Public Finance 3 cr

The nature, purposes, and economic effects of various types of taxes in a federal government. Problems of tax administration, budgeting, and expenditure of tax revenues. Review of current problems.

**Prerequisite:** ECO 215 Minimum Grade of D or ECO 300 Minimum Grade of D

### ECO 330 Current Global Economic Issues 3 cr

Application of the standard economic theory to markets to analyze major issues confronting U.S. consumers and businesses in the global economy. Topics include comparative advantage, commercial policy and protectionism, currency markets and foreign exchange rates, economic integration and free trade areas, international trade accounting, and financial aspects of international trade.

**Prerequisite:** ECO 215 Minimum Grade of D or ECO 300 Minimum Grade of D

### ECO 340 Money and Banking 3 cr

Analysis of monetary, credit, and banking institutions in the American economy, emphasizing commercial banks, the Federal Reserve System, and the Treasury. Credit for both ECO 340 and FIN 343 is not allowed.

**Prerequisite:** FIN 315 Minimum Grade of D

**Cross-Listed:** FIN 343

### ECO 343 Labor Economics 3 cr

United States population analyzed by age, sex, and other characteristics; study of the labor force and its composition; unemployment and underemployment. Education as an investment in productive resources. Economics of leisure, health, housing, recreation, and other areas of human-resource development.

**Prerequisite:** ECO 215 Minimum Grade of D or ECO 300 Minimum Grade of D

### ECO 355 Sport & Entertainment Econ 3 cr

The analysis of the economics of decision making and trends in sports and entertainment media. This class will cover cases where economic analysis has caused in behavior, as well as cases where various groups appear to behaving irrationally. Prerequisites: ECO 215 or ECO 300 for non-business and non-economic major.

**Prerequisite:** ECO 215 Minimum Grade of D or ECO 300 Minimum Grade of D

### ECO 363 International Economics 3 cr

Modern international trade theory; the balance of payments and the adjustments processes; the evolution of international economic institutions; critical analysis of current international economic policies - trade, monetary, and regional economics organizations.

**Prerequisite:** ECO 214 Minimum Grade of D or (ECO 212 Minimum Grade of D or ECO 215 Minimum Grade of D) or ECO 216 Minimum Grade of D or ECO 300 Minimum Grade of D

### ECO 371 Economic Development 3 cr

Economic development theory with stress on the roles of technology, management, international financing, technical assistance organizations, and international private investment. Factors that control and influence the developmental and growth process either positively or negatively.

Prerequisites: ECO 215 or ECO 300 for non-business and non-economics majors.

**Prerequisite:** ECO 215 Minimum Grade of C or ECO 300 Minimum Grade of C

### ECO 372 Economics of Urban Development 3 cr

This course addresses contemporary issues of urban and metropolitan areas. The course focuses on understanding the main economic forces leading to the existence of cities and regional agglomeration. Students will also use neoclassical economic theory to critically analyze economic efficiency and the spatial structure of markets. The course includes a wide range of topics such as urban growth, business clusters, poverty, crime, urban transportation, positive and negative externalities in urban areas, land use theory, housing, and the role of local governments.

**Prerequisite:** ECO 215 Minimum Grade of D or ECO 300 Minimum Grade of D

**ECO 383 Economic History of the US 3 cr**

The evolution of the modern United States economic system. The parts played by exploitation of natural resources, investment from abroad, financial institutions, and technology in arriving at the present economic situation. Critical analysis of development just before, during, and after World War II, and of current economic problems.

**Prerequisite:** (ECO 215 Minimum Grade of D or ECO 212 Minimum Grade of D) and (ECO 214 Minimum Grade of D or ECO 211 Minimum Grade of D or ECO 216 Minimum Grade of D) or ECO 300 Minimum Grade of D

**ECO 390 Environmental Economics 3 cr**

This course introduces students to the economic and environmental implications of natural resource management. The course covers conceptual and methodological topics, including sustainability, which will be applied to contemporary issues i.e. depletion of renewable resources, land and water scarcity, and climate change. Specific topics include the economics of energy, fisheries, forestry, food and pollution.

**Prerequisite:** ECO 215 Minimum Grade of D or ECO 300 Minimum Grade of D

**ECO 451 Mathematical Economics 3 cr**

Application of business and economics concepts using economic models and equilibrium, matrix algebra, differentiation, comparative static analysis, optimization problems, and other selected techniques.

**Prerequisite:** MA 120 (may be taken concurrently) Minimum Grade of D and ECO 215 Minimum Grade of D and ECO 216 Minimum Grade of D or ECO 300 Minimum Grade of D

**ECO 453 Intro to Econometrics 3 cr**

Study of regression analysis and its application to business, economics, and other social-science problems; emphasis on model building, research writing, and econometric forecasting. Students are required to write a term paper on econometric applications under direct supervision of the instructor.

**Prerequisite:** BUS 255 Minimum Grade of D and (ECO 215 Minimum Grade of D or ECO 216 Minimum Grade of D)

**ECO 490 Special Topics 3 cr**

Designed to provide senior students an opportunity to study selected topics of particular interest. A student may count no more than six hours of Special Topics in the concentration. **Prerequisite:** Approval of Department Chair.

**ECO 491 History of Economic Thought -W 3 cr**

Economic ideas from the Greeks to present with intensive study of the classical, neoclassical, and contemporary schools of economic thought.

**Prerequisite:** (ECO 215 Minimum Grade of D or ECO 212 Minimum Grade of D) or ECO 300 Minimum Grade of D

**ECO 494 Dir St in Economics 3 cr**

Reading and research on selected economic topics under guidance of the departmental faculty. Junior and senior standing, a cumulative GPA of 2.5 or better, and approval of the department chair following the evaluation of a written proposal.

**ECO 496 Economics Internship 3 cr**

The internship program is designed to give students practical experience in their field of study. Students complete directed projects under the supervision of Department Chair. **Prerequisites:** Junior or Senior standing, declared major in economics, overall GPA of least 2.0, and Internship Agreement signed by the Department Chair.

**ECO 506 Economic Theory 3 cr**

An introduction to economic theory, including the basic theory of the market (supply and demand); elasticity; introduction to market structure; trade theory; international trade and balance of payments; national income accounting; money and the banking system; macroeconomic theories, and macroeconomic stabilization policy.

**ECO 535 Forecasting Business Dynamics 3 cr**

Application of business and economic concepts using business cycle models, international trade theories, dynamics of stock market, unemployment, tax policies, monetary policy regulation, and forecasting of important business indicators.

**ECO 590 Sp Top - 3 cr**

Designed to provide graduate students an opportunity to study selected topics. (A student may count no more than three hours of Special Topics in the MBA degree program.) **Prerequisite:** Approval of Department Chair.

**ECO 594 Independent Study in Economics 3 cr**

Readings and research on selected topics. Conferences and formal research report required. Approval of Department Chair.

**ECO 609 Industrial Organiz Economics 3 cr**

This course focuses on industrial organization topics such as consumer choice, market structure, and pricing. It is designed to give students fundamentals in economics and to help them start research agendas.

## Edu-K-6 and 6-12 Teacher (EDU) (EDU)

**EDU 100 Role of the Teacher 2 cr**

This course provides a broad overview of education, schools, and teaching as well as an orientation to the K-6 Teacher Education Program.

**EDU 125 Step 1: Inquiry Approaches to Teaching 1 cr**

The goal of Step 1: Inquiry Approaches to Teaching is to have undergraduate students explore teaching mathematics or science in an upper-elementary setting. This 1-credit hour course provides students with an introduction to inquiry-based science and mathematics instruction through experiencing inquiry-based instruction as a learner, and implementing inquiry-based instruction in a real classroom setting. Course objectives focus on learning to write an inquiry-based lesson plan, examining strategies for achieving instructional equity, and demonstrating use of instructional technology. Step 1 is a first course within the UTeach minor.

**EDU 126 Step 2: Inquiry-Based Lesson Design 1 cr**

This one-hour field-based course focuses on the basic principles of designing, implementing, and assessing inquiry-based mathematics and science instruction for middle school curricula. Field experiences will be completed in a public middle school and will consist of preparing, teaching, and assessing three inquiry-based mathematics or science lessons. Alignment to state content and pedagogical standards will be emphasized. May be taken concurrently with EDU 325. **Prerequisites:** EDU 125 with a grade of 'C' or better.

**Prerequisite:** (EDU 125 Minimum Grade of C)

**EDU 127 Step Combo: Inquiry Approaches to Teaching and Lesson Design 2 cr**

This two-hour field-based course is an accelerated exploration of teaching as a career by modeling and practicing inquiry-based mathematics and science instruction. Field experiences will be completed in both elementary and middle schools and consist of preparing, teaching, and assessing six inquiry-based mathematics or science lessons. Alignment to state content and pedagogical standards will be emphasized. May be taken concurrently with EDU 325.

**EDU 290 Special Topics 1-3 cr**

Guided study of selected educational tasks (e.g. curriculum revision, classroom materials development, models of learning and teaching) and teaching problems and practices for improving student achievement. Not more than six hours may be earned in Special Topics courses.

**EDU 300 Classroom Management 1 1-3 cr**

An introductory course in classroom management with emphasis upon effective instructional practices that inhibit student behaviors incompatible with learning. The focus is upon PEPE and how it provides the framework for effective teaching practices through the use of rules and procedures.

**Prerequisite:** (EDU 311 Minimum Grade of C and EDU 332 Minimum Grade of C and EDU 335 Minimum Grade of C and EDU 337 Minimum Grade of C and EDU 345 Minimum Grade of C)

**Corequisite:** EDU 430

**EDU 301 Arts in the Elementary School 3 cr**

Knowledge and skills appropriate to the elementary school art program. Techniques in media for teaching art in the various grades.

**EDU 302 Classroom Management 2 1 cr**

An introductory course in classroom management with emphasis upon effective instructional practices that inhibit student behaviors incompatible with learning. The focus is upon PEPE and how it provides the framework for effective teaching practices through the use of rules and procedures.

**Prerequisite:** EDU 300 Minimum Grade of C and EDU 303 Minimum Grade of C and EDU 313 Minimum Grade of C and EDU 336 Minimum Grade of C and EDU 312 Minimum Grade of C and EDU 331 Minimum Grade of C and 5002 157 and 5003 157 and 5004 154 and 5005 158

**Corequisite:** EDU 311, EDU 335, EDU 337, EDU 345, EDU 362

**EDU 303 Field Experience SPE 1-3 cr**

An in-field opportunity for early field-based practicum in a variety of placements.

**Prerequisite:** EDU 330 Minimum Grade of C

**Corequisite:** EDU 312, EDU 313, EDU 331, EDU 336, EDU 362

**EDU 311 Partnerships in SPE 3 cr**

Emphasis is on the special problems found in the home, community, and school of the exceptional child, the teacher, the family, and community resource agencies. Ways for the teacher to form teamships to work collaboratively with all human resources involved in the child's life are explored and ethical and moral standards examined.

**Prerequisite:** EDU 303 Minimum Grade of C and EDU 312 Minimum Grade of C and EDU 313 Minimum Grade of C and EDU 331 Minimum Grade of C and EDU 336 Minimum Grade of C and EDU 362 Minimum Grade of C

**Corequisite:** EDU 332, EDU 335, EDU 337, EDU 345

**EDU 312 Intell and Physical Disabilit 3 cr**

A study of the intellectual and physical disability which usually require substantial curriculum adaptations or ecological accommodation. Historical perspectives, etiology, definitions, classification, treatment, social aspects and interdisciplinary team work will be explored.

**Prerequisite:** EDU 330 Minimum Grade of C

**Corequisite:** EDU 303, EDU 313, EDU 331, EDU 336, EDU 362

**EDU 313 Learning & Behav Disorders 3 cr**

An examination of the definitions, characteristics, and prevalence of children with learning and/or behavioral disabilities. Emphasis is placed on the causes of problems in motor, perceptual, social, academic, affective and behavioral development. Students will be introduced to current service delivery models and the programming options for individuals with learning and behavioral disabilities.

**Prerequisite:** EDU 330 Minimum Grade of C

**Corequisite:** EDU 303, EDU 312, EDU 331, EDU 336, EDU 362

**EDU 321 Field Experience in SpeEd Sett 1 cr**

A series of in-field opportunities in Special Education. A variety of appropriate placements will be employed depending on each student's interest and needs. May be repeated for credit.

**EDU 322 Field Experience in SpeEd Sett 1 cr**

A series of in-field opportunities in Special Education. A variety of appropriate placements will be employed depending on each student's interest and needs. Students are placed in settings related to the student's major areas of study and co-requisites in progress. May be repeated for credit.

**Corequisite:** EDU 354

**EDU 325 Knowing & Learning in Mathematics and Science 3 cr**

This course introduces the cognitive, psychological, and pedagogical principles of learning for effective science and mathematics instruction for all learners. Course emphasize will be on the use of current technology for classroom learning; novice-expert transfer and understanding of subject matter; equity; summative, formative, and authentic assessment. Students will develop a model of knowing and learning that will guide their future practice. May be taken concurrently with EDU 126, or EDU 127.

**Prerequisite:** (EDU 125 (may be taken concurrently) Minimum Grade of C or EDU 126 (may be taken concurrently) Minimum Grade of C or EDU 127 (may be taken concurrently) Minimum Grade of C)

**EDU 326 Classroom Interactions 3 cr**

The three-hour field-based course focuses on how the interactions between curriculum, technology, and pedagogy are used to promote learning. The review of major instructional models and the delivery of effective instruction will be emphasized. This course has a field component that consists of multiple observations and teaching events, including a multiple-day connected lesson in a secondary setting.

**EDU 330 Foundations Read Instruct - W 3 cr**

A course to orient the study to fundamentals in the teaching of reading and provides practice in basic skills. This course has a required field experience.

**EDU 331 Teaching Reading 3 cr**

A course focusing on methodology, materials, and techniques for developing systematic instruction and diagnosis appropriate for early childhood and elementary children. This course has a required field experience.

**Prerequisite:** EDU 330 Minimum Grade of C

**Corequisite:** EDU 303, EDU 312, EDU 313, EDU 336, EDU 362

**EDU 332 Teaching Language Arts 3 cr**

A course presenting methods of promoting meaningful language and literacy skills in early childhood and elementary school programs. This course has a required field experience.

**Prerequisite:** EDU 303 Minimum Grade of C and EDU 312 Minimum Grade of C and EDU 313 Minimum Grade of C and EDU 331 Minimum Grade of C and EDU 336 Minimum Grade of C and EDU 362 Minimum Grade of C

**Corequisite:** EDU 311, EDU 335, EDU 337, EDU 345

**EDU 334 Teaching Mathematics I 3 cr**

This is a course that focuses on effective methods of teaching mathematics to K through grade 3 students. Emphasis will be on developing pedagogical practices that support ambitious and equitable teaching, using research-based frameworks and tools, connecting theory and practice to meet the different needs of K-3 students.

**Prerequisite:** EEC 351 Minimum Grade of C and EDU 330 Minimum Grade of C and EDU 346 Minimum Grade of C and RED 333 Minimum Grade of C

**Corequisite:** EDU 303, EDU 331, EDU 337

**EDU 335 Teaching Mathematics - W 3 cr**

A course which deals with effective methods of teaching mathematics to elementary school students. Emphasis will be on developing an understanding of numbers, teaching basic operations, and using teaching aids and materials to meet the various needs of elementary age children. This course has a required field experience.

**Prerequisite:** EDU 303 Minimum Grade of C and EDU 312 Minimum Grade of C and EDU 313 Minimum Grade of C and EDU 331 Minimum Grade of C and EDU 336 Minimum Grade of C and EDU 362 Minimum Grade of C and (5003 157 or 5903 157) and (5004 154 or 5904 154) and (5005 158 or 5905 158)

**Corequisite:** EDU 311, EDU 332, EDU 337, EDU 345

**EDU 336 Teaching Social Studies 3 cr**

A course using problem solving and independent investigation as means as teaching the relationship of humans to their environment. Objectives, content and procedures are discussed. This course has a required field experience.

**Prerequisite:** EDU 330 Minimum Grade of C

**Corequisite:** EDU 303, EDU 312, EDU 313, EDU 331, EDU 362

**EDU 337 Teaching Science 3 cr**

A course using discovery, inquiry and problem-solving approaches as a means of teaching science. Relationships of science to entire early childhood and elementary curriculum is discussed. This course has a required field experience.

**Prerequisite:** EDU 303 Minimum Grade of C and EDU 312 Minimum Grade of C and EDU 313 Minimum Grade of C and EDU 331 Minimum Grade of C and EDU 336 Minimum Grade of C and EDU 362 Minimum Grade of C

**Corequisite:** EDU 311, EDU 332, EDU 335, EDU 345

**EDU 338 STEAM Education 3 cr**

This course is an extension of mathematics and science teaching methods. It will provide a foundation of the STEAM disciplines in education, the value of integration methods, and strategies used to deliver integrated STEAM education in the elementary school setting. Topics in the course include nature of the disciplines in STEAM education, STEAM pedagogy, teaching strategies, integrated STEAM learning, and problem-based learning.

**Prerequisite:** EDU 303 Minimum Grade of C and EDU 334 Minimum Grade of C and EDU 337 Minimum Grade of C and EDU 336 Minimum Grade of C and EDU 331 Minimum Grade of C

**Corequisite:** EDU 332, EDU 335, EDU 345

**EDU 340 Fundamentals of Teaching - W 3 cr**

This course provides an introduction to effective instructional practices in the secondary classroom. The focus is on planning for instruction and classroom management. This course has both required class meetings and field experiences.

**Prerequisite:** EDM 310 Minimum Grade of C and EDU 400 Minimum Grade of C and EPY 351 Minimum Grade of C

**EDU 341 Middle Level Education - W 3 cr**

Philosophy, concepts, and issues of middle level education including the developmental stage of young adolescence, appropriate and responsive curricular, and meeting the physical, emotional, psychosocial, and cognitive needs of diverse learners.

**Prerequisite:** EDU 340 Minimum Grade of C and EDU 453 (may be taken concurrently) Minimum Grade of C or EDU 454 (may be taken concurrently) Minimum Grade of C or EDU 456 (may be taken concurrently) Minimum Grade of C or EDU 457 (may be taken concurrently) Minimum Grade of C

**Corequisite:** EDU 342, EDU 363, EDU 451

**EDU 342 Secondary Field Experience 1-3 cr**

Supervised practice in teaching curriculum areas in middle and high school classroom settings during the semester in which block courses are taken.

**Prerequisite:** EDU 340 Minimum Grade of C and EDU 453 (may be taken concurrently) Minimum Grade of C or EDU 454 (may be taken concurrently) Minimum Grade of C or EDU 456 (may be taken concurrently) Minimum Grade of C or EDU 457 (may be taken concurrently) Minimum Grade of C

**Corequisite:** EDU 341, EDU 363, EDU 451

**EDU 345 Field Experience 1-3 cr**

Supervised practice in teaching curriculum areas in the elementary or early childhood classroom setting during the semester in which sequence courses are taken.

**Prerequisite:** EDU 303 Minimum Grade of C and EDU 312 Minimum Grade of C and EDU 313 Minimum Grade of C and EDU 331 Minimum Grade of C and EDU 336 Minimum Grade of C and EDU 362 Minimum Grade of C

**Corequisite:** EDU 311, EDU 332, EDU 335, EDU 337

**EDU 346 K-6 Education 3 cr**

This course will introduce the roles of the teacher in working with children in the elementary grades.

**EDU 348 P-3 Education 3 cr**

This course will introduce the roles of the teacher in working with children during the early childhood years (preschool through 3rd grade)

**EDU 352 Literature for Adolescents 3 cr**

This course will introduce the roles of the teacher in working with children from pre-kindergarten through the primary grades. History, management, and parent education techniques are presented.

**EDU 354 Serving Students Severe Disabilities 3 cr**

Curriculum and methods for individuals who exhibit significant challenges in the areas of cognitive, motor, self care, communicative, and/or social behaviors. Emphasis is on physical management, class/individual scheduling, adapted aids and equipment, task analysis, and functional life skills.

**EDU 362 Behavior Mgmt of Except Child 3 cr**

Presentation of the principles and applications of behavioral modification, data collection procedures, and single-subject research designs as related to exceptional children and youth in special education environments.

**Corequisite:** EDU 303, EDU 312, EDU 313, EDU 331, EDU 336

**EDU 363 Tchg Adptve Cur Thru Beh/Clsrm 3 cr**

An examination of regular and special education K-12 curricula, materials, and procedures. Specific emphasis will be placed on the selection, modification, and adaptation of curricula, materials, and procedures to meet the needs of individuals with learning and behavioral disabilities.

**Prerequisite:** EDU 340 Minimum Grade of C

**EDU 372 Behav Mgt Exceptional Child 3 cr**

Presentation of the principles and applications of behavior analysis, data collection procedures, and single subject research designs as related to exceptional children and youth.

**EDU 373 Teaching Reading to Stu Disab 3 cr**

Introduces the student to the curriculum, teaching the methodologies and instructional activities and materials associated with effective and appropriate developmental and functional reading instruction for students with disabilities.

**EDU 398 P-3 Field Experience 1-3 cr**

Observation and supervised teaching in an early childhood classroom setting prior to Internship

**Prerequisite:** EDU 348 Minimum Grade of C

**EDU 400 Edu Except Child and Youth 3 cr**

Introduction to the field of exceptional children and youth, involving the study of various areas of exceptionality.

**EDU 410 Formal and Informal Assessment 3 cr**

Assesses developmental levels, academic and non-academic performance of exceptional individuals through the administration and interpretation of criterion-referenced instruments, and informal measures. Evaluation of classroom teaching and special education programs is also emphasized.

**EDU 429 Opening School Lab Experience 1 cr**

Professional laboratory experiences of observation and participation for a two-week period at the opening of school. (May be taken twice.)  
**Prerequisite:** senior standing.

**EDU 430 K-6 Internship 3-10 cr**

Observation and supervised teaching in elementary or early childhood settings with the opportunity for study and discussion of problems and issues encountered.

**Prerequisite:** (EDU 311 Minimum Grade of C and EDU 332 Minimum Grade of C and EDU 335 Minimum Grade of C and EDU 337 Minimum Grade of C and EDU 345 Minimum Grade of C) and (5003 157 or 5903 157) and (5004 154 or 5904 154) and (5005 158 or 5905 158) and (5205 159 or 190 233)

**Corequisite:** EDU 300

**EDU 430L K-6 Internship Lab 3-9 cr**

Observation and supervised teaching in elementary or early childhood settings with the opportunity for study and discussion of problems and issues encountered.

**EDU 432 Impact Typ & Atyp Dev on Edu 3 cr**

An examination of typical child development and developmental characteristics of infants, toddlers, and young children with disabilities from the prenatal period through age eight. Characteristics of disabling conditions and their impact upon development are also discussed.

**EDU 433 Issues Edu Young Child w/Dis 3 cr**

This course prepares students to work with infants, toddlers, and young children with disabilities and their families. Topics covered include specific teaching and intervention techniques, special education laws and regulations, and service delivery models.

**EDU 440 Project-Based Instruction 3 cr**

The three-hour field-based capstone course focuses on the principles of design, instruction, classroom management, and assessment of project-based and case-based curriculum projects in mathematics and science education. This course has a field component that includes observations and teaching in secondary school settings. **Prerequisites:** EDU 325 with a grade of 'C' or better, and admission to the Teacher Educator Program.

**EDU 451 Content Area Literacy 3 cr**

Methods and materials in the teaching of reading. Development of effective study and skills at the secondary level is stressed.

**EDU 453 Teaching Language Subjects 3 cr**

Assists the student in organizing materials and in developing methods of teaching language subjects in secondary schools

**Prerequisite:** EDU 340 Minimum Grade of C

**Corequisite:** EDU 341, EDU 342

**EDU 454 Teaching Mathematics 3 cr**

Assists the student in organizing materials and in developing methods of teaching mathematics in secondary schools.

**Prerequisite:** EDU 340 Minimum Grade of C

**Corequisite:** EDU 341, EDU 342

**EDU 456 Teaching Science 3 cr**

Assists the student in organizing materials and in developing methods of teaching science in secondary schools

**Prerequisite:** EDU 340 Minimum Grade of C

**Corequisite:** EDU 341, EDU 342

**EDU 457 Teaching Social Studies 3 cr**

Assists the student in organizing materials and in developing methods of teaching social studies in secondary schools

**Prerequisite:** EDU 340 Minimum Grade of C

**Corequisite:** EDU 341, EDU 342

**EDU 465 Student Teaching Secondary Sch 3 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the N-12 program. Students will be placed with a person holding a valid teaching certificate in the appropriate field. **Prerequisite:** Appropriate methods course.

**Prerequisite:** EDU 341 Minimum Grade of C

**EDU 466 Internship-Language Arts 3-9 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the 6-12 program. Students will be placed with a person holding a Masters degree and a valid teaching certificate in the appropriate field.

**Prerequisite:** (EDU 341 Minimum Grade of C and EDU 453 Minimum Grade of B and 5038 167)

**EDU 467 Internship - Social Studies 3-9 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the N-12 program. Students will be placed with a person holding a valid teaching certificate in the appropriate field.

**Prerequisite:** EDU 341 Minimum Grade of C and EDU 457 Minimum Grade of B and P081 155 or 5081 155

**EDU 468 Internship - Science 3-9 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the 6-12 program. Students will be placed with a person holding a Masters degree and a valid teaching certificate in the appropriate field.

**Prerequisite:** EDU 341 Minimum Grade of C and EDU 456 Minimum Grade of B and (P435 152 or 5435 152 or P245 150 or 5245 150 or 5265 138 or 5235 150) or 5236 154 or 5246 146 or 5436 141 or 5266 145

**EDU 469 Internship - Math 3-9 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the 6-12 program. Students will be placed with a person holding a Masters degree and a valid teaching certificate in the appropriate field.

**Prerequisite:** (EDU 341 Minimum Grade of C and EDU 454 Minimum Grade of B and 5165 159)

**EDU 470 Apprentice Teaching 7 cr**

This seven-credit-hour field-based course applies previously learned techniques and theoretical perspectives of mathematics or science education within a secondary school classroom setting. Prerequisites: EDU 325 with a grade of C or better, admission to the Teacher Educator Program, and a passing score on the Praxis exam corresponding with the student's desired area of certification.

**Prerequisite:** (5165 159 or 5266 145 or 5436 141 or 5246 146 or 5236 154) and (EDU 325 Minimum Grade of C)

**EDU 490 Special Topics 3 cr**

Guided study of selected educational tasks (e.g. curriculum revision, classroom materials development, models of learning and teaching) and teaching problems and practices for improving student achievement. Not more than six hours may be earned in Special Topics courses.

**EDU 494 Directed Research Studies 1-3 cr**

No more than six hours can be accepted for a Bachelor's Degree and Class B Certificate.

**EDU 495 K-6 Internship SPE 3-9 cr**

Observation and supervised K-6 classroom teaching experience providing the opportunity to synthesize all previous instruction. This culminating activity provides opportunity for study and discussion of problems and issues encountered in the practicum situation.

**Prerequisite:** (EDU 302 Minimum Grade of C and EDU 311 Minimum Grade of C and EDU 335 Minimum Grade of C and EDU 337 Minimum Grade of C and EDU 345 Minimum Grade of C and EDU 362 Minimum Grade of C) and (5002 157 and 5003 157 and 5004 154 and 5005 158 and 5205 159)

**Corequisite:** EDU 430

**EDU 496 Internship 6-12 9 cr**

Observation and supervised classroom teaching experience providing the opportunity to synthesize all previous instruction. This culminating activity provides opportunity for study and discussion of problems and issues encountered in the practicum situation.

**Prerequisite:** EDU 372 Minimum Grade of C and EDU 363 Minimum Grade of C

**EDU 497 P-3 Internship 3-9 cr**

Observation and supervised classroom teaching experience providing the opportunity to synthesize all previous instruction. This culminating activity provides opportunity for study and discussion of problems and issues encountered in the practicum situation.

**Prerequisite:** EDU 432 Minimum Grade of C and EDU 433 Minimum Grade of C

**EDU 498 P-3 Internship 3-10 cr**

Observation and supervised teaching experience providing the opportunity to synthesize all previous instruction. This culminating activity provides opportunity for study and discussion of problems and issues encountered in the practicum situation.

**Prerequisite:** EDU 348 Minimum Grade of C and EDU 398 Minimum Grade of C

**EDU 499 Senior Honors Project - H 3-6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project, relevant to the field of elementary/early childhood study, that will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty chaired by the honors mentor. This course is required for Honors recognition and may be repeated for up to six hours. Prerequisite: Participant in honors program and junior level status.

**EDU 500 Capstone Portfolio 0 cr**

The capstone portfolio is a 0 credit course for graduate students whose programs require a capstone portfolio as all or part of their comprehensive exam. Students will enroll in this course for their final semester. The portfolio will be developed under the guidance of the student's academic advisor and other departmental faculty, and will demonstrate mastery of content knowledge, professional dispositions and skills.

**EDU 567 Multicultural Exp in Schools 3 cr**

In an increasingly diverse society, teachers must be able to work with students with form a variety of backgrounds, some quite different from teachers' own cultural backgrounds. This course responds to the growing need for better training for teachers in how to work with a diverse population, increase academic achievement, and prepare students from a global workplace.

**Cross-Listed:** SED 567

**EDU 640 Instructional Development 3 cr**

Preparation of a modular program of instruction which incorporates all elements of the instructional-design process.

**EDU 650 Instructional Techniques 3 cr**

**Cross-Listed:** IDE 650

**EDU 692 Research Proj Seminar 3 cr**

Survey of both current and classic research in education. Students will identify a research problem of significance in their area of specialization and develop a strategy or research design to solve this problem.

**Prerequisite:** IDE 510 Minimum Grade of B

**Cross-Listed:** IDE 692

## Educational Foundations (EDF) (EDF)

**EDF 207 Law and Politics in Educ 3 cr**

Examines the legal and political considerations that affect education in America. Emphasis will be placed on the practical applications of these legal and political considerations to the operation of schools.

**EDF 211 Clinical and Lab Experience 0 cr**

Provides relevant clinical and laboratory experiences directly related to the several academic disciplines that constitute the social foundations of education. Must be taken with EDF 315. Requires a special fee.

**Corequisite:** EDF 315

**EDF 290 Sp Top - 1-3 cr**

Varies in content in one disciplinary area of educational foundations (e.g., history of education or anthropology of education) or in an interdisciplinary area (e.g., multicultural education). May be repeated for credit when course content varies.

**EDF 300 Gender & International Devel-W 3 cr**

This course introduces concepts in gender, international development and global education through an examination and critique gender issues in developing nations and international efforts to address these concerns from the 1970's to the present with particular emphasis on the context of women. Includes formal and nonformal education of women, cultural differences (reproduction, marriage, male/female hierarchies) affecting life opportunities, rural vs. urban issues, politics, social class influences, international movements, and organizations and efforts to empower girls and women to advance their lives within the context of gendered social roles. Analysis of issues through various lenses including the Gender Equality Continuum. Students will interact directly with individuals in the field via videoconferencing and other modes of electronic communication. Assessment will center on a guided project and experience specific to individual student interests.

**Prerequisite:** EH 102 Minimum Grade of C

**EDF 310 International Develop & Educ-W 3 cr**

A study of international development and education in global and gender contexts that includes an examination of policy, structure, sociological issues (gender, religion, social class), and formal, adult and nonformal education. Major agency providers in the field and employment opportunities in the public and private sectors will be reviewed. Students will interact with individuals in the field through videoconferencing, face-to-face dialogues and other electronic interactions. Assessment will center on a guided project and experience specific to individual student interests. This course helps prepare students for a summer study abroad service learning experience in a developing country.

**Prerequisite:** EH 102 Minimum Grade of C

**EDF 315 Living, Working, and Educating in a Diverse and Global Society 3 cr**

Explores ones' understanding and acceptance of individuals perceived as culturally different in educational, work, and social settings. Students collaborate with people of other cultures to negotiate and compromise across distances and cultures, create new ideas and products, reach common goals, exchange cultural ideas, and reflect on how cultural differences affect their thoughts and behaviors.

**EDF 320 Compar & Intl. Gender & Fam 3 cr**

The content will focus on comparative and international gender and family issues regarding non-formal adult health education and services. The student will do readings in this content area and compare human rights related to gender and family roles, woman's health issues and family planning services across the nations, how these relate to life opportunities for women and men. Programs providing related services and education will be analyzed. Students will dialogue with individual working in the field to gain a deeper understanding of contemporary real-world endeavors. Assessment will center on a guided project and experience specific to individual student interests and includes a service learning component at a local agency or an agency serving a developing country.

**EDF 325 Global Gender Perpec in Ed 3 cr**

An examination of gender and race, class, religion, language and ethnicity in formal and nonformal education in US and global contexts that develops cultural competencies and prepares students with an interest in international development/education careers. Students will interact directly with professionals in the field from various cultural backgrounds via videoconferencing and other modes of electronic communication. Assessment will center on weekly applications of course topics to real world situations and guided project or service learning specific to individual student interests.

**EDF 330 Amer Ed Comp Global Framework 3 cr**

An overview of education in its three aspects: formal, non-formal and informal. It will include the history, philosophy, sociology, policy and structure of the American education in comparison with other countries' systems. A regional approach will include northern Africa, the Indian Sub-continent, Asia, Pacific Islands and Australia, Central America and the Caribbean, South America, Canada and Europe. Assessment will center on weekly applications of course topics to real world situations and a guided project or service learning experience specific to individual student interests.

**EDF 335 Intern. Devel & Global Ed 3 cr**

A study of current problems and issues in non-formal, informal and all levels of formal education. Includes poverty, inequality and human rights and related structures, policies and programs. Includes poverty, inequality and human rights and related structures, policies and programs. Major issue areas include health, gender, rural development, agriculture, civil society, economics, sustainability, politics and reform. Content may vary according to currently important issues. Assessment will center on weekly applications of course topics to real world situations and a guided project or service learning experience specific to individual student interests.

**EDF 490 Special Topics 1-3 cr**

Varies in content in one disciplinary area of educational foundations (e.g., history of education or anthropology of education) or in an interdisciplinary area (e.g., multicultural education). May be repeated for credit when course content varies.

**EDF 494 Directed Studies 1-3 cr**

Directed study. Prerequisite: Permission of Department. (No more than two directed studies can be counted toward the Bachelor's Degree and Class B Certificate.)

**EDF 501 Cult Found of Education 3 cr**

A presentation and investigation of basic concepts, issues, and principles of American education within a social scientific framework; particular emphasis is on multicultural concerns and strategies.

**EDF 515 Multicultural Education 3 cr**

In a multicultural society, teachers must be able to work with students from a variety of backgrounds-some quite differently from the teachers' own. Four cultural factors are the focus of this course: social class, race, gender, and ethnicity. Teachers sensitive to these factors can prepare students to survive and function in the dominant culture without sacrificing pride in the students' own cultures.

**EDF 590 Sp Top - 1-3 cr**

Course may vary in content or may be supervised study in one disciplinary area of educational foundations (e.g., history of education or anthropology of education) or in an interdisciplinary area (e.g., multicultural education). May be repeated for credit when course content varies.

**EDF 594 Dir St and Research 1-3 cr**

Students explore problems and issues of special interest or significance in educational foundations. Not more than three semester hours of any departmental 594 courses can be accepted toward a degree program.

**EDF 610 History of American Educ 3 cr**

Designed to give the student an historical perspective on important issues in American education. Among these issues are the influence of class, race, gender, ethnicity, and exceptionalism on educational attainment; the control of public education; the debate over public schools versus private schools; the status and work of teachers; and the role of education in social change. The student will relate the past to the present in analyzing these issues.

**EDF 615 Sem in Ed Policy Studies 3 cr**

This course offers advanced graduate students the opportunity to examine educational policy and policy-making from sociocultural, political, historical, philosophical, and comparative and international perspectives. After analyzing a common core of issues, students will investigate a topic of their choice using research skills from the educational foundations disciplines.

**EDF 620 Compar-Internat Educ 3 cr**

Comparative and International Education will examine different world cultures and nations and their educational systems. The course will explore the various outcomes of education (achievement, status, employment, living conditions) and will examine the world crisis in education. In all, a study of education from a world-wide perspective will help illuminate the educational purposes, programs, and achievements of schools in the United States.

**EDF 690 Sp Top - 1-3 cr**

Course may vary in content or may be supervised study in one disciplinary area of educational foundations (e.g., history of education or anthropology of education) or in an interdisciplinary area (e.g., multicultural education). May be repeated for credit when course content varies.

**EDF 694 Dir St and Research 1-3 cr**

Exploration of problems and issues of special interest or significance for advanced students. No more than three semester hours of any departmental 694 courses can be accepted toward a degree.

## Educational Leadership (EDL) (EDL)

**EDL 410 Leadership Development 1 cr**

This course is for undergraduates who are, or aspire to be, leaders. Faculty from throughout the University will direct weekly class sessions. Requires permission of the Dean of Students.

**EDL 501 Theories Instrcnl Leadership 3 cr**

The need for instructional leaders to understand and be able to operate within the larger context of community effect on opportunities for all students is addressed. Cooperation among schools, the district, parents, and the larger community as essential to the success of instructional leaders and students and ethical practices are emphasized.

**EDL 502 Data-Driven Instrcnl Leadership 3 cr**

This course stresses the engagement of the school community in developing and maintaining a shared vision; planning effectively; using critical thinking and problem-solving techniques; collecting, analyzing, and interpreting data; allocation of resources; and evaluation of results for the purpose of continuous school improvement.

**EDL 503 Supervision & Prof Development 3 cr**

This course addresses how the instructional leader recruits, selects, organizes, evaluates, and mentors faculty and staff to accomplish school and system goals.

**EDL 504 Ethical & Legal Dimens Sch Ldr 3 cr**

Students completing this course will demonstrate understanding of the legal system of schools. Students will be able to relate constitutional, federal, state, and local requirements as they concern students, employees, teachers, and instructional program administration. The student will demonstrate an understanding of the concepts of honesty, integrity, and fairness.

**EDL 505 Bus Mgmt of Lrng Organizations 3 cr**

This course explores leadership skills related to group dynamics, problem identification, accountability, diversity, economic levels, and their relationship to financing schools. Internal and external public relations and political factors which impact the funding of school will also be presented.

**EDL 506 Teaching and Learning Leaders 3 cr**

Student will acquire the knowledge to ensure that decisions about curricular, instructional strategies, assessment and professional development are based on sound research, best practices, and other contextual information needed to align the curricula with student needs.

**EDL 510 Theories of Adlt Tchg & Lrng 3 cr**

This course is an introduction to the pedagogy of teaching adult learners. Topics will include basic instructional design, strategies to meet needs of adult learners, higher order questioning, student assessment, and mechanisms for providing feedback to students. The class will model effective teaching and assessment practices. Participants will be expected to demonstrate effective teaching in a summative class presentation.

**EDL 512 Community Development 3 cr**

Presents the field of community development, including basic terminology, concepts, methods and literature. Purposes are to present conceptual foundations of community development, provide some experiences in practical application, and lay foundations for further study and practice in the field.

**EDL 513 Instr Lead and Curr Dev 3 cr**

Students in this course will learn to participate in the process of instructional improvement, adaptation to the needs of children and local communities, and instructional leadership within schools. The course will include staff development, instructional evaluation and assessment, school effectiveness concepts, government requirements, cultural diversity, curriculum development, problem solving, small group leadership, conflict management, empowerment, professional ethics, and other interpersonal skills applied to instructional development situations.

**Corequisite:** EDL 595A

**EDL 517 Education Law 3 cr**

Students completing this course will demonstrate understanding of the legal system of schools. Students will be able to relate to constitutional, federal, state, and local requirements as they concern students, employees, teachers, and instructional program administration. Students will understand statutory rights of certified and non-certified personnel in Alabama, including due process, tenure, transfer, suspension, and termination, and will be able to investigate legal matters affecting the administration of schools.

**Corequisite:** EDL 595B

**EDL 525 School Finance 3 cr**

This course explores leadership skills related to group dynamics, problem identification, accountability, diversity, economic levels, and their relationship to financing schools. Internal and external public relations and political factors which impact the funding of school will also be discussed. Fiscal management, including the Alabama Local School Accounting and Reporting system, will be analyzed.

**Corequisite:** EDL 595C

**EDL 530 School Dist Leadership 3 cr**

This course describes the unique forces that shape the role and functions of the school superintendent. The management of conflict is explored as well as the management of all aspects of this school system. The concept of the administrative team is also explored and examined.

**EDL 545 Secondary School Leadership 3 cr**

Provides understandings and skills in the leadership and management of secondary schools. Emphases are placed upon the administrator's role in staff and student personnel administration, program development, and building operations.

**EDL 546 Elem School Leadership 3 cr**

Provides an understanding of the organizational and various other characteristics of a good elementary school with emphasis on leadership.

**EDL 549 Practicum in Educ Supv 3 cr**

The practicum is a supervised learning experience in several settings which simulates the work situations of educational supervision. An opportunity is provided to apply the theories and concepts learned during the student's graduate program.

**EDL 550 Prin of School Lead 3 cr**

This course provides understanding and skills in the leadership and management of schools, including elements of effective classroom management, monitoring student services, and school and community relations. Management skills associated with school facilities, transportation, and student records will be studied.

**EDL 557 Supervisory Leadership 3 cr**

Students completing this course will learn to work with teachers in improving classroom instruction. Students will demonstrate the ability to collect classroom information, including assessment and evaluative data; coordinate student service needs; direct teachers using leadership, motivational techniques, professional ethics, and school management; and use techniques such as personnel selection, stress management, conflict management, scheduling, and research in adapting instruction to the changing needs of the community.

**Corequisite:** EDL 595E

**EDL 561 Dev of Postsecondary Education 3 cr**

This course provides an overview of the organization, development and characteristics of postsecondary education.

**EDL 562 Student in Higher Education 3 cr**

This course focuses on the demographics and characteristics of the American college student today. Development theories applicable to the diverse population of students (e.g., race, ethnicity, age, gender, sexual orientation, disability) are introduced and examined.

**EDL 573 Educational Gerontology 3 cr**

Will introduce the students to the organization and administration of programs of instruction of and about older persons, instruction of general or specific audiences about aging, and instruction of professionals working with or on the behalf of older persons.

**EDL 575 Org and Plan Postsec Educ 3 cr**

Designed as an introduction to and an analysis of organizational and administrative features of postsecondary education.

**EDL 578 Law and Postsecondary Educ 3 cr**

Explores court decisions and federal and state laws relating to governance, student rights, and tort liability in postsecondary education.

**EDL 590 Sp Top - 1-3 cr**

Guided supervision in the identification and completion of educational tasks, such as program design, program revision, self study for accreditation visitation, supervision in the organization, and application of selected learning activities to acquire and enhance leadership skills.

**EDL 594 Dir St and Research 1-3 cr**

Exploration of problems and issues of special interest or significance in Educational Leadership. Not more than three semester hours of any departmental 594 courses can be accepted toward a degree.

**EDL 595 Internship 1-6 cr**

The internship is a supervised learning experience in several work settings which simulates the reality of Educational Leadership work situations. The internship provides an opportunity to apply the theories and concepts learned during the student's graduate program. Students are expected to complete no less than 50 hours for each semester hour earned.

**EDL 595A Internship A 1 cr**

The internship is a supervised learning experience in several work settings which simulates the reality of Education Leadership work situations. The internship provides an opportunity to apply the theories and concepts learned during the student's graduate program. Students are expected to complete no less than 50 hours for each semester hour earned.

**Corequisite:** EDL 513

**EDL 595B Internship B 1 cr**

The internship is a supervised learning experience in several work settings which simulates the reality of Educational Leadership work situations. The internship provides an opportunity to apply the theories and concepts learned during the student's graduate program. Students are expected to complete no less than 50 hours for each semester hour earned.

**Corequisite:** EDL 517

**EDL 595C Internship C 1 cr**

The internship is a supervised learning experience in several work settings which simulates the reality of Educational Leadership work situations. The internship provides an opportunity to apply the theories and concepts learned during the student's graduate program. Students are expected to complete no less than 50 hours for each semester hour earned.

**Corequisite:** EDL 525

**EDL 595D Internship D 1 cr**

The internship is a supervised learning experience in several work settings which simulates the reality of Educational Leadership work situations. The internship provides an opportunity to apply the theories and concepts learned during the student's graduate program. Students are expected to complete no less than 50 hours for each semester hour earned.

**Corequisite:** EDL 550

**EDL 595E Internship E 1 cr**

The internship is a supervised learning experience in several work settings which simulates the reality of Educational Leadership work situations. The internship provides an opportunity to apply the theories and concepts learned during the student's graduate program. Students are expected to complete no less than 50 hours for each semester hour earned.

**Corequisite:** EDL 557

**EDL 595F Internship F - Related Topics 1 cr**

The internship is a supervised learning experience in several work settings which simulates the reality of Educational Leadership work situations. The internship provides an opportunity to apply the theories and concepts learned during the student's graduate program. Students are expected to complete no less than 50 hours for each semester hour earned.

**EDL 598 Residency - 1-6 cr**

The internship is designed to place candidates in the cooperating school during critical times of instructional planning. The residency allows interns to experience leadership in as many of the Alabama Leadership Standard indicators as possible. Candidates shall prepare and maintain a comprehensive portfolio which indicates the level of experiences and knowledge gained in instructional leadership during the intern experiences.

**Prerequisite:** 5412 146

**EDL 603 Curr Prob and Iss Ed Adm 3 cr**

Explores problems and issues at the federal, state, and local levels facing the administration and supervision of American educational institutions. Particular emphasis is on decision making affecting education.

**EDL 607 Lead Schs/Multicultural Soc 3 cr**

Students will examine the role of educational leaders in schools with diverse student populations and study strategies to address race, class and gender inequities that exist in schools.

**EDL 611 Human Relations Skills 3 cr**

Designed to assess and improve the student's level of competency in communication and group leadership skills, knowledge of socio-cultural influences and differences, and understanding of the developmental characteristics of human beings.

**EDL 621 Sem Prog Curriculum Dev 3 cr**

Designed to assess and improve the student's level of competency in program development skills, instructional strategies, systems analysis, and change innovation.

**EDL 631 Sem Ed Management Skills 3 cr**

Designed to assess and improve the student's knowledge of decision-making styles, problem-solving processes, leadership skills, implementation of organizational change, and physical environments which promote productivity. Additionally, when appropriate to the candidate's expected leadership position, current knowledge of law, finance, plant management, and professional negotiations will be stressed.

**EDL 689 Quantitative/Action Research 3 cr**

Basic principles of quantitative and action research for decision making and problem solving in the educational environment.

**EDL 690 Sp Top - 1-3 cr**

May be a content-varying course or may be guided supervision in the identification and completion of educational tasks as well as supervision in the organization and application of selected learning activities to acquire and enhance leadership skills. May be repeated for credit when course content varies.

**EDL 694 Dir St and Research 1-3 cr**

Students explore problems and issues of special interest or significance to advanced students. Not more than three semester hours of any department 694 courses can be accepted toward a degree.

**EDL 695 Mentoring Leadership 3 cr**

This course is a learning experience in mentoring relationships. The course provides an opportunity to apply the theories and concepts learned during the student's advanced graduate studies. The student will learn mentoring skills and serve as a mentor for students interested in educational administration or new to the field of administration.

**EDL 699 Research Project 1-3 cr**

A supervised field project, study, or investigation in Educational Leadership. The student will conduct an investigation and apply concepts and skills learned during the sixth-year program.

**Prerequisite:** IDE 692 Minimum Grade of B or EDU 692 Minimum Grade of B

**EDL 699A Research Project 1-3 cr**

A supervised field project, study, or investigation in Educational Leadership. The student will conduct an investigation and apply concepts and skills learned during the sixth-year program.

**Prerequisite:** IDE 692 Minimum Grade of B or EDU 692 Minimum Grade of B

**EDL 699B Research Project 1-3 cr**

A supervised field project, study, or investigation in Educational Leadership. The student will conduct an investigation and apply concepts and skills learned during the sixth-year program.

**Prerequisite:** IDE 692 Minimum Grade of B or EDU 692 Minimum Grade of B

**EDL 699C Research Project 1-3 cr**

A supervised field project, study, or investigation in Educational Leadership. The student will conduct an investigation and apply concepts and skills learned during the sixth-year program.

**Prerequisite:** IDE 692 Minimum Grade of B

**EDL 701 Adv Organizational Theory 3 cr**

An in-depth exploration of organizing in educational settings. Organizational theories and models are examined, as is their application to educational settings, particularly when challenges or changes are introduced.

**EDL 702 School Finance 3 cr**

General study of finance at local, state, and federal basis. Include principles of taxation, the concepts of equity and adequacy, acceptable practices in securing and administering school funds, and acceptable accounting and business procedures. Explores the unique characteristics of the Alabama Tax structure, its history, and impact on the funding of education.

**EDL 703 Adv School Leadership 3 cr**

This course explores research-based practices of effective leadership in P-12 education settings. The role of mission and vision in the leadership of an organization, decision-making models, and leadership styles will be explored.

**EDL 720 Global Education 3 cr**

This course focuses on similarities and differences in the ways various countries educate their citizens from early childhood to adult learners.

**EDL 732 Ethics and Law for Ed Leaders 3 cr**

An examination of ethical and legal issues present in educational settings, including primary, secondary, and postsecondary education.

**EDL 798A Research Project 1-3 cr**

A supervised field project, study, or investigation in Educational Leadership. The student will conduct an investigation and apply concepts and skills learned during the sixth-year program.

**Prerequisite:** IDE 792 Minimum Grade of B

**EDL 798B Research Project 1-3 cr**

A supervised field project, study, or investigation in Educational Leadership. The student will conduct an investigation and apply concepts and skills learned during the sixth-year program.

**Prerequisite:** IDE 792 Minimum Grade of B

**EDL 798C Research Project 1-3 cr**

A supervised field project, study, or investigation in Educational Leadership. The student will conduct an investigation and apply concepts and skills learned during the sixth-year program.

**Prerequisite:** IDE 792 Minimum Grade of B

**EDL 799 Research/Dissertation 1-12 cr**

Directed dissertation research in the field of educational leadership. Faculty advisor approval required.

## Educational Media (EDM) (EDM)

**EDM 310 Microcomputing Systems 3 cr**

Basic understanding of current and emerging technologies for instructional purposes. Requires a special fee.

**EDM 312 Ed Tech - 3 cr**

Application of current educational technology in various instructional environments. Laboratory experience is given with selected software programs. May be repeated when technological application changes.

**EDM 385 Methods Instr Comm 3 cr**

Application of current concepts in communication and instructional system design to elementary and secondary teaching. Operation of basic mediaware and overview of literature related to media use are stressed.

**EDM 430 Workshop in Educ Media 1-9 cr**

In-depth study of operational experience in current trends and techniques in educational media research.

**EDM 482 Prep Instr Materials 3 cr**

Basic elements in the planning preparation, and evaluation of teacher-produced instructional materials.

**EDM 490 Sp Top - 3 cr**

Investigation of contemporary topics of interest in Educational Media. Requires permission of the department.

**EDM 494 Dir St - 1-3 cr**

Directed study in Educational Media. No more than two directed studies can count toward the Bachelor's degree. Required departmental approval.

**EDM 510 Microcomputing Systems in Ed 3 cr**

Application of current and emerging technologies that support and enhance instruction and can be used to improve student achievement.

**EDM 520 Research in Ed Tech 3 cr**

Introduction to history and theories of computer use in education.

**EDM 530 Workshop in Ed Media 1-9 cr**

In-depth study and operational experience in current trends and techniques in educational media research.

**EDM 533 Curriculum Media for Children 3 cr**

This course explores media used for learning and enjoyment with children in preschool through grade eight. Other topics include: the professional roles and responsibilities of a collection developer, the influence of child development and curriculum on collection development, an overview of the marketplace, strategies to encourage teachers to use media center materials in teaching, and related research.

**EDM 540 Curr Media for Children & Yth 3 cr****EDM 552 Curr Media for Young Adults 3 cr**

This course initiates or extends a student's knowledge of how to identify, select, and use library media resources for students in grades 6 through 12. Other topics include: the role of a library media specialist in establishing and maintaining a collection of resources; steps that can be taken to encourage students and teachers to use the collection; related research; and ways professionals can keep abreast of the latest knowledge, practices, and resources.

**EDM 580 Information Literacy 3 cr**

This course focuses on the role of the library media specialist in teaching students and instructional staff how to select, evaluate, and use information from print, non-print, and online sources. Emphasis is placed on information access, retrieval, and interpretation; advanced research techniques; copyright laws; and lessons and projects that utilize research information.

**EDM 581 Media Center Management 3 cr**

This course covers the procedures and routines for effective media center management, including acquiring, organizing, classifying, cataloging, maintaining, and inventorying a relevant collection. Other topics include: selecting resources to support the total curriculum and budget, responding to the needs of a school's demographic population, assisting students and teachers in the application of information skills, and applying the fundamentals of library design to achieve an effective environment for learning and leisure use.

**EDM 582 Prod of Curriculum Media 3 cr**

Provides instruction in the elements of planning, preparation and evaluation of professional circular materials for group and individual instruction.

**Prerequisite:** EDM 510 Minimum Grade of B or EDM 520 Minimum Grade of B

**EDM 583 Library Media Programs 3 cr**

This course covers the professional responsibilities for planning, implementing, and evaluating a library media program that serves a school program. Emphasis is placed on curriculum, leadership, environment, teaching and learning styles, a planning model, collaboration, staff development, program administration and evaluation activities, and ways in which research can be used to help shape an effective program.

**EDM 584 Educational Technology Design 1-3 cr**

Design and evaluation of information technology hardware, software, and networked information resources that support classroom pedagogy, educational administrative services, and student learning.

**Prerequisite:** EDM 520 Minimum Grade of B and ISD 581 Minimum Grade of B

**EDM 585 Admin Educ Media Center 3 cr**

General practices and procedures for establishing, organizing and operating the media center. Students submit plans for hypothetical or actual situations.

**EDM 590 Sp Top - 3 cr**

Presents topics of contemporary interest in the area of Educational Media.

**EDM 591 Trends and Issues in Ed Tech 3 cr**

Students will investigate current research as well as discuss emerging trends and developmental issues in the fields of educational media and instructional technology and their use as a pedagogical tool in P-12 schools.

**Prerequisite:** EDM 510 Minimum Grade of B or ISD 581 Minimum Grade of B

**EDM 594 Dir St and Research - 1-3 cr**

Students explore problems and issues of special interest or significance in Educational Media. Not more than three semester hours may be accepted toward degree programs.

**EDM 595 Internship - 1-9 cr**

The internship is a supervised learning experience in a work setting similar to that in which a media specialist eventually will be employed. Departmental approval is required.

**EDM 595A Internship A 1 cr**

The internship is a supervised learning experience in a work setting similar to that in which a media specialist eventually will be employed.

**Prerequisite:** EDM 581 Minimum Grade of B

**EDM 595B Internship B 1 cr**

The internship is a supervised learning experience in a work setting similar to that in which a media specialist eventually will be employed.

**Prerequisite:** EDM 580 Minimum Grade of B

**EDM 595C Internship C 1 cr**

The internship is a supervised learning experience in a work setting similar to that in which a media specialist eventually will be employed.

**Prerequisite:** EDM 583 Minimum Grade of B

**EDM 599 Thesis 1-9 cr**

A student selects a project, study or investigation related to the area of specialization in Educational Media. The project forms a basis for the thesis. A thesis committee provides direction during the investigation and during the writing of the thesis.

**EDM 610 Adv Prod Curric Media 3 cr**

The planning, design and preparation of photographic and audio instructional materials will form the basis of comprehensive, sophisticated, software systems.

**EDM 685 Administering Ed Media Center 3 cr**

Practices and procedures for administering the educational media center.

**EDM 689 Info Storage and Retrieval 3 cr**

Examination and application of computer systems to school library media centers.

**EDM 690 Sp Top - 3 cr**

Presents topics of contemporary interest in the area of Educational Media.

**EDM 696 Adv Ref and Selection Resource 3 cr**

Bibliographic organization and reference use of professional resources in education, including governmental documents, publications of educational associations, professional journals and indices, research reports and computerized bibliographies.

**EDM 698 Advanced Cataloging 3 cr**

Modern trends in cataloging with emphasis on standards for cataloging and educational media.

**EDM 699 Research Project 3 cr**

Provides an opportunity to synthesize and apply the various program components in a selected instructional setting. May be repeated for a total of 6 semester hours.

## Educational Psychology (EPY) (EPY)

**EPY 251 Human Growth and Development 3 cr**

A study of the physical, mental, social and emotional development of young people from conception to late adolescence.

**EPY 315 The Adolescent in School 3 cr**

Assists future educators to understand adolescent development and behavior of students in the middle and high schools. Issues and problems include the school's role in the social, emotional, and intellectual development of middle and secondary school students from diverse multicultural backgrounds; student-teacher and peer relationships; and the academic and vocational planning process.

**EPY 351 Human Growth & Development 3 cr**

A study of the physical, mental, social and emotional development of young people from conception to late adolescence.

**EPY 355 Eval of Teaching-Learning 3 cr**

The application of formative and summative evaluative concepts in building and interpreting tests in the educational setting.

**EPY 455 Eval of Teaching-Learning - W 3 cr**

The application of formative and summative evaluative concepts in building and interpreting tests in the educational setting.

**EPY 490 Sp Top - 3 cr**

Study of a significant topic, theory, model or problem in behavioral studies. May be repeated once for credit when content varies.

**EPY 494 Directed Study 1-3 cr**

Directed individual study and research. Consent of department chair is required. (No more than two directed studies can be counted toward the Bachelor's degree and Class B Certificate).

**EPY 502 Psy Prin Learning 3 cr**

Psychology of learning as it pertains to education. Emphasis is on both the practical application of learning principles in educational and training classroom situations and theories of learning.

**EPY 521 Human Dev and Behavior 3 cr**

A study of the crucial developmental principles of human development and behavior focusing on: developmental tasks over the life span; growth patterns of the diverse subcultures emphasizing attitudes, values, and learning styles; family, school, and community impact on people of all ages living and growing in a multicultural society.

**EPY 525 Assessment & Research in Educ 3 cr**

This course is offered as part of the Alternative Masters Degree in Education. Upon completion of the course, students will be able to construct, evaluate, administer, and interpret classroom and school-related assessment. In addition, students will be prepared to be effective consumers of research reports, writings, and results in professional literature in their field.

**EPY 555 Tests-Measurement and Eval 3 cr**

Understanding and interpreting the meaning of test scores. Technical qualities desired in a test. Techniques for obtaining information about clients and/or students. Using this information in counseling, consulting, and teaching. Cultural bias in tests. Problems of testing and obtaining information about clients and/or students with diverse backgrounds.

**EPY 556 Ed Testing - Wechsler Scales 3 cr**

Includes basic theories of intelligence, basic concepts and principles of intelligence testing, extensive practice in administering, scoring and interpreting the Wechsler Adult Intelligence Scale, the Wechsler intelligence Scale for Children and the Wechsler Preschool and Primary Scales of Intelligence in a wide variety of educational settings.

**Prerequisite:** EPY 555 Minimum Grade of B

**EPY 557 Ind Intel Test -Stanford-Binet 3 cr**

Includes basic theories of intelligence, basic concepts and principles of intelligence testing, extensive practice in administering, scoring and interpreting the Stanford-Binet Scale in a variety of educational settings. Competencies in consulting with professional personnel and with parents will be emphasized.

**Prerequisite:** EPY 555 Minimum Grade of B

**EPY 558 Ed Testing - Kaufman Scales 3 cr**

The Kaufman Assessment Battery for Children and the Kaufman Adolescent and Adult Scale are the basic instruments used for extensive practice in administering, scoring, and interpretation of intelligence. The various theories of intelligence, especially those of Horn and Cattell, Luria, Sperry and Neisser are emphasized.

**Prerequisite:** EPY 555 Minimum Grade of B

**EPY 590 Sp Top - 3 cr**

Guided supervision in the completion of learning tasks in educational psychology such as program design and revision, study of a significant topic, theory, model, and supervision of selected learning activities to acquire specific counseling and testing skills.

**EPY 594 Dir St and Research 1-3 cr**

Students explore through directed study of problems and issues of special interest or significance in Educational Psychology. Not more than three semester hours of any departmental 594 courses can be accepted toward a degree program.

**EPY 602 Advanced Theories of Learning 3 cr**

A study of the major psychological theories, models, research and principles that apply to the teaching and learning process. Special attention will be given to cognitivist approaches.

**Prerequisite:** EPY 502 Minimum Grade of B

**EPY 610 Indiv Diff Among Learners 3 cr**

Examination of individual and developmental differences as related to learning, performance and behavior. Intelligence attitudes, cognitive and learning styles, anxiety, prior knowledge, and locus of control are among the topics discussed. Models and methods for using learner characteristics in instructional design, teaching practices, and research are considered.

## Electrical Engineering (EE) (EE)

**EE 220 Circuit Analysis I 3 cr**

Resistive networks with independent and dependent sources: Ohm's law; Kirchhoff's law; nodal and loop analysis; network theorems; energy storage elements (capacitors and inductors); operational amplifiers; steady state AC analysis; and introduction to PSpice.

**Prerequisite:** MA 125 Minimum Grade of C and PH 201 Minimum Grade of C

**EE 223 Network Analysis 3 cr**

Transient analysis of RLC circuits; Three-phase systems; power-factor correction in three-phase power systems; magnetically coupled networks; Operational amplifiers; network frequency response functions and resonance; Fourier series.

**Prerequisite:** EE 220 Minimum Grade of C and PH 202 Minimum Grade of C and MA 227 (may be taken concurrently) Minimum Grade of C and MA 238 (may be taken concurrently) Minimum Grade of C

**EE 227 Circuits and Devices Lab 1 cr**

Introduction to electrical laboratory equipment and instrumentation; analog and digital meters, oscilloscopes, bridges, power supplies, function generators. Measurement of voltage, current and power in DC networks and in single-phase and three-phase AC networks. Verification of Kirchhoff's laws. Measurement of resistance, capacitance, and inductance. Corequisite: EE 223 and credit for or concurrent registration in EH102.

**Prerequisite:** EE 223 (may be taken concurrently) Minimum Grade of D and (EH 102 (may be taken concurrently) Minimum Grade of D or EH 105 Minimum Grade of D)

**EE 263 Digital Logic Design 3 cr**

Number systems, introduction to basic logic circuits, analysis and design of combinational and sequential logic circuits, k-map methods, finite state machines, multiplexers, decoders, encoders, adders, latches, flip-flops, registers, and counters.

**Prerequisite:** CPE 260 Minimum Grade of C or CIS 210 Minimum Grade of C

**EE 264 Microprocessor Sys-Interfacing 3 cr**

Small computer organization, assembly and machine level programming, microprocessor architectures and instruction sets, microprocessor and microcontroller system design, and microprocessor based peripheral interfacing.

**Prerequisite:** EE 263 Minimum Grade of C or CSC 228 Minimum Grade of C

**EE 268 Digital Logic Design Lab 1 cr**

A series of digital logic circuit experiments and simulations using TTL/CMOS integrated circuits designed to reinforce the material presented in EE 263. Design projects include standard SSI and MSI digital circuit based simulation and experiments.

**Prerequisite:** EE 263 Minimum Grade of C or CSC 228 Minimum Grade of C

**EE 302 Computer Methods in EE - CpE 1 cr**

Introduction to the use of computer softwares such as MATHCAD/MATLAB and PSPICE/ ELECTRONIC WORKBENCH for the analysis of engineering related problems and the solution of electric/ electronic circuits.

**Prerequisite:** EE 223 Minimum Grade of C and EE 263 Minimum Grade of C

**EE 321 Signals, Systems & Transforms 3 cr**

Modeling of analog and discrete-time signals and systems, time domain analysis, Fourier series, continuous and discrete time Fourier transforms and applications, sampling, z-transform, state variables, analysis of signals and systems and basic filter design, filter implementation using MatLab.

**Prerequisite:** EE 223 Minimum Grade of D and MA 238 Minimum Grade of C

**EE 322 Prob, Rand Sigs & Stat Anlys 3 cr**

Discrete and continuous probability distributions; random variables; Bernoulli trials; hypothesis testing; confidence intervals; Anova multiple comparisons; Bayes' theorem; estimation; sampling; random processes and random signals in linear systems. Probability applications in computer and electrical engineering.

**Prerequisite:** MA 238 Minimum Grade of C and EE 321 (may be taken concurrently) Minimum Grade of D

**EE 328 Feedback Control Systems 3 cr**

Review of the Laplace Transform. Transfer functions; block diagrams; signal-flow graphs and Mason's Gain Formula. Stability of feedback control systems; Routh-Hurwitz criterion; root-locus technique and the Nyquist criterion. Bode plots; gain and phase margins. PI, PD and PID controller design. Introduction to the use of Matlab for analysis and design.

**Prerequisite:** EE 321 Minimum Grade of D

**EE 331 Physical Electronics 3 cr**

Introduction to quantum concepts; particles in one dimensional potential well; tunneling. Silicon band structure, electrons and holes. Drift and diffusion current density; band bending; Einstein diffusion coefficient; recombination/generation. The pn junction; step and linear junctions; depletion layer. I-V characteristics of a pn junction and steady-state carrier concentrations at junctions. Bipolar junction transistor fundamentals; pnp and npn types; common emitter configuration, biasing and gain.

**Prerequisite:** MA 238 Minimum Grade of C and PH 202 Minimum Grade of C and CH 131 Minimum Grade of C

**EE 334 Digital Electronics 3 cr**

Review of semiconductor diodes and diode circuits; Introduction to digital electronics; Review of BJTs, operating characteristics and DC analysis, TTL logic gates; Field effect devices, operating characteristics and DC analysis; NMOS, PMOS, CMOS devices and logic circuits, transmission gates; Design considerations.

**Prerequisite:** (EE 331 Minimum Grade of D and EE 223 Minimum Grade of D)

**EE 354 Electromagnetics I 3 cr**

Basic concepts of electrostatics, electric potential theory, electric fields and currents, fields of moving charge, Poisson's and Laplace's equations, magnetostatics, metallic conductors and dielectric materials, electric-scalar and magnetic-vector potentials and boundary conditions, general time varying fields and Maxwell's equations.

**Prerequisite:** (MA 237 Minimum Grade of C and MA 238 Minimum Grade of C and PH 202 Minimum Grade of C)

**EE 355 Electromagnetics II 3 cr**

Lumped versus distributed circuit components, capacitance, inductance and mutual inductance, uniform plane waves, power flow and skin effect, reflection, transmission and propagation of uniform plane waves through different media, wave polarization, transmission lines, waveguides, optical fiber, electromagnetic radiation and antennas, the Radar equation.

**Prerequisite:** EE 354 Minimum Grade of D

**EE 356 Electromagnetics Laboratory 1 cr**

Computer-aided and experimental field mapping; shielding techniques; field measurement of elementary radiating structures and waveguide circuits; terminal characteristics of klystrons and space wave propagation losses.

**Prerequisite:** EE 355 (may be taken concurrently) Minimum Grade of C

**EE 368 Microprocessor Sys Interf Lab 1 cr**

This Laboratory is designed to reinforce the material covered in EE 264 and to provide practical hands-on experience with microprocessor software, hardware and interfacing. Topics include integration of microprocessor software, hardware and peripheral devices; assembly level programming and hardware interfaces for control and instrumentation.

**Prerequisite:** EE 268 Minimum Grade of D and EE 264 (may be taken concurrently) Minimum Grade of D

**EE 372 Introduction to Communications 3 cr**

Introduction to communication systems; analog, digital, deterministic and stochastic messages; modulation; redundancy coding. Signal energy and power; correlation; orthogonal signal set and Fourier series. Fourier transforms; signal transmission through linear systems; ideal and practical filters; signal distortion; Parseval's theorem; essential bandwidth and energy and power spectral density. Amplitude modulation: DSB, SSB, AM, QAM and VSB; phase and frequency modulation and the basic design of a FM transmitter. Sampling theorem; pulse code modulation and differential pulse code modulation.

**Prerequisite:** EE 322 (may be taken concurrently) Minimum Grade of D and EE 321 Minimum Grade of D

**EE 381 Electromech Energy Conversion 3 cr**

Introduction to the principles of electromechanical energy conversion. Energy balance, force, and torque of electromagnetic systems; magnetic circuits and ferromagnetic losses; transformers and their connections; three-phase induction motors; synchronous generators and motors; non-salient machines. Parallel operation of synchronous generators. Dynamics of electric machines.

**Prerequisite:** EE 223 Minimum Grade of D

**EE 385 Energy Conversion Lab 1 cr**

Laboratory experiments based on: Faraday's Law and magnetic coupling; magnetic circuits; transformers (single and three phase) and their connections and tests. Three phase induction motors - tests and performance characteristics; synchronous generators and motors. Machine data acquisition methods and processing using a computer.

**Prerequisite:** (EE 381 Minimum Grade of D and EE 227 Minimum Grade of D)

**EE 401 Intro Elec and CpE Design - W 1 cr**

Specification of design criteria. Written and oral presentations of design proposals. Coverage of professional and contemporary issues and students are required to become members of the IEEE or ACM and attend two technical meetings of IEEE/ACM.

**Prerequisite:** CA 110 Minimum Grade of D and EE 321 Minimum Grade of D and EE 334 (may be taken concurrently) Minimum Grade of D and EE 368 (may be taken concurrently) Minimum Grade of D

**EE 404 Electrical and Computer Engineering Design 3 cr**

Implementation of design project from the field of Electrical or Computer Engineering in the broadest sense and under the guidance of a project director from the electrical and computer engineering faculty. Written and oral presentations of project proposals, interim and final reports. Students are required to be current members of the IEEE/ACM and attend two technical meetings.

**Prerequisite:** EE 328 Minimum Grade of D and EE 334 Minimum Grade of D and EE 368 Minimum Grade of D and EE 401 Minimum Grade of D

**EE 422 Adv Feedback Control Systems 3 cr**

Sensors, encoders and DC motors in control systems. The performance and design of feedback control systems. System bandwidth; Nichol's Chart and the stability of control systems with time delays. State variable analysis and design. This course is dually listed with an equivalent graduate level course (EE522) and requires a minimum GPA of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 328 Minimum Grade of D

**EE 423 Modern Control Theory 3 cr**

Simulation and modeling; introduction to linear systems theory; concepts of controllability and observability; specifications; structures and limitations; review of classical design methods; state feedback design methods; multivariable control; robust stability and sampled data implementation. Introduction to the use of MATLAB for design. This course is dually listed with an equivalent graduate-level course (EE 523) and requires a minimum G.P.A of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 328 Minimum Grade of D

**EE 424 Nonlinear Control Systems 3 cr**

State space description; methods of linearization; isoclines; stability of nonlinear systems; Lyapunov's direct method; harmonic linearization; describing functions; dual input describing functions; Popov's method; circle criterion and computer aided analysis. This graduate-level course is dually listed with an equivalent course (EE524) and requires a minimum GPA of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 328 Minimum Grade of D

**EE 427 Digital Control Systems 3 cr**

State space and transfer function description of discrete-time systems; solution of discrete state equation; discrete-time model of analog plants; frequency domain analysis; design of discrete state-feedback regulators; observers and tracking systems. This course is dually listed with an equivalent graduate-level course (EE 527) and requires a minimum G.P.A. of 2.75 or the instructors permission for admission.

**Prerequisite:** EE 328 Minimum Grade of D

**EE 430 Power Semiconductor Dev 3 cr**

Characteristics of power devices; physics of transport phenomena; breakdown voltage; power rectifiers; bipolar transistors; power MOSFET; insulated-gate bipolar transistor and MOS-gated thyristors.

**Prerequisite:** EE 331 Minimum Grade of D

**EE 431 Analog Electronics 3 cr**

Small signal model of diodes, applications, advanced op-amp applications, principle of operation of FETs, small signal model of FET and basic FET amplifiers, small signal model of BJT and basic BJT amplifiers, differential and multistage amplifiers, Miller's Theorem, Nyquist stability criterion and frequency response, internal circuit of typical op-amp.

**Prerequisite:** (EE 334 Minimum Grade of D and EE 227 Minimum Grade of D)

**EE 432 Microelectronic Devices 3 cr**

Introduction to semiconductor material properties; semiconductor diodes; structure and operation; diode circuit applications; bipolar transistor; structure and operation; junction field effect transistors (JFETs); metal oxide field effect transistors (MOSFETs) fabrication technology and construction of semiconductor devices; biasing and stability of amplifiers. This course is dually listed with an equivalent graduate-level course (EE 532) and requires a minimum GPA of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 334 Minimum Grade of D

**EE 437 Electronics Lab 1 cr**

Computer analysis and measurement of the characteristics and parameters of power supplies; operational amplifiers; voltage and power amplifiers; oscillators and active filters.

**Prerequisite:** (EE 334 Minimum Grade of D and EE 431 (may be taken concurrently) Minimum Grade of D)

**EE 438 Virtual Instrumentation 3 cr**

Transducers; measurement techniques; measurement errors; digital signal processing; noise sources and reduction; introduction to LabVIEW software, data acquisition and processing using computer-controlled data acquisition hardware.

**Prerequisite:** EE 334 Minimum Grade of D

**EE 439 VSLI Technology-Fabrication 3 cr**

Introduction to semiconductor devices; crystal growth and wafer preparation; chemical and physical vapor deposition; oxidation; diffusion; ion implantation; lithography; etching metallization, process integration of CMOS and bipolar technologies; diagnostic techniques and measurements; packaging; yield and reliability. This course is dually listed with an equivalent graduate-level course (EE 539) and requires a minimum G.P.A. of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 331 Minimum Grade of D

**EE 440 HDL Logic Synthesis 3 cr**

Introduction to the syntax and elements of the basic VHDL language such as entities and architectures; creating combinational, synchronous logic and state machines using both structural and behavioral VHDL; using hierarchy in large designs; synthesizing and implementing designs. This course is dually listed with an equivalent graduate-level course (EE 540) and requires a minimum GPA of 2.75 or the instructor's permission for admission. Credit for both EE 440 and EE 443 not allowed toward a degree.

**Prerequisite:** EE 264 Minimum Grade of D and EE 268 Minimum Grade of D

**EE 441 Computer Networks 3 cr**

Introduction to design and analysis of computer networks. Polling networks and ring networks. This course is dually listed with an equivalent graduate-level course (EE 541) and requires a minimum GPA of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 264 Minimum Grade of D and EE 268 Minimum Grade of D

**EE 443 HDL Logic Simulation 3 cr**

Introduction to the syntax and elements of the basic Verilog language such as modules and ports; hierarchical modeling; gate-level modeling; dataflow modeling; switch-level modeling; tasks and functions; timing and delays; user-defined primitives; synthesizing and implementing designs. Emphasis is on the simulation and test-bench aspects. This course is dually listed with an equivalent graduate-level course (EE 543) and requires a minimum GPA of 2.75 or the instructor's permission for admission. Credit for both EE 440 and EE 443 not allowed toward a degree.

**Prerequisite:** EE 264 Minimum Grade of D and EE 268 Minimum Grade of D

**EE 444 Wireless Networks 3 cr**

Introduction to modern wireless networks/systems, the cellular concept, frequency reuse, interference and system capacity improvement, trunking and grade of service, multiple access techniques, wireless/wireline interworking, and advanced networks (i.e. ad hoc networks). This course is dually listed with an equivalent graduate-level course (EE 544) and requires a minimum GPA of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 441 Minimum Grade of D

**EE 445 Smart Grid 3 cr**

Introduction to smart grid concepts, phasor measurement units, applications of PMUs in protection and fault recovery, communication over power lines, smart metering, smart grid standards, and cyber security.

**Prerequisite:** EE 264 Minimum Grade of D and EE 381 Minimum Grade of D

**Corequisite:** EE 483

**EE 446 Embedded System Design Lab 1 cr**

Design projects utilizing 16-bit and 32-bit microprocessor hardware and software; interfaces to memory and peripheral devices.

**Prerequisite:** EE 457 (may be taken concurrently) Minimum Grade of D

**EE 447 Field-Programmable Gate Array Lab 1 cr**

The FPGA (Field-Programmable Gate Array) Lab concentrates on the simulations, synthesis, testing and experimentation with FPGA technology. Students design digital circuits and then implement these designs physically using CAD tools and FPGA boards.

**Prerequisite:** EE 264 Minimum Grade of D and EE 268 Minimum Grade of D

**EE 449 Controls Lab 1 cr**

Computer-aided modeling, design and performance analysis in time and frequency domain of process control systems, and design of PID controllers.

**Prerequisite:** EE 328 Minimum Grade of D

**EE 450 Fundamentals of Fourier Optics 3 cr**

Two-dimensional Fourier analysis; linear systems; sampling theory; scalar diffraction theory. Fourier transform imaging properties of lenses; frequency analyses of diffraction-limited coherent and incoherent imaging systems; aberrations and resolution analysis; Vander Lugt filters and frequency domain analysis and synthesis; SAR and pattern recognition applications.

**Prerequisite:** EE 331 Minimum Grade of D and EE 355 Minimum Grade of D

**EE 452 Microwave Engineering 3 cr**

Generation and transmission of high frequency electromagnetic energy; magnetrons, klystrons, masers, parametric amplifiers, traveling wave tubes and solid-state devices; waveguides and resonators. This course is dually listed with an equivalent graduate level course (EE 552) and requires a minimum GPA of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 355 Minimum Grade of D

**EE 453 Antenna Theory and Design 3 cr**

Radiation fundamentals; linear antennas; loop antennas; aperture antennas; reflector antennas; antenna impedance and measurements; computer-aided design of antenna systems. This course is dually listed with an equivalent graduate-level course (EE 553).

**Prerequisite:** EE 355 Minimum Grade of D

**EE 454 Digital Computer Architecture 3 cr**

Computer organization; instruction set design; ALU design; control unit design; I/O and interrupt designs; memory organization; DMA; microprogramming; introduction to multi-processors; performance analysis. This course is dually listed with an equivalent graduate level course (EE 554) and requires a minimum GPA of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 264 Minimum Grade of D and EE 268 Minimum Grade of D

**EE 455 Optoelectronics 3 cr**

Wave propagation in free-space and in wave guides; optical resonators; interaction of radiation and atomic systems; laser oscillation; solid-state lasers. He-Ne and Argon lasers, integrated optics including integration of emitters and detectors; optical interconnects; spatial light modulators; optoelectronic materials and devices; and applications of optoelectronics. This course is dually listed with an equivalent graduate-level course (EE 555) and requires a minimum GPA of 2.75 or the instructor's permission of admission.

**Prerequisite:** EE 355 Minimum Grade of D

**EE 456 Fiber Optic Communication Sys 3 cr**

Review of optical principles, dielectric waveguides, signal propagation, degradations and attenuation of fibers. Fiber interconnection devices, active and passive components, optical transmitters and receivers, power budget, fiber optic communication systems. This course is dually listed with an equivalent graduate-level course (EE 556).

**Prerequisite:** EE 355 Minimum Grade of D

**EE 457 Embedded System Design 3 cr**

Architecture and software of 16-bit and 32-bit microprocessor hardware and software; interface design to memory and peripheral devices; multiprocessing. This course is dually listed with an equivalent graduate level course (EE 557) and requires a minimum GPA of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 264 Minimum Grade of D and EE 368 Minimum Grade of D

**EE 458 Radar Systems 3 cr**

Introduction to radar signal processing. Continuous wave and pulsed radars. Clutter and radio wave propagation. Moving target indicator, target surveillance and tracking radar systems. Side-looking, synthetic aperture, interferometric and other airborne radars. This course is dually listed with an equivalent graduate level course (EE 558) and requires a minimum GPA of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 355 Minimum Grade of D

**EE 465 Digital Signal Processing 3 cr**

Review of discrete Fourier and Z-transforms; review of analog filter design; design of IIR and FIR digital filters. Fast Fourier transform (FFT) and applications; Hardware implementation and quantization effects. Advanced digital filter structures and design. DSP algorithm design and implementation. Analysis of finite word length effects of DSP applications. Extensive use of MatLab for analysis and design.

**Prerequisite:** (EE 321 Minimum Grade of C and EE 322 (may be taken concurrently) Minimum Grade of D)

**EE 468 Programmable Logic Controllers 3 cr**

Hardware and software principles of PLC devices, ladder logic, hardware components of PLC systems and controller configuration, basic PLC operation, program construction and manipulation, advanced operation and networking.

**Prerequisite:** EE 264 Minimum Grade of D and EE 268 Minimum Grade of D

**EE 469 Signal Integrity 3 cr**

Design techniques for high-speed digital interfaces and circuit boards; signal integrity including crosstalk and ground bounce; electromagnetic aspects of high-speed digital design; frequency-domain analysis of power-system integrity; state-of-the-art buses and standards. This course is dually listed with an equivalent graduate-level course (EE 569) and requires a minimum GPA of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 264 Minimum Grade of D and EE 268 Minimum Grade of D and EE 334 Minimum Grade of D

**EE 470 Synth Active-Passive Networks 3 cr**

Reliability of network functions (high-pass, band-pass, low-pass, band reject and equalizing filters); approximation techniques; sensitivity analysis; passive and active synthesis; positive and negative feedback and biquads. Computer techniques for the realization of standard filter forms (Butterworth, Chebyshev, Bessel, Sallen and Key, and other forms).

**Prerequisite:** EE 321 Minimum Grade of D

**EE 471 Wireless Communication 3 cr**

Introduction to wireless communications propagation in mobile radio channels, large, small scale fading and multipath; diversity and diversity combining techniques and modulation techniques. This course is dually listed with an equivalent graduate level course (EE 571) and requires a minimum GPA of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 372 Minimum Grade of D

**EE 473 Advanced Communication Systems 3 cr**

Digital line coding; pulse shaping; partial response signaling; scrambling; M-ary communication; digital carrier systems and digital multiplexing. Probability; random variables; quantization error in PCM; random processes; white noise and the behavior of analog systems in the presence of noise. Information theory; compact codes and error correcting codes. This course is dually listed with an equivalent graduate level course (EE 573) and requires a minimum GPA of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 372 Minimum Grade of D

**EE 481 Electrical Machines 3 cr**

DC machines-motors and generators. Single-phase motors; unbalanced two-phase motors; servo-motors; commutator motors; stepper motors; synchros; shaded pole motors; reluctance and hysteresis motors and brushless DC motors. Dynamic circuit analysis of rotating machines.

**Prerequisite:** EE 381 Minimum Grade of D

**EE 482 Switch Mode Power Conversion 3 cr**

Design and analysis of switch mode power converters; design of magnetic components; stability considerations; input filter interactions; performance measurements and evaluations. This course is dually listed with an equivalent graduate-level course (EE 582) and requires a minimum GPA of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 334 Minimum Grade of D and EE 381 Minimum Grade of D

**EE 483 Power Systems I 3 cr**

Principles of power system analysis. Synchronous machines, transformers and loads; transmission line parameters and analysis. Impedance/admittance matrix representation of power systems. Power flow analysis. Symmetrical fault studies and protective devices.

**Prerequisite:** EE 381 Minimum Grade of D and EE 385 (may be taken concurrently) Minimum Grade of D

**EE 484 Power Systems II 3 cr**

Symmetrical components and sequence networks; computer studies of transmission lines; fault studies using a computer; state estimation of power system and power system stability, Economic analysis.

**Prerequisite:** EE 483 Minimum Grade of D

**EE 485 Power Distrib and Utilization 3 cr**

Principles and characteristics of generating stations; transformers; conversion equipment; primary and secondary distribution systems; short-circuit calculations; selection of protective devices; system grounding and over current protection; voltage control; power factor control and correction; load and cost estimating.

**Prerequisite:** EE 483 Minimum Grade of D

**EE 486 Power Electronics 3 cr**

Power semiconductor diodes and thyristors; commutation techniques; rectification circuits - uncontrolled and controlled; AC voltage controllers; DC chopper; pulse-width modulated inverters and resonant pulse inverters. This course is dually listed with an equivalent graduate level course (EE 586) and requires a minimum GPA of 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 334 Minimum Grade of D and EE 381 Minimum Grade of D

**EE 487 Switch Mode Power Conversion 3 cr**

Design and analysis of switch mode power converters; design of magnetic components; stability considerations; input filter interactions; performance measurements and evaluation. This course is dually listed with an equivalent graduate level course and requires a minimum GPA of 2.75 for admission.

**Prerequisite:** EE 334 Minimum Grade of D and EE 381 Minimum Grade of D

**EE 488 Illumination Engineering 3 cr**

Photometric units and definitions; light sources and luminaires; interior lighting and artificial illumination design techniques; daylight lighting design; exterior lighting design and the theory of color. Optics and control of lighting. Prerequisite: Instructor's permission.

**EE 489 Renewable Energy 3 cr**

Introduction to renewable energy sources. Fuel cells: classification, configuration and operation. Hydrogen: production, purification and storage. Photovoltaic cells: solar cells and operational characteristics. Wind turbines: operational characteristics. Energy from water sources: hydroelectric, wave and tidal energy. This course is dually listed with an equivalent graduate course and requires a minimum GPA 2.75 or the instructor's permission for admission.

**Prerequisite:** EE 381 Minimum Grade of D

**EE 490 Special Topics 1-3 cr**

Topics of current electrical and computer engineering interest.

**EE 494 Directed Studies 1-3 cr**

Directed study under the guidance of a faculty advisor, of a topic from the field of electrical and/or computer engineering, not offered in a regularly scheduled course. This course requires permission of the Department Chair and a minimum GPA of 2.75 for admission. Pre-requisite: PCS.

**EE 499 Honors Senior Project - H 1-6 cr**

Under the advice and guidance of a faculty mentor, honors student will identify and carry out a research project, relevant to the field of Electrical and Computer Engineering which will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty chaired by the honors mentor. Students are required to become members of IEEE/ACM and attend two technical meetings. This course is required for Honors recognition. A minimum of 4 credit hours is required, but students may enroll for a maximum of 6 credit hours over two semesters. Prerequisites: an approved project prospectus.

**Prerequisite:** (EE 401 Minimum Grade of C or HON 301 Minimum Grade of C)

**EE 522 Adv Feedback Control Systems 3 cr**

Sensors; encoders and D.C. motors in control systems. The performance and design of feedback control systems. System bandwidth; Nichol's Chart and the stability of control systems with time delays. State variable analysis and design. Use of MatLab for analysis and design. This course is dually listed with an equivalent 400-level Electrical/Computer Engineering course.

**EE 523 Modern Control Theory 3 cr**

Simulation and modeling; introduction to linear system theory; concepts of controllability and observability; specifications, structures and limitations; review of classical design methods; state feedback design methods; multivariable control; robust stability and sampled data implementation. Introduction to the use of MATLAB for design. This course is dually listed with an equivalent 400-level course (EE 423).

**EE 524 Nonlinear Control Systems 3 cr**

State space description; methods of linearization; isoclines; stability of nonlinear systems; Lyapunov's direct method; harmonic linearization; describing functions; dual input describing functions; Popov's method; circle criterion, computer aided analysis. This course is dually listed with an equivalent 400-level course(EE 424).

**Prerequisite:** EE 523

**EE 525 Optimal Control Systems 3 cr**

Static optimization; method of Lagrange multipliers; adaptive controllers; dynamic optimization; calculus of variations; the principle of optimality and dynamic programming; Pontryagin's maximum principle; quadratic optimal control.

**Prerequisite:** EE 523

**EE 526 Introduction to Robotics 3 cr**

Basic mathematics of robotic systems; coordinate transformations: forward and inverse kinematics; velocity kinematics; path planning and trajectory generation; numerical methods; mobile robots. Fee

**EE 527 Digital Control Systems 3 cr**

State space and transfer function description of discrete time systems; solution of the discrete state equation; discrete-time model of analog plants; frequency domain analysis; designing of discrete state-feedback regulators; observers and tracking systems. This course is dually listed with an equivalent 400-level course (EE 427).

**EE 528 Advanced System Theory 3 cr**

Review of linear spaces and operators; state variable description of time varying and time invariant linear systems. Controllability and observability of linear dynamical systems; state feedback and state estimators; stability of linear systems; arbitrary pole assignment for multivariable case. Prerequisite: Instructor's permission.

**EE 530 Nanotechnology 3 cr**

Nanotechnology fundamentals and principles; quantum wires and dots; single electron effects and coulomb blockade; nanomagnets and spintronics; spin based electronics (magnetic memories, magnetic field sensors); nanofabrication; nanoelectronics (QCQ); organic electronics (carbon fullerenes and nanotubes, polymers); advanced characterization techniques; applications especially those related to nanotechnology; MEMS and microsystems (sensors); QWIP technology and its associative nanoscience; photonic crystal; advances in nanostructured materials. Requires instructor's permission.

**EE 531 Advanced Electronic Devices 3 cr**

Semiconductor electronics; semiconductor diode circuit analysis; bipolar and field effect transistors; analog-to-digital and digital-to-analog circuits and active filters. This course is dually listed with an equivalent 400-level course (EE 431). Prerequisite: Instructor's permission

**EE 532 Microelectronic Devices 3 cr**

Introduction to semiconductor material properties; semiconductor diodes: structure and operation; diode circuit applications; semiconductor heterojunctions; metal-semiconductor junctions; bipolar transistor: structure and operation; junction field effect transistors (JFETs); metal oxide field effect transistors (MOSFETs); metal semiconductor field effect transistors (MESFETs); fabrication technology and construction of semiconductor devices; photodetectors; light-emitting diodes; laser diodes; solar cells; image sensors; spice based microelectronic circuit design. This course is dually listed with equivalent 400-level course (EE 432).

**EE 534 VLSI Design Systems 3 cr**

Review of fabrication of microelectronic devices; introduction to MOS technology; basic physical and electrical properties of field effect transistors; CMOS fabrication; layout of CMOS integrated circuits; MOSFETS; concepts of VLSI chip design; physical design of CMOS integrated circuit.

**EE 535 Electronic Materials Prop-Appl 3 cr**

Schrodinger's equation, potential wells and barriers; crystallographic geometry; Kronig-Penney model; energy bands in crystalline solids; density of states - Fermi statistics; intrinsic and extrinsic semiconductors; conductivity and Hall effects; interfaces; magnetic materials; superconducting materials; optical materials. Prerequisite: Instructor's permission.

**EE 536 Intro to Superconductivity 3 cr**

Microscopic theory of superconductivity; BCS theory; superconduction tunneling phenomena; superconducting device; superconducting materials; High-Tc superconductors. Prerequisite: Instructor's permission.

**EE 537 Adv Plasma Process Elect Mat 3 cr**

Analysis, design and application of DC, RF and microwave plasma in microelectronic material processing; sputtering; etching; deposition; surface modification; diagnostic and characterization techniques. Prerequisite: Instructor's permission.

**EE 538 Magnetic Recording Media 3 cr**

Magnetostatic fields; magnetization processes; demagnetizing factors; magnetic circuits; hard disk / tape media; inductive and MR heads; magnetic data storage systems. Prerequisite: Instructor's permission.

**EE 539 VLSI Technology - Fabrication 3 cr**

Introduction to semiconductor devices; crystal growth and wafer preparation; chemical and physical vapor deposition; oxidation; diffusion; ion implantation; lithography; etching; metallization; process integration of CMOS and bipolar technologies; diagnostic techniques and measurements; packaging; yield and reliability. This course is dually listed with an equivalent 400-level course (EE 439).

**EE 540 HDL Logic Synthesis 3 cr**

Introduction to the syntax and elements of the basic VHDL language such as entities and architectures; creating combinational, synchronous logic and state machines using both structural and behavioral VHDL; using hierarchy in large designs; synthesizing and implementing designs. This course is dually listed with an equivalent undergraduate-level course (EE 440) and requires a minimum GPA of 2.75 or the instructor's permission for admission. Credit for both EE 540 and EE 543 not allowed toward a degree.

**EE 541 Computer Networks 3 cr**

Introduction to design and analysis of computer networks. Polling networks and ring networks. Networking applications. This course is dually listed with an equivalent 400-level EE course.

**EE 542 Adv Top Digital Design - HDLs 3 cr**

Current topics of interest in digital design. State-of-the-art software tools used in digital design. Advanced topics in HDLs.

**EE 543 HDL Logic Simulation 3 cr**

Introduction to the syntax and elements of the basic Verilog language such as modules and ports; hierarchical modeling; gate-level modeling; dataflow modeling; behavioral modeling; switch-level modeling; tasks and functions; timing and delays; user-defined primitives; synthesizing and implementing designs. Emphasis is on the simulation and test-bench aspects. This course is dually listed with an equivalent undergraduate-level course (EE 443) and requires a minimum GPA of 2.75 or the instructor's permission. Credit for both EE 540 and EE 543 not allowed toward a degree.

**EE 544 Wireless Networks 3 cr**

Introduction to modern wireless networks/systems, the cellular concept, frequency reuse, interference and system capacity improvement, trunking and grade of service, multiple access techniques, wireless/wireline interworking, and ad hoc networks). This course is dually listed with an equivalent 400-level course (EE 444) and requires a minimum GPA of 2.75.

**Prerequisite:** EE 541

**EE 545 Optical Network 3 cr**

Digital transmission using fiber optics as point-to-point link. Wavelength-division-multiplexing concepts and components, LAN, WAN, and MAN, SONET/SDH, FDDI Networks, Broadcast-and-select WDM Networks, Wavelength-routed Networks, and Performance of WDM and EDFA systems. Prerequisite: Instructor's permission.

**Prerequisite:** EE 456 Minimum Grade of D

**EE 546 Neural Networks 3 cr**

Introduction to neural networks and their application to electrical engineering. Concept learning and the general-to-specific ordering, decision tree learning, linear perceptrons, back propagation networks, recursive networks, radial basis networks, neural network-based control systems, unsupervised learned networks.

**EE 548 Computer-Network Security 3 cr**

Cryptography; Symmetric and asymmetric encryption; authentication and identification schemes; MACs and Digital Signatures; applications of security.

**EE 552 Microwave Engineering 3 cr**

Generation and transmission of high frequency electromagnetic energy-magnetrons, klystrons, maser, parametric amplifiers, traveling wave tubes and solid-state devices. This course is dually listed with an equivalent 400-level course (EE 452). Prerequisite: Instructor's permission.

**EE 553 Antenna Theory and Design 3 cr**

Radiation fundamentals; linear antennas; loop antennas; aperture antennas; reflector antennas; antenna impedance and measurements; computer-aided design of antenna systems. This course is dually listed with an undergraduate level course (EE 453).

**EE 554 Digital Computer Architecture 3 cr**

Computer organization; instruction set design; ALU design; control unit design; I/O and interrupt designs; memory organization; DMA; microprogramming; introduction to multi-processors; performance analysis. This course is dually listed with an undergraduate level course (EE 454).

**EE 555 Optoelectronics 3 cr**

Wave propagation in free-space and in wave guides; optical resonators, interaction of radiation and atomic systems; laser oscillation; solid-state lasers. He-Ne and Argon ion lasers, integrated optics including integration of emitters and detectors; optical interconnects; spatial light modulators; optoelectronic materials and devices; and applications of optoelectronics. This course is dually listed with a 400-level course (EE 455).

**EE 556 Fiber Optic Communication Sys 3 cr**

Review of optical principles, dielectric waveguides, signal propagation, degradations and attenuation of fibers. Fiber interconnection devices, active and passive components, optical transmitters and receivers, power budget, fiber optic communication systems. This course is dually listed with an equivalent undergraduate-level course (EE 456).

**EE 557 Adv. Embedded System Design 3 cr**

Architecture and software of 16-bit and 32-bit microprocessor hardware and software; interface design to memory and peripheral devices; multiprocessing. This course is dually listed with an undergraduate level course (EE 457).

**EE 558 Radar Analysis 3 cr**

Introduction to radar signal processing. Continuous wave and pulsed radars. Clutter and radio wave propagation. Moving target indicator, target surveillance and tracking radar systems. Side-looking, synthetic aperture, interferometric and other airborne radars. This course is dually listed with an equivalent 400-level (EE458).

**EE 559 Optical Info Process-Holograph 3 cr**

Parallel optical information processing in Fourier transform systems; nonlinear optical image processing in a linear optical processing; optical image equidensity and pseudo-color using techniques; wave-front reconstruction; on-axis and off-axis holography, effects of film MTF and nonlinearities; holographic memory, display and non-destructive testing; and optical computing. Prerequisite: Instructor's permission.

**EE 560 Adv Computer Architecture 3 cr**

Overview of software/hardware architectures of selected RISC/CISC microprocessors, advanced pipelining and instruction level parallelism, superscalar techniques, memory hierarchy design, cache coherency, introduction to multiprocessor systems and interconnection networks.

**Prerequisite:** EE 554 Minimum Grade of C

**EE 565 Adv Digital Signal Processing 3 cr**

Review of discrete Fourier and z-transforms; review of analog filter design; canonical digital filter forms; design of IIR and FIR digital filters. Fast Fourier Transforms (FET) and their applications; hardware implementation and quantization effects. Advanced digital filter structures and design. DSP algorithm design and implementation. Analysis of finite word length effects of DSP applications. Extensive use of MatLab for analysis and design. This course is dually listed with an equivalent 400-level EE course (EE465).

**EE 566 Digital Image Processing 3 cr**

Review of digital image fundamentals; different image transforms; image enhancement techniques; image restoration methods; detection of discontinuities and thresholding.

**EE 567 Biomedical Imaging 3 cr**

Introduction to biomedical imaging, projection radiography, computer aided tomography, single photon emission computed tomography (SPECT), positron emission tomography (PET), magnetic resonance imaging (MRI and fMRI), ultrasound imaging, optical imaging techniques including confocal microscopy and optical coherence tomography (OCT).

**Prerequisite:** EE 566 Minimum Grade of D

**EE 568 Pattern Recognition 3 cr**

Introduction to pattern recognition, statistical, syntactic and neural pattern recognition; Decision procedures; Parameter estimation and supervised learning; Non-parametric techniques; Feature extraction and nonlinear mapping; Fuzzy systems in pattern recognition; Methods of testing

**EE 569 Signal Integrity 3 cr**

Design techniques for high-speed digital interfaces and circuit boards; signal integrity including crosstalk and ground bounce; electromagnetic aspects of high-speed digital design; frequency-domain analysis of power-system integrity; state-of-the-art buses and standards. This course is dually listed with an equivalent undergraduate-level course (EE 469).

**EE 571 Wireless Communications 3 cr**

The cellular concept and system design fundamentals, propagation in mobile radio channels, large scale fading; small-scale fading and multi-path statistical distributions, distributions, diversity and diversity combining techniques. This course is dually listed with an equivalent undergraduate level course (EE 471) and requires instructor's permission for admission.

**Prerequisite:** EE 322 Minimum Grade of D and EE 372 Minimum Grade of D

**EE 573 Advanced Communication Systems 3 cr**

Digital line coding; pulse shaping; partial response signaling; scrambling; M-ary communication; digital carrier systems and digital multiplexing. Probability; random processes; white noise and the behavior of analog systems in the presence of noise. Information theory; compact codes and error correcting codes. This course is dually listed with an equivalent 400-level course (EE 473).

**EE 574 Digital Communications 3 cr**

Analysis and design of digital communication systems based on probability theory; signal space representation and optimum detection principles; Digital modulation techniques and their performance in additive white Gaussian noise.

**Prerequisite:** EE 573

**EE 575 Stochastic Processes 3 cr**

Introduction to estimation theory. Markov chains - finite, countable, continuous time, optimal stopping; Martingales; renewal processes, reversible Markov chains, Brownian motion and stochastic integration.

**EE 576 Optical Communications 3 cr**

Light sources, detectors, fiber components and optical systems for fiber communication; free-space inter-satellite optical networks for high-speed global communication; coding problems in optical fiber data transmission; three-dimensional optical data storage for database processing; propagation losses and fiber amplifiers; and optical free-space interconnections in future computers. Prerequisite: Instructor's permission.

**EE 577 Information Theory 3 cr**

Self-information; entropy; mutual information and channel capacity; encoding; error detecting and correcting codes. Sampling theorem. Discrete and continuous channels. Band-limited channels.

**EE 578 Error Correction Codes 3 cr**

This course is designed to introduce the students to error correcting codes, their construction and properties, encoding and decoding.

**EE 579 Wireless Sensor Networks 3 cr**

Introduction to Wireless Sensor Networks; Network deployment; Network Topologies; Localization; Tracking; Time synchronization techniques; Wireless characteristics; Energy considerations; MAC layer protocol and sleep scheduling; Routing; Sleep-based topology control; Latest development in the field.

**Prerequisite:** EE 544 Minimum Grade of D

**EE 582 Switch-Mode Power Conversion 3 cr**

Design and analysis of switch mode power converters-design of magnetic components; stability considerations; input filter interactions; performance, measurements and evaluation. This course is dually listed with an equivalent 400-level course (EE 482). Prerequisite: Instructor's permission.

**EE 585 Advanced Power Systems 3 cr**

Special topics that are not covered in traditional power systems courses, such as: Optimization techniques, computer methods, unified fault (short circuit) analysis, protection and control of power systems. Prerequisite: Instructor's permission.

**EE 586 Power Electronics 3 cr**

Power semiconductor diodes and thyristors; commutation techniques; rectification circuits - uncontrolled and controlled; AC voltage controllers; DC chopper; pulse-width modulated inverters and resonant pulse inverters. This course is dually listed with an equivalent undergraduate level course (EE 486).

**Cross-Listed:** EE 486

**EE 588 Power Semiconductor Drives 3 cr**

Rectifier control of DC motors; chopper control of DC drives; closed-loop control of DC drives; induction motor speed control and multiquadrant control; control of induction motors by AC controllers and frequency-controlled drives; slip power control of induction motors; synchronous motor drives - brushless DC and AC motor drives. Prerequisites: Instructor's permission.

**EE 589 Renewable Energy 3 cr**

Introduction to renewable energy sources. Fuel cells: classification, configuration and operation. Hydrogen: production, purification and storage. Photovoltaic cells: solar cells and operational characteristics. Wind turbines: operational characteristics. Energy from water sources: hydroelectric, wave and tidal energy.

**EE 590 Special Topics - 1-3 cr**

Topics of current electrical engineering interest.

**EE 592 Directed Independent Study 1-3 cr**

Directed study, under the guidance of a faculty advisor, of a topic from the field of Electrical and Computer Engineering not offered in a regularly scheduled course. Prerequisite: Instructor's permission.

**EE 594 Project in Electrical Engr 1-3 cr**

An investigation of an original problem in electrical engineering under the guidance of the student's major professor. Prerequisites: Approval of the project prospectus by the student's advisory committee, and consent of the Director of Engineering Graduate Studies.

**EE 599 Thesis 1-6 cr**

An investigation of an original problem in electrical and/or computer engineering under the guidance of the student's major professor. Prerequisite: Approval of the thesis prospectus by the student's Advisory Committee and the Graduate School and consent of the Director of Engineering Graduate Studies.

## Elem-Early Childhood (EEC) (EEC)

**EEC 290 Special Topics - 3 cr**

Guided study of selected educational tasks (e.g. curriculum revision, classroom materials development, models of learning and teaching) and teaching problems and practices for improving student achievement. Not more than 6 hours may be earned in Special Topics courses.

**EEC 300 Creating Envir for Lrng/Play 3 cr**

A study of environments that promote learning through play in early childhood. Emphasis on materials, activities, equipment, and effective strategies that support and encourage young children's play, learning and creativity.

**EEC 315 Creating Culturally Responsive Early Childhood Classrooms 3 cr**

This course emphasizes the importance of recognizing the role of culture(s) and lived experiences in developing effective, meaningful, and inclusive learning opportunities for young children.

**EEC 332 Teaching Language Arts 3 cr**

A course presenting methods of promoting meaningful language and literacy skills in early childhood and elementary school programs. This course has a required field experience.

**Corequisite:** EEC 346, RED 330, RED 333

**EEC 334 Lit for the Young Child 3 cr**

A survey course dealing with methods of writing literary materials with children in preschool through the primary grades. It is designed to assist those who wish to become widely acquainted with books and related materials for today's young children.

**Cross-Listed:** RED 334

**EEC 335 Teaching Mathematics - W 3 cr**

A course which deals with effective methods of teaching mathematics to elementary school students. Emphasis will be on developing an understanding of numbers, teaching basic operations, and using teaching aids and materials to meet the various needs of elementary age children. This course has a required field experience.

**Prerequisite:** ((MA 181 Minimum Grade of D or MA 201 Minimum Grade of D) or (MA 202 Minimum Grade of D or MA 281 Minimum Grade of D)) and EEC 346 Minimum Grade of C and RED 330 Minimum Grade of C and EEC 332 Minimum Grade of C

**Corequisite:** EEC 336, EEC 337, RED 331

**EEC 336 Teaching Social Studies 3 cr**

A course using problem solving and independent investigation as means of teaching the relationship of humans to their environment. Objectives, content and procedures are discussed. This course has a required field experience.

**Prerequisite:** EEC 346 Minimum Grade of C and RED 330 Minimum Grade of C and RED 333 Minimum Grade of C and EEC 332 Minimum Grade of C

**Corequisite:** EEC 335, EEC 337, EEC 345, RED 331

**EEC 337 Teaching Science 3 cr**

A course using discovery, inquiry and problem-solving approaches as a means of teaching science. Relationships of science to entire early childhood and elementary curriculum is discussed. This course has a required field experience.

**Prerequisite:** EEC 346 Minimum Grade of C and RED 330 Minimum Grade of C and RED 333 Minimum Grade of C and EEC 332 Minimum Grade of C

**Corequisite:** EEC 335, EEC 336, EEC 345, RED 331

**EEC 338 Curr App Music-Movement in EC 3 cr**

Focus on planning, preparing, and guiding experiences for young children in musical play, movement, and creative dramatics to develop the whole child through cooperative activities that promote language and literacy learning across the curriculum.

**EEC 345 Sequence Field Experience 1 cr**

Supervised practice in teaching curriculum areas in the elementary or early childhood classroom setting during the semester in which sequence courses are taken.

**Prerequisite:** EEC 346 Minimum Grade of C and RED 330 Minimum Grade of C and RED 333 Minimum Grade of C and EEC 332 Minimum Grade of C

**Corequisite:** EEC 335, EEC 336, EEC 337, RED 331

**EEC 346 Early Child Prog(Birth-8)-W 3 cr**

This course will introduce the roles of the adult in working with children from birth through age 8. History, management and parent education techniques are presented.

**EEC 348 Lang Dev in Early Childhood 3 cr**

An introduction to speech and language development birth through primary grades and teaching practices that support language and literacy development. Includes discussion of cultural and developmental factors that influence language development methods appropriate for helping young children acquire language and literacy skills.

**Cross-Listed:** RED 348

**EEC 351 Child Development & Learning 3 cr**

A study of physical, cognitive, social, and emotional development from birth to age 8. Emphasis is placed on applying an understanding of child growth and development in an educational context. This course includes a field experience in an early childhood setting.

**EEC 429 Opening School Lab Exp 1 cr**

Professional laboratory experiences of observation and participation for a two-week period at the opening of school. (May be taken twice.)

**Prerequisite:** senior standing.

**EEC 430 Student Teaching - EEC 9-12 cr**

Observation and supervised teaching in elementary or early childhood settings with the opportunity for study and discussion of problems and issues encountered. (Co-requisite: Lab) Prerequisite: Permission of department.

**Prerequisite:** EEC 332 Minimum Grade of C and EEC 335 Minimum Grade of C and EEC 336 Minimum Grade of C and EEC 337 Minimum Grade of C and EEC 345 Minimum Grade of C and EEC 346 Minimum Grade of C and RED 330 Minimum Grade of C and RED 331 Minimum Grade of C and RED 333 Minimum Grade of C

**EEC 430L Student Teaching - EEC 0 cr**

Observation and supervised teaching in elementary or early childhood settings with the opportunity for study and discussion of problems and issues encountered. (Co-requisite: Lecture) Prerequisite: Permission of department.

**Prerequisite:** EEC 332 Minimum Grade of C and EEC 335 Minimum Grade of C and EEC 336 Minimum Grade of C and EEC 337 Minimum Grade of C and EEC 345 Minimum Grade of C and EEC 346 Minimum Grade of C and RED 330 Minimum Grade of C and RED 331 Minimum Grade of C and RED 333 Minimum Grade of C

**Corequisite:** EEC 430

**EEC 490 Special Topics 3 cr**

Guided study of selected educational tasks (e.g. curriculum revision, classroom materials development, models of learning and teaching) and teaching problems and practices for improving student achievement.

**EEC 494 Directed Studies 1-3 cr**

No more than 6 hours can be accepted for a Bachelor's Degree and Class B Certificate. Prerequisite: Permission of department chair.

**EEC 496 Internship- 3-9 cr**

The internship is a supervised learning experience in an approved setting similar to that in which the student will eventually be employed. The internship provides students with an opportunity to apply theories and concepts learned during the undergraduate program. Requires candidacy and approval of department chair.

**EEC 499 Senior Honors Project - H 3-6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project, relevant to the field of elementary/early childhood study, that will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty chaired by the honors mentor. This course is required for Honors recognition and may be repeated for up to 6 credit hours. Prerequisite: Participant in honors program and junior level status.

**EEC 522 Elementary School Curriculum 3 cr**

The study of curriculum with an emphasis on concepts, procedures and models particular to curriculum in the elementary school. Curriculum study includes the context of and a process of planning, developing, implementing, and evaluating the elementary school curriculum.

**EEC 523 Instr Plan Elem School 3 cr**

Presents an overview of factors and procedures involved in planning, developing and evaluating the elementary school instructional process.

**EEC 532 Lit and Lang Dev in Elem Sch 3 cr**

Designed to explore the multi-dimensional theory of language development and to provide techniques and practices for development of language ability. Through correlating these related areas, the student should grow in understanding dynamics and change in language structure and development. Opportunities for oral and written communication are emphasized.

**EEC 535 Trends in Teaching Mathematics 3 cr**

This course emphasizes new methods of presenting mathematical content to elementary school students. Various materials will be developed to promote thinking and discovery of mathematical concepts. Opportunities are provided for developing multi-level materials appropriate to the varied abilities and interest levels in elementary school. **Prerequisite:** EEC 523 (may be taken concurrently) Minimum Grade of C

**EEC 536 Issues-Innov Tch Soc Studies 3 cr**

Current issues and innovations in early childhood and elementary school social studies teaching and learning are reviewed.

**EEC 537 Teaching Science 3 cr**

Current trends and issues in early childhood and elementary school science teaching and learning are reviewed.

**EEC 545 Effective Mathematics Teaching Practices 3 cr**

This course supports elementary mathematics educators in examining and reflecting upon effective teaching practices that promote ambitious mathematics instruction in the K-6 classroom.

**EEC 547 Instructional Strategies for Science Teaching 3 cr**

This course prepares students to provide effective science instruction using strategies that focus on phenomena, inquiry learning, sensemaking, and science practices

**EEC 548 Early Childhood Practicum 1-9 cr**

Experiences in a field-setting working with children birth through age 8 under the supervision of qualified personnel.

**EEC 550 Trends in Parent Education 3 cr**

A study of current trends in parent education designed to promote better homeschool communication and cooperation.

**EEC 551 Seminar Elem Education 3 cr**

A seminar of topics, programs and research in the field of elementary education. This course provides a forum for discussion of contemporary educational issues and practicum experiences in the teaching field in which the quality of performance in teaching is evaluated.

**EEC 552 Comm Svcs Families-Children 3 cr**

Study of agencies which provide services, types of services provided, and means of obtaining needed services.

**EEC 553 Org Patterns and Curr in ECE 3 cr**

A review of organizational and curricular patterns utilized in the classroom setting for the education of young children. A study of educators and their theories concerning learning styles and developmental patterns in relation to the school setting and curriculum.

**EEC 554 Lang Dev in Early Child Ed 3 cr**

Study of the language development of young children with an emphasis on provision of classroom environment to promote growth of language.

**EEC 555 Org-Adm In Early Childhood Ed 3 cr**

Managing the multiple responsibilities of administrative heads of educational programs for young children.

**EEC 556 Elementary School Curriculum 3 cr**

An in-depth study of the development, implementation, and assessment of Elementary school curriculum through a theoretical and research-based lens.

**EEC 557 Elementary Practicum 1-9 cr**

Experiences in a field setting working with children in grades K-6 under the supervision of qualified personnel.

**EEC 558 Teaching Spelling and Writing 3 cr**

Analysis of methods of teaching spelling and the mechanics of writing, included review of pertinent research in the skill areas as well as emphasis on the relationship of spelling to the development of skills in word recognition.

**EEC 560 Workshop Elem-Early Child Ed 3 cr**

A topical workshop in which participants have experiences in creating, designing, constructing and using instructional materials and activities. No more than 6 hours can be applied toward a degree program.

**EEC 562 Classroom Logis - Facilitation 3 cr**

To increase teacher's competencies to facilitate learning by providing a classroom atmosphere conducive to self-discipline, participation and worthwhile learning activities.

**EEC 575 Diag Lrng Difficulties in Math 3 cr**

Analysis of diagnostic techniques for identifying children's learning difficulties in mathematics.

**Prerequisite:** EEC 535 Minimum Grade of B

**EEC 577 Children's Lit for Gifted 3 cr**

An exploration of research related to reading behavior of gifted and high-ability children with emphasis on examining criteria for selecting and utilizing literature to promote cognitive, emotional, and social development.

**EEC 590 Sp Top - 1-3 cr**

Guided supervision in the identification and completion of educational tasks, such as curriculum revision, course and/or program design, self-study for accreditation visitation, student achievement evaluation, aesthetic experiences, consumer and career education. No more than 6 hours can be applied toward a graduate degree.

**EEC 592 Research Seminar 3 cr**

Structured to assist graduate students in designing and implementing appropriate research for professional growth and writing of a thesis.

**EEC 594 Dir St and Research 1-3 cr**

Students explore through directed individual study research problems and issues of special interest or significance in elementary or early childhood education. No more than 3 hours of any departmental 594 courses can be applied toward a degree program. **Prerequisite:** Permission of department chair

**EEC 595 Internship-Elementary 3-9 cr**

The internship is a supervised learning experience in a work setting similar to that in which the educator will eventually be employed. The internship provides the student an opportunity to apply the theories and concepts learned during the graduate program of study. **Prerequisite:** Permission of department chair.

**Prerequisite:** (5004 154 (5003 157 or 5903 157) or 5904 154) and (5005 158 or 5905 158) and (5205 159 or 190 233)

**EEC 598 Internship Early Childhood Edu 3-9 cr**

The internship is a supervised learning experience in a work setting similar to that in which the educator will eventually be employed. The internship provides the student an opportunity to apply the theories and concepts learned during the graduate program of study. **Prerequisite:** Permission of department chair.

**Prerequisite:** 5025 156 and 5205 159 or 190 233

**EEC 599 Thesis 1-9 cr**

A student selects a project, study, or investigation related to his area of specialization in early childhood or elementary education. The project forms a basis for the thesis. A thesis committee will provide direction during the investigation for and writing of the thesis.

**EEC 601 Advanced Seminar - 3 cr**

In depth study of various curriculum areas through research reports, problem analysis and individual evaluation of promising practices and topical issues. Each seminar participant will concentrate on a curriculum area: e.g., arithmetic, career awareness, communication, consumer education, humanities, natural sciences, social sciences, early reading and psycholinguistics.

**EEC 610 Diag and Prescriptive Teaching 3 cr**

Designed to assist teachers and school leaders in understanding the skills and techniques necessary for diagnosing and prescribing instruction for learners in different types of teaching-learning settings.

**EEC 622 Seminar in Curr-Inst Problems 3 cr**

Critical study of curriculum and instructional problems in the elementary school. Research reviews and program design problems are emphasized.

**EEC 635 Seminar in Mathematics Ed 3 cr**

A study of current topics related to teaching mathematics in early childhood and elementary years.

**EEC 690 Sp Top - 3 cr**

Guided supervision in the identification and completion of educational tasks, such as curriculum revision, course and/or program design, self-study for accreditation visitation, student achievement evaluation. No more than 6 hours can be applied toward a graduate degree. **Prerequisite:** Permission of department chair.

**EEC 694 Dir St and Research - 1-3 cr**

Students explore through directed study problems and issues of special interest or significance in early childhood or elementary education. No more than 3 hours of any departmental 694 courses can be applied toward a degree program. **Prerequisite:** Permission of department chair.

**EEC 695 Internship 3-9 cr**

The internship is a supervised learning experience in a work setting similar to that in which an educator will eventually be employed. The internship provides the student with an opportunity to apply the theories and concepts learned during the graduate program.

**EEC 699 Research Project 1-3 cr**

The research project, as the culminating experience in the Instructional Specialist Program, provides an opportunity for the candidate to synthesize and apply the various program components in a selected instructional setting. Suitable agreements are reached with the appropriate school systems by the candidate. May be taken more than one semester. **Prerequisite:** Permission of department chair.

**Prerequisite:** EEC 601 Minimum Grade of B and EEC 610 Minimum Grade of B and EEC 622 Minimum Grade of B and (IDE 692 Minimum Grade of B or EDU 692 Minimum Grade of B)

## Emergency Med Training (EMT) (EMT)

**EMT 100 Cardiopulmonary Resuscitation 1 cr**

Cardiopulmonary Resuscitation (CPR) emphasizes the scope and magnitude of cardiovascular disease, causes of sudden death, and the effects of prudent heart living as a tool to reduce risk factors associated with cardiovascular disease. The skills component identifies and measures competence in one-person CPR, two-person CPR, infant and child CPR, and management of airway obstruction. Course completion cards are issued by the American Heart Association.

**EMT 110 First Responder 3 cr**

A skills approach in helping the student to intervene in any medical or traumatic emergency situation before the emergency personnel arrive. Emphasis is placed on care of the airway, CPR, control of bleeding, splinting and bandaging, AED use, and overall management.

**EMT 200 Basic Emergency Care 6 cr**

Includes all required modules of the 1994 EMT Basic National Standard Curriculum. Assessment of patients, airway management, AED use, hemorrhage control, management of fractures, care of special injuries, emergency childbirth, environmental emergencies, transportation of the sick and injured, and radio communications.

**EMT 205 Basic Emergency Clinic Intern 1 cr**

Pre-hospital care and transportation of the sick and injured using principles of basic life support, correlated with emergency room experience. Time distributed between emergency room, ambulance, communications center, and interfacility transport vehicle.

**EMT 206 Basic Skills Lab 1 cr**

Basic Emergency Medical Technician Skill Practicum. Designed to allow Basic EMT students extensive practice of required psychomotor skills.

**EMT 210 Medical Terminology 3 cr**

Medical vocabulary including prefixes, suffixes and their etymological derivation. Proper pronunciation stressed as well as logic, grammar, and spelling.

**EMT 255 Hazardous Environment Managmnt 3 cr**

Theory behind management of hazardous environment emergencies with some application of theory in a practical setting. Instruction on chemical and physical nature of hazardous materials relative to control of emergency situations involving chemical spills.

**EMT 290 Special Topics - 1-3 cr**

Selected topics in Emergency Medical Services and Emergency Response Training. May be repeated for credit when course content varies.

**EMT 310 Human Systems-Disease Process 3 cr**

An overview of the human body and its systems. Emphasis is placed on the understanding of the functions of human systems and subsystems. Includes concepts of pathophysiology included in the 1998 DOT Paramedic Curriculum.

**EMT 315 EMS Pharmacology I 3 cr**

Introduction to pharmacology for the EMS professional. Includes drug classification, dosage calculations, routes and methods of administration, and IV access.

**EMT 321 Advanced EMT 6 cr**

This course includes theoretical concepts and competencies outlined in the National EMS Education Standards for Advanced EMT's. Major topical areas include EMS Operations, Airway Management, Assessment and Management of the Medical and Trauma Patient, Pharmacology for the A-EMT, Public Health and Life Span Development, among others.

**Prerequisite:** EMT 200 Minimum Grade of B and EMT 210 (may be taken concurrently) Minimum Grade of B and EMT 310 (may be taken concurrently) Minimum Grade of B or (BMD 114 Minimum Grade of C or BLY 151 Minimum Grade of C or CLS 114 Minimum Grade of C) and (BMD 115 (may be taken concurrently) Minimum Grade of C or BLY 152 (may be taken concurrently) Minimum Grade of C or CLS 115 (may be taken concurrently) Minimum Grade of C)

**Corequisite:** EMT 361, EMT 371

**EMT 335 Essentials of Paramedicine 3 cr**

Preparatory course for ALS EMS students. Includes airway management, EMS Systems, therapeutic communications, responsibilities, injury prevention, and legal issues.

**EMT 340 Introduction to EMS Cardiology 3 cr**

Rhythm interpretation in Lead II EKG. Rapid recognition, defibrillation and therapeutic management of potentially lethal rhythms and myocardial infarction. Twelve lead placement and basic recognition.

**EMT 345 EMS Pharmacology II 3 cr**

Advanced course with emphasis on specific drugs within classifications, drug names, actions, indications, contraindications, side effects, precautions, dosages, clinical applications and listings of prescriptions and over-the-counter medications.

**EMT 350 Patient Assessment-Management 3 cr**

Includes history taking, physical examination, clinical decision making, communications, documentation and assessment based management of medical and trauma patients.

**EMT 355 Paramedic Emergency Care I 3 cr**

Includes pulmonary and cardiology, including ACLS. Additional modules may be added in accordance with State and Department of Transportation guidelines.

**EMT 361 Advanced EMT Skill Lab 1 cr**

This course is designed to integrate previously learned theory on advanced pre-hospital assessment, treatment and documentation of the medical and traumatic emergency patient. The course includes psychomotor skills and competencies outlined in the DOT's National EMS Education Standards for Advanced EMTs.

**Corequisite:** EMT 321, EMT 371

**EMT 365 Advanced Trauma Management 3 cr**

Includes trauma systems, mechanism of injury, management of hemorrhage, shock, burns, soft tissue, head and facial, spinal, thoracic, abdominal and musculoskeletal trauma.

**EMT 371 Advanced EMT Internship 2 cr**

Supervised clinical and field experiences emphasizing patient care in the hospital and out-of-hospital environments. Time distributed between hospital emergency departments, fire rescue departments, and ambulance services, among others.

**Corequisite:** EMT 321, EMT 361

**EMT 375 EMS Response Women-Children 3 cr**

The unique problems for the EMS provider when responding to women or children. Includes gynecology, obstetrics, abuse and assault, pediatrics and neonatology.

**EMT 394 Directed Studies - 1-3 cr**

Directed study, under the guidance of a faculty advisor, of a topic in the fields of Emergency Medical Services or Emergency Response Training. Requires permission of Department Chair.

**EMT 425 Paramedic Emergency Care II 3 cr**

Includes all medical emergency modules of the National Paramedic Curriculum not included in EMT 355 and 375.

**EMT 440 EMS Op and Sp Considerations 3 cr**

Includes special circumstances regarding geriatric patient, abuse and assault, patients with special challenges, acute interventions for the chronic care patient, ambulance operations, incident command, rescue, hazmat, and crime scene awareness.

**EMT 455 Paramedic Skills Laboratory 1 cr**

Advanced skills practicum. Designed to integrate all previously learned theory, management concepts and behavioral objectives of the 1999 National Standard Paramedic training curriculum.

**Prerequisite:** EMT 210 Minimum Grade of B and EMT 315 Minimum Grade of B and EMT 335 Minimum Grade of B and EMT 340 Minimum Grade of B and EMT 345 Minimum Grade of B

**EMT 465 Paramedic Clinical Intern I 3 cr**

The first of two clinical internship courses required of paramedic students. Supervised clinical experiences emphasizing patient care in the hospital and outpatient clinical settings.

**Prerequisite:** EMT 210 Minimum Grade of B and EMT 315 Minimum Grade of B and EMT 335 Minimum Grade of B and EMT 340 Minimum Grade of B and EMT 345 Minimum Grade of B

**EMT 466 Paramedic Clinical Intern II 3 cr**

The second of two clinical internship courses required of paramedic students. Supervised clinical experiences emphasizing patient care in the hospital and outpatient clinical settings.

**Prerequisite:** EMT 355 Minimum Grade of B and EMT 375 Minimum Grade of B

**EMT 475 Paramedic Field Internships 6 cr**

Supervised field experiences with an out of hospital advanced life support service emphasizing patient care and team leadership skills.

**Prerequisite:** EMT 350 Minimum Grade of B and EMT 466 Minimum Grade of S

**EMT 485 Advanced Cardiac Life Support 3 cr**

Course based on American Heart Association's ACLS Program. Includes in depth review of all cases required for a full ACLS course. Recommended for health care providers and health care provider students.

**EMT 490 Special Topics - 1-3 cr**

Selected topics in Emergency Medical Services and Emergency Response Training. Topics will vary according to needs and interests of students. Course may be repeated for credit when content varies.

**EMT 494 Directed Studies - 1-3 cr**

Directed study, under the guidance of a faculty advisor, of a topic in the fields of Emergency Medical Services or Emergency Response Training. Requires the permission of department chair.

**EMT 495 Comprehensive Review-Exam 1 cr**

Culmination of paramedic education. Includes practical skills labs designed to prepare the graduate for state licensure exams. A final practical and written exam will be administered as a final evaluation of student progress.

**Prerequisite:** EMT 350 Minimum Grade of B and EMT 466 Minimum Grade of S

## Emergency Medical Svcs (EMS) (EMS)

**EMS 100 Cardiopulmonary Resuscitation 1 cr**

Cardiopulmonary Resuscitation (CPR) emphasizes the scope and magnitude of cardiovascular disease causes of sudden death, and the effects of prudent heart living as a tool to reduce risk factors associated with cardiovascular disease. The skills component identifies and measures competence in one-person CPR, two person adult CPR, infant and child CPR, and management of airway obstruction. Course completion cards are issued by the American Heart Association.

**EMS 104 First Aid/CPR 1 cr**

This American Heart Association course includes the basics of First Aid and Cardiopulmonary Resuscitation (CPR) for Adults, Children and Infants. Course content includes instruction on recognition and management of medical and trauma emergencies including environmental emergencies. The skills component includes competence in one-person adult, infant and child CPR, and management of airway obstruction as well as skills associated with trauma and medical emergencies. Course completion cards are issued by the American Heart Association.

**EMS 110 Emergency Medical Responder 3 cr**

A skills approach in helping the student to intervene in any medical or traumatic emergency situation before emergency personnel arrive. Emphasis is placed on care of the airway, CPR, control of bleeding, splinting and bandaging, and overall management. Clinical rotations include emergency department and ambulance. American Heart Association Healthcare Provider CPR certification will be awarded. Successful completion of this course permits the student to sit for the National Registry exam for Emergency Medical Responder. Upon successful completion of the National Registry exam the student may apply for a license with the Alabama Department of Public Health as an Emergency Medical Responder.

**EMS 112 EMT Emergency Care 6 cr**

Includes all required modules of the 2009 National EMS Educational Standard Curriculum. Topics include pathophysiology, patient assessment, airway management, hemorrhage control, management of fractures, care of individuals with special needs, emergency childbirth, care of infants and children, medical emergencies, environmental emergencies, transportation of the sick and injured, operations and radio communications. Prerequisite: AHA BLS for Health Care Providers.

**Corequisite:** EMS 113, EMS 115

**EMS 113 EMT Skills Lab 1 cr**

Emergency Medical Technician Skills practicum, Designed to allow EMT students extensive practice of required psychomotor skills.

**Corequisite:** EMS 112, EMS 115

**EMS 115 EMT Clinical Internship 1 cr**

Pre-hospital care and transportation of the sick and injured using principles of basic life support, correlated with emergency department experience. Time distributed between emergency department and ambulance.

**Corequisite:** EMS 112, EMS 113

**EMS 140 Advanced EMT 6 cr**

This course includes theoretical concepts and competencies outlined in the National EMS Education Standards for Advanced EMT's. Major topical areas include EMS operations, airway management, assessment and management of the medical and trauma patient, pharmacology for the A-EMT, public health and life span development, among others.

**Prerequisite:** EMS 112 Minimum Grade of B and EMS 113 Minimum Grade of S and EMS 115 Minimum Grade of S and EMS 210 (may be taken concurrently) Minimum Grade of B

**Corequisite:** EMS 141, EMS 143

**EMS 141 Advanced EMT Skills Lab 1 cr**

This course is designed to integrate previously learned theory on advanced pre-hospital assessment, treatment and documentation of the medical and traumatic emergency patient. The course includes psychomotor skills and competencies outlined in the DOT's National EMS Education Standards for Advanced EMTs.

**Prerequisite:** (EMS 210 (may be taken concurrently) Minimum Grade of B or EMT 210 Minimum Grade of B) and (EMS 200 (may be taken concurrently) Minimum Grade of B or EMT 310 Minimum Grade of B) and (EMS 140 (may be taken concurrently) Minimum Grade of B or EMT 321 Minimum Grade of B) and (EMS 143 (may be taken concurrently) Minimum Grade of S or EMT 371 (may be taken concurrently) Minimum Grade of S)

**EMS 143 Advanced EMT Internship 2 cr**

Supervised clinical and field experiences emphasizing patient care in the hospital and out-of-hospital environments. Time distributed between hospital emergency departments, fire rescue departments, and ambulance services, among others.

**Prerequisite:** (EMS 210 (may be taken concurrently) Minimum Grade of B or EMT 210 Minimum Grade of B) and (EMS 200 (may be taken concurrently) Minimum Grade of B or EMT 310 Minimum Grade of B) and (EMS 140 (may be taken concurrently) Minimum Grade of B or EMT 321 Minimum Grade of B) and (EMS 141 (may be taken concurrently) Minimum Grade of S or EMT 361 Minimum Grade of S)

**EMS 200 Human Systems/Pathophysiology 3 cr**

An overview of the human body systems and disease processes. Emphasis is placed on the functions of human systems and subsystems relative to pathophysiology. Includes concepts of pathophysiology included in the National Standard Curriculum for the Paramedic and the requirements set forth by the Alabama Department of Public Health.

**EMS 210 Medical Terminology 3 cr**

Medical vocabulary including prefixes, suffixes and their etymological derivation. Proper pronunciation stressed as well as logic, grammar, and spelling. Course includes an overview of human anatomy and physiology.

**EMS 212 Paramedic Foundations 3 cr**

This course introduces issues related to the practice of pre-hospital advanced life support as a career, with a focus on issues common to all health care professions. Content areas include: paramedic roles and responsibilities, well-being of the paramedic, illness and injury prevention, medical-legal-ethical issues, therapeutic communication, pharmacology and advance airway management. Upon course completion, student will have met the objectives as outlined in the National Standard Curriculum for the Paramedic.

**Prerequisite:** (EMS 210 Minimum Grade of B or EMT 210 Minimum Grade of B) and (EMS 140 Minimum Grade of B or EMT 321 Minimum Grade of B) and (EMS 141 Minimum Grade of S or EMT 361 Minimum Grade of S) and (EMS 143 Minimum Grade of S or EMT 371 Minimum Grade of S) and (EMS 200 Minimum Grade of B or EMT 310 Minimum Grade of B) or (BMD 114 Minimum Grade of C or BLY 151 Minimum Grade of C or CLS 114 Minimum Grade of C) and (BMD 115 Minimum Grade of C or BLY 152 Minimum Grade of C or CLS 115 Minimum Grade of C) and (EMS 214 (may be taken concurrently) Minimum Grade of B or EMT 340 Minimum Grade of B) and (EMS 216 (may be taken concurrently) Minimum Grade of B or EMT 350 Minimum Grade of B) and (EMS 217 (may be taken concurrently) Minimum Grade of S or EMT 465 Minimum Grade of S)

**EMS 214 Introduction to EMS Cardiology 3 cr**

Rhythm interpretation in Lead II EKG. Rapid recognition, defibrillation and/or therapeutic management of potentially lethal rhythms and myocardial infarction. Objectives include twelve lead placement and basic rhythm recognition.

**Prerequisite:** (EMS 210 Minimum Grade of B or EMT 210 Minimum Grade of B) and (EMS 140 Minimum Grade of B or EMT 321 Minimum Grade of B) and (EMS 141 Minimum Grade of S or EMT 361 Minimum Grade of S) and (EMS 143 Minimum Grade of S or EMT 371 Minimum Grade of S) and (EMS 200 Minimum Grade of B or EMT 310 Minimum Grade of B) or ((BMD 114 Minimum Grade of C or BLY 151 Minimum Grade of C or CLS 114 Minimum Grade of C) and (BMD 115 Minimum Grade of C or BLY 152 Minimum Grade of C or CLS 115 Minimum Grade of C)) and EMS 212 Minimum Grade of C and (EMS 216 (may be taken concurrently) Minimum Grade of B or EMT 350 Minimum Grade of B) and (EMS 217 (may be taken concurrently) Minimum Grade of S or EMT 465 Minimum Grade of S)

**EMS 216 Patient Assess/Mgt & EMS Oper 3 cr**

Includes history taking, physical examination, clinical decision making, communications, documentation, assessment-based management of medical and trauma patients, ambulance operations, incident command rescue, Hazmat and crime scene awareness.

**Prerequisite:** (EMS 210 Minimum Grade of B or EMT 210 Minimum Grade of B) and (EMS 140 Minimum Grade of B or EMT 321 Minimum Grade of B) and (EMS 141 Minimum Grade of S or EMT 361 Minimum Grade of S) and (EMS 143 Minimum Grade of S or EMT 371 Minimum Grade of S) and (EMS 200 Minimum Grade of B or EMT 310 Minimum Grade of B) or ((BMD 114 Minimum Grade of C or BLY 151 Minimum Grade of C or CLS 114 Minimum Grade of C) and (BMD 115 Minimum Grade of C or BLY 152 Minimum Grade of C or CLS 115 Minimum Grade of C)) and EMS 212 (may be taken concurrently) Minimum Grade of B and (EMS 214 (may be taken concurrently) Minimum Grade of B or EMT 340 Minimum Grade of B) and (EMS 217 (may be taken concurrently) Minimum Grade of S or EMT 465 Minimum Grade of S)

**EMS 217 Paramedic Clinical I 3 cr**

Supervised clinical experiences emphasizing patient care in the hospital and outpatient clinical settings as outlined in the National Standard Curriculum for the Paramedic.

**Prerequisite:** (EMS 210 Minimum Grade of B or EMT 210 Minimum Grade of B) and (EMS 140 Minimum Grade of B or EMT 321 Minimum Grade of B) and (EMS 141 Minimum Grade of S or EMT 361 Minimum Grade of S) and (EMS 143 Minimum Grade of S or EMT 371 Minimum Grade of S) and (EMS 200 Minimum Grade of B or EMT 310 Minimum Grade of B) or ((BMD 114 Minimum Grade of B or BLY 151 Minimum Grade of B or CLS 114 Minimum Grade of B) and BMD 115 Minimum Grade of B or BLY 152 Minimum Grade of B or CLS 115 Minimum Grade of B)) and EMS 212 (may be taken concurrently) Minimum Grade of B and (EMS 214 (may be taken concurrently) Minimum Grade of B or EMT 340 Minimum Grade of B) and (EMS 216 (may be taken concurrently) Minimum Grade of B or EMT 350 Minimum Grade of B)

**EMS 240 EMS Resp. Special Populations 3 cr**

This course relates pathophysiology and assessment findings to the formation of field impressions and treatment plans specific to special populations. Subject matter will include gynecology, obstetrics, abuse and assault, neonatology, pediatrics, special needs and the geriatric community. Upon course completion, students will have met the objectives for special populations as outlined in the National Standard Curriculum for the Paramedic.

**Prerequisite:** EMS 212 Minimum Grade of B and (EMS 214 Minimum Grade of B or EMT 340 Minimum Grade of B) and (EMS 216 Minimum Grade of B or EMT 350 Minimum Grade of B) and (EMS 217 Minimum Grade of S or EMT 465 Minimum Grade of S) and (EMS 242 (may be taken concurrently) Minimum Grade of B or EMT 355 Minimum Grade of B) and (EMS 244 (may be taken concurrently) Minimum Grade of B or EMT 425 Minimum Grade of B) and (EMS 245 (may be taken concurrently) Minimum Grade of S or EMT 455 Minimum Grade of S) and (EMS 247 (may be taken concurrently) Minimum Grade of S or EMT 466 Minimum Grade of S)

**EMS 242 Paramedic Emergency Care I 3 cr**

Includes pathophysiology, assessment and management of patients suffering from pulmonary and cardiovascular diseases. Additional modules may be added in accordance to standards and guidelines in the National Standard Curriculum for the Paramedic and the American Heart Association. Student will receive an ACLS provider certification upon successful completion.

**Prerequisite:** EMS 212 Minimum Grade of B and (EMS 214 Minimum Grade of B or EMT 340 Minimum Grade of B) and (EMS 216 Minimum Grade of B or EMT 350 Minimum Grade of B) and (EMS 217 Minimum Grade of S or EMT 465 Minimum Grade of S) and (EMS 240 (may be taken concurrently) Minimum Grade of B or EMT 375 Minimum Grade of B) and (EMS 244 (may be taken concurrently) Minimum Grade of B or EMT 425 Minimum Grade of B) and (EMS 245 (may be taken concurrently) Minimum Grade of S or EMT 455 Minimum Grade of S) and (EMS 247 (may be taken concurrently) Minimum Grade of S or EMT 466 Minimum Grade of S)

**EMS 244 Paramedic Emergency Care II 3 cr**

Includes pathophysiology, assessment and management of patients suffering from medical emergencies not included in EMS 240 and EMS 242 in accordance to the National Standard Curriculum for the Paramedic.

**Prerequisite:** EMS 212 Minimum Grade of B and (EMS 214 Minimum Grade of B or EMT 340 Minimum Grade of B) and (EMS 216 Minimum Grade of B or EMT 350 Minimum Grade of B) and (EMS 217 Minimum Grade of S or EMT 465 Minimum Grade of S) and (EMS 240 (may be taken concurrently) Minimum Grade of B or EMT 375 Minimum Grade of B) and (EMS 242 (may be taken concurrently) Minimum Grade of B or EMT 355 Minimum Grade of B) and (EMS 244 (may be taken concurrently) Minimum Grade of S or EMT 455 Minimum Grade of S) and (EMS 247 (may be taken concurrently) Minimum Grade of S or EMT 466 Minimum Grade of S)

**EMS 245 Paramedic Skills Lab 1 cr**

Advanced out-of-hospital practicum. Designed to integrate all previously learned theory, management concepts and behavioral objectives as outlined in the National Standard Curriculum for the Paramedic.

**Prerequisite:** EMS 212 Minimum Grade of B and (EMS 214 Minimum Grade of B or EMT 340 Minimum Grade of B) and (EMS 216 Minimum Grade of S or EMT 465 Minimum Grade of S) and (EMS 240 (may be taken concurrently) Minimum Grade of B or EMT 375 Minimum Grade of B) and (EMS 242 (may be taken concurrently) Minimum Grade of B or EMT 355 Minimum Grade of B) and (EMS 244 (may be taken concurrently) Minimum Grade of B or EMT 425 Minimum Grade of B)

**EMS 247 Paramedic Clinical II 2 cr**

Supervised clinical experiences emphasizing patient care in the hospital and outpatient clinical settings as outlined in the National Standard Curriculum for the Paramedic.

**Prerequisite:** EMS 212 Minimum Grade of B and (EMS 214 Minimum Grade of B or EMT 340 Minimum Grade of B) and (EMS 216 Minimum Grade of B or EMT 350 Minimum Grade of B) and (EMS 217 Minimum Grade of S or EMT 465 Minimum Grade of S) and (EMS 240 (may be taken concurrently) Minimum Grade of B or EMT 375 Minimum Grade of B) and (EMS 242 (may be taken concurrently) Minimum Grade of B or EMT 355 Minimum Grade of B) and (EMS 244 (may be taken concurrently) Minimum Grade of B or EMT 425 Minimum Grade of B) and (EMS 245 (may be taken concurrently) Minimum Grade of S or EMT 455 Minimum Grade of S)

**EMS 270 PALS 3 cr**

Course based on American Heart Association's Emergency Cardiovascular Care program. Includes assessment and management of pediatric cardiovascular and respiratory emergencies. Upon successful completion, the student will receive PALS provider certification. Recommended for health care providers and health care provider students.

**EMS 280 Advanced Cardiac Life Support 3 cr**

Course based on American Heart Association's Emergency Cardiovascular Care program. Includes in-depth review of all cases required for a full ACLS course. Recommended for health care providers and health care provider students. Upon successful completion, the student will receive ACLS certification.

**EMS 295 Paramedic Field Internship 4 cr**

Supervised field experiences with an out-of-hospital advanced life support service emphasizing patient care and team leadership skills as outlined in the National Standard Curriculum for the Paramedic.

**Prerequisite:** (EMS 240 Minimum Grade of B or EMT 375 Minimum Grade of B) and (EMS 242 Minimum Grade of B or EMT 355 Minimum Grade of B) and (EMS 244 Minimum Grade of B or EMT 425 Minimum Grade of B) and (EMS 245 Minimum Grade of S or EMT 455 Minimum Grade of S) and (EMS 247 Minimum Grade of S or EMT 466 Minimum Grade of S) and (EMS 297 (may be taken concurrently) Minimum Grade of S or EMT 495 (may be taken concurrently) Minimum Grade of S)

**EMS 296 Special Topics in EMS 1-3 cr**

Selected topics in Emergency Medical Services and Emergency Response Training. Topics will vary according to needs and interest of students. Course may be repeated for credit when content varies.

**EMS 297 Paramedic Comp Review/Exams 3 cr**

Culmination of paramedic education. Includes practical skills lab designed to prepare the student for state licensure exams. A final practical and written exam will be administered as a final evaluation of student progress.

**Prerequisite:** (EMS 240 Minimum Grade of B or EMT 375 Minimum Grade of B) and (EMS 242 Minimum Grade of B or EMT 355 Minimum Grade of B) and (EMS 244 Minimum Grade of B or EMT 425 Minimum Grade of B) and (EMS 245 Minimum Grade of S or EMT 455 Minimum Grade of S) and (EMS 247 Minimum Grade of S or EMT 466 Minimum Grade of S) and (EMS 295 (may be taken concurrently) Minimum Grade of S or EMT 475 (may be taken concurrently) Minimum Grade of S)

**EMS 298 Directed Studies in EMS 1-3 cr**

Selected topics in Emergency Medical Services and Emergency Response Training. Topics will vary according to needs and interest of students. Course may be repeated for credit when content varies.

**EMS 300 Human Systems/Pathophysiology 3 cr**

An overview of the human body systems and disease processes. Emphasis is placed on the functions of human systems and subsystems relative to pathophysiology. Includes concepts of pathophysiology included in the National Standard Curriculum for the Paramedic and the requirements set forth by the Alabama Department of Public Health.

**EMS 310 Intro to EMS Systems 3 cr**

This course provides students with an introduction to Emergency Medical Services (EMS) Systems. Theoretical concepts and issues will be discussed and examined in order to provide students with a conceptual basis for understanding and analyzing EMS systems and organizations. Particular emphasis will be placed on system components, system integration and the roles and responsibilities of management and leadership in EMS organizations.

**EMS 315 EMS Administration 3 cr**

This course provides a general overview of management and administration functions required of EMS managers today including planning, directing, budgeting, staffing and evaluation. Particular emphasis will be placed on issues relating to human resources, EMS operations, and organizational planning.

**EMS 320 EMS Law and Legal Issues-W 3 cr**

This course will provide a general overview of the origins of law in the United States with particular emphasis on health laws and regulations affecting pre-hospital providers. Topics include issues relating to malpractice, litigation, consent and refusal of medical treatment, advanced directives, patient confidentiality, and expert witness preparation, among others.

**EMS 325 Instructional Methods in EMS 3 cr**

This course presents theoretical and practical foundations necessary for entry level EMS instructors and coordinators. Topics include instructor roles and responsibilities, learning theory, lesson plan development, test writing and validation, and program evaluation. Additional emphasis will be placed on instructional techniques for the adult learner.

**EMS 340 Disaster Mgt & Event Planning 3 cr**

Considerations of the theoretical and practical foundations necessary to manage incidents involving multiple casualties and multiple agencies as well as the planning and management of other large scale events. Topics include disaster planning, incident command, WMD, response issues, and scene control, among others.

**EMS 350 Critical Care Paramedic 3 cr**

This course provides paramedics with advanced skills and knowledge in critical care medicine. Students successfully completing this course and its subsequent internship (EMS 375) will be eligible to sit for national certification as a Critical Care Paramedic.

**EMS 375 Crit Care Paramedic Internship 3 cr**

An advanced clinical internship course for licensed paramedics who have successfully completed EMS 350. Internship is conducted in an approved critical care setting or facility. Successful completion of this course allows the student to sit for national certification examination as a Critical Care Paramedic.

**EMS 401 Seminar in HP 3 cr**

This course is designed to provide students with an overview of different health professions and their scope of practice and also to provide information about health administration.

**EMS 410 Concepts of Prof Paramedic 6 cr**

This bridge course is designed for licensed (or nationally certified) paramedics who are admitted to the Department's Paramedic to BS in EMS Track. This course provides critical updates and information related to paramedic practice and enhances the student's overall patient assessment and critical thinking skills. Focus of the course is on selected theories and concepts integrated throughout the curriculum. Additional emphasis will be on the professional roles of paramedics. Prerequisite: Paramedic to BSEMS Track.

**EMS 440 Health Insurance/Managed Care 3 cr**

This course provides an overview of the basic concepts and principles in the health insurance and managed care environments. Particular emphasis will be placed on issues relating to the costs, quality and access to emergency medical services. Topics include Medicare and Medicaid reimbursement, Managed Care contracting and EMS Quality Management, among others.

**EMS 445 EMS Research - W 3 cr**

An introduction to basic research methods and basic statistical procedures used in Emergency Medical Services research. Students will use this information in order to assist them with reading, interpreting and evaluating articles in the pre-hospital healthcare literature.

**EMS 460 Issues and Trends in EMS 3 cr**

Explores issues and trends at the federal, state and local levels facing EMS leaders and EMS organizations. Particular emphasis is on new and proposed programs, policies and practices which affect pre-hospital healthcare providers.

**EMS 475 EMS Internship 3 cr**

Structured field experience providing the student to work in an EMS administration, management or educational environment; observation of leadership processes within an EMS organization; application of EMS leadership theory and techniques.

**EMS 494 Directed Studies 1-3 cr**

Student completes an individual project in a specific EMS area under the guidance and supervision of an EMS faculty member.

**EMS 495 EMS Comp/Review Exam 1 cr**

The comprehensive examination is the capstone of the Emergency Medical Services degree program. A written examination based on the program objectives of the EMS degree program will be administered as a final evaluation of the student's progress.

## Emergency Medicine - MD (EMM)

### EMM 099 Emergency Medicine 3 cr

The students will assist the attending physician and/or PGY 2-3 resident in evaluating and treating acute emergency patients presenting to USAMC Emergency Department.

### EMM 311 Emergency Medicine 4 cr

#### EMM 400 Emergency Med Externship 4 cr

To be determined.

### EMM 411 Emergency Medicine Response 4 cr

A minimum of 10 ride along shifts (12 hr shifts) divided between MFRD and MCEMSS 8 hours at 911 center divided between the 911 dispatch call takers and the individual agency dispatch stations. Preparation and presentation of one lecture to a basic EMT class.

### EMM 420 Ultrasound in Emer. Medicine 4 cr

EMM 420 Ultrasound in Emergency Medicine elective will provide instruction in focused bedside ultrasound (US) in the evaluation and diagnosis of various conditions encountered in the Emergency Department (ED), building upon students' previous instruction on US and anatomy.

### EMM 444 Spec Elec-Emergency Medicine 4 cr

To be prepared by the student in conjunction with the Course Director and approved by the Vice Dean before course can be added to schedule. This course is designed to offer students and faculty/clinical faculty an opportunity to develop electives which are not offered in the Elective Manual. Such an elective may be made permanent and printed in the next edition of the Elective Manual at the request of the Course Director and with the approval of the Curriculum Committee. At the discretion of the Vice Dean, this elective may count as the required "in-house" elective.

### EMM 450 Acting Intern - Emergency Medi 4 cr

This elective is designed to provide an opportunity for increased responsibility and experience in the evaluation, diagnosis and treatment of a wide range of patients with acute and chronic medical and surgical conditions presenting to the Emergency Department and Level 1 Trauma Center.

### EMM 453 Emergency Medicine-Pediatrics 4 cr

The acting intern will be responsible for performing and appropriately documenting the history, physical examination and diagnosis as well as all procedures in the medical record. The acting intern will also be responsible for carrying out the management plan after discussion with the attending physician/senior pediatric resident and will provide for appropriate transfer of care upon completion of their assigned shift or admission of their patient to the inpatient service. The acting intern will have duties and responsibilities of first year pediatric housestaff assigned to the Evaluation Center.

### EMM 460 Emergency Medicine Elective 4 cr

Students will work side by side with resident and faculty assigned to the Emergency Department. The students will interview and examine patients and recommend appropriate therapy under the supervision of the resident or attending physician. Coverage is provided on a continuing basis by Residents and the Attending faculty of the Department of Emergency Medicine. The supervision of the students will be by the Attending physicians of the Department of Emergency Medicine. In addition, Attending physicians from other services will serve as consultants to the physicians in the Emergency Department. The student will rotate shifts. Seminars will include major aspects of emergency medical care. The course will include clinical case reviews.

### EMM 478 Emergency Medicine 1-4 cr

Students will work side by side with residents and faculty assigned to the Emergency Department. The students will interview and examine patients and recommend appropriate therapy under the supervision of the resident or attending physician. Coverage is provided on a continuing basis by Residents and the Attending faculty of the Department of Internal Medicine and the Department of Emergency Medicine. The supervision of the students will be by the Attending physicians of the Department of Emergency Medicine. In addition, attending physicians from other services serve as consultants to the physicians in the Emergency Department. The student will rotate shifts. Seminars will include major aspects of emergency medical care. The course will include clinical case reviews.

### EMM 480 Wilderness Medicine Elective 4 cr

The course focuses on the basic first aid professionals need in a wilderness or disaster setting. If you want to help, it teaches you what to do when you can't call 911. You will complete an industry approved 16 hour WFA course and have an additional 6 hours of topics pertaining to wilderness medicine in the southern ecosystem. Perhaps more important, it teaches you how to take care of yourself in difficult living conditions. The outdoor training and wilderness expedition will advance your camping and outdoor survival skills.

## Endocrine/Reproductive - MD (ENR)

### ENR 220 Endocrine & Reproductive 8 cr

The Endocrine/Reproductive Module will enable students to acquire and apply knowledge of human development and reproduction and endocrine homeostasis. Lectures, small-group discussions, self-study, laboratory work, clinical experiences and patient simulation exercises will be utilized to advance the students' understanding of the embryological and anatomical development of the reproductive tract as well as its physiological function, as well as the evaluation of the clinical presentation, prevention and treatment of male and female reproductive disorders, sexually transmitted infections, and breast diseases. Students will participate in small group discussions of human sexuality and sexual dysfunction. They will also develop their clinical examination skills working with instructors trained in teaching female pelvic and breast exam and male genital examinations. In the latter portion of the course, students will apply knowledge of endocrinology to discuss the role of hormones in development, growth, and metabolism as well as understand the pathology of endocrine disorders. Students will participate in small group conferences on diabetes, adrenal, thyroid, and calcium disorders as well as participate in clinical skills exercises in which these disorders are recognized.

## Engineering (EG) (EG)

### EG 101 Intro to Engineering & Design 1 cr

Community lecture experience for first-year students majoring in the College of Engineering that assists with maximizing the student's potential to achieve academic success and to adjust responsibly to the individual and interpersonal challenges presented by college life. You will engage with all your engineering freshman peers, various upper-level students, and numerous College of Engineering faculty from each of our engineering disciplines. The lectures and discussions will facilitate establishing your engineering professional identity and successful academic pursuits.

**Prerequisite:** (MA 113 (may be taken concurrently) Minimum Grade of D or MA 172 Minimum Grade of D) or (MA 125 (may be taken concurrently) Minimum Grade of C or MA 132 Minimum Grade of D)

**EG 101L Intro to Engineering & Design 1 cr**

Small size lab experience for first-year students majoring in the College of Engineering that assists with maximizing the student's potential to achieve academic success and to adjust responsibly to the individual and interpersonal challenges presented by college life. You will discover the differences of each engineering discipline and start to establish your engineering professional identity through group and individual activities such as videos, readings, writing, calculations, experiments, and guest speakers.

**Prerequisite:** (MA 113 (may be taken concurrently) Minimum Grade of D or MA 172 Minimum Grade of D) or (MA 125 (may be taken concurrently) Minimum Grade of C or MA 132 Minimum Grade of D)

**EG 201 Intro to Engr & Prob Solving 2 cr**

A course for first-time transfer students that helps maximize the student's potential to achieve academic success and to address the transition from community college to four-year college. Introduction to engineering fundamentals and problem solving techniques through reading, homework assignments, laboratory investigations, guest lecturers and group discussions on the engineering profession.

**Prerequisite:** MA 126 Minimum Grade of C

**EG 220 Electrical Circuits 3 cr**

Ohm's and Kirchhoff's laws. Network theorems-superposition, source transformation, Thevenin's and Norton's Theorems. RLC circuits. Sinusoids and phasors and their applications in RLC circuits. RMS values of voltages and currents. Operational amplifiers. Average power and power factor in AC circuits.

**Prerequisite:** MA 126 Minimum Grade of C and PH 202 Minimum Grade of C

**EG 231 Intro to Ethics and Economics 3 cr**

Introduction to ethics and the use of codes of ethics in developing an ethical profession. Application of engineering economic principles to engineering problems.

**Prerequisite:** MA 126 Minimum Grade of C

**EG 270 Engineering Thermodynamics 3 cr**

First and second law of thermodynamics with applications.

**Prerequisite:** (MA 126 Minimum Grade of C and PH 201 Minimum Grade of C)

**EG 283 Statics 3 cr**

Use of vector algebra to analyze two and three dimensional forces, moments, and couples. Use of free body diagrams to analyze rigid bodies, beams, trusses, and frames in equilibrium. Calculation of the area and mass moments of inertia, and friction forces.

**Prerequisite:** (MA 126 Minimum Grade of C and PH 201 Minimum Grade of C)

**EG 284 Dynamics 3 cr**

Kinematics and kinetics of particles and rigid bodies. Work/energy and momentum methods.

**Prerequisite:** EG 283 Minimum Grade of C and MA 126 Minimum Grade of C

**EG 290 Sp Top - 1-5 cr**

Subjects of special interest in engineering. Requires permission of instructor.

**EG 315 Mechanics of Materials 3 cr**

An introduction to the mechanics of deformable bodies. Analysis of stress and strain. Emphasis on axial, torsional and bending loads. Deflections, deformations, and column stability.

**Prerequisite:** EG 283 Minimum Grade of C and (MA 227 Minimum Grade of C and PH 201 Minimum Grade of C)

**EG 360 Fluid Mechanics 3 cr**

Study of the properties of fluids including fluid statics, kinematics; integral and differential equations of mass, momentum and energy conservation principles; dimensional analysis; flow in ducts; boundary layer flows; and compressible flow.

**Prerequisite:** MA 238 Minimum Grade of D and EG 284 Minimum Grade of C

**EG 390 Special Topics- 1-3 cr**

This course covers topics of current interest in Engineering.

**EG 450 Intro to Systems Engineering 3 cr**

This course will explore the history of systems engineering, the problems that contributed to the need for systems thinking, and the systems engineering lifecycle as defined by ISO/IEC/IEEE 15288 Systems and Software Engineering – System Life Cycle Processes. This course will include a significant reading list and a systems engineering exercise that will run for the duration of the course.

**EG 490 Special Topics 1-3 cr**

This course covers topics of current interest in Engineering. This course requires permission of the department chair.

**EG 494 DIS In Engineering 1-3 cr**

Directed study, under the guidance of a faculty advisor of a topic from the field of Engineering not offered in a regularly scheduled course.

**EG 590 Sp Top - 1-3 cr**

Subjects of special interest in engineering for engineering graduate students. Requires permission of instructor.

**EG 620 Biomedical Engineering I 4 cr**

Fundamental concepts of medical instrumentation, biomedical imaging and biological systems modeling as used in biomedical engineering. Course is cross-listed with IDL 620.

**Cross-Listed:** IDL 620

**EG 621 Biomedical Engineering II 4 cr**

Fundamental concepts of transport phenomena, cellular and tissue mechanics, and materials as used in biomedical engineering. Course is cross-listed with IDL 621.

**Cross-Listed:** IDL 621

## English (EH) (EH)

**EH 101 English Composition I 3 cr**

Prepares students for diverse types of college writing. Covers the writing process, general criteria used to evaluate writing, collaborative writing, and rhetoric, especially audience analysis. Some sections require an ACT Reading score of 19 or higher or an SAT Critical Reading score of 26 or higher. Grading is "A", "B", "C", and "U". Core Course.

**Prerequisite:** A01 19 or S13 26 or S01 450 or (ESL 015 Minimum Grade of C or T03R 5.5 or T04R 20) and (T04W 20 or T03W 5.5 or ESL 016 Minimum Grade of C)

**EH 102 English Composition II 3 cr**

EH 102 prepares students for college writing by focusing on argumentation, research, and the critical thinking required to argue effectively. Students must earn a C or higher in EH 102 to fulfill the University writing requirement for composition. Core course.

**Prerequisite:** A01 27 or S01 610 or S13 33 or EH 101 Minimum Grade of C or EH 010 Minimum Grade of S or USEH P

**Cross-Listed:** EH 105

**EH 105 Honors Composition - H 3 cr**

This course emphasizes the types of writing that students will do in college and reflects goals of the Honors Program with advanced work in critical thinking and research. Prerequisite: students must have been accepted in the Honors Program.

**Prerequisite:** A01 27 or S01 610 or S13 33 or EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or EH 010 Minimum Grade of S or USEH P

**Cross-Listed:** EH 102

**EH 200 Intro to Creative Writing 3 cr**

This course will introduce students to writing creatively in four major genres: poetry, fiction, nonfiction, and drama. Fundamentals of craft to be studied will include plot and character in fiction; sound and image in poetry; dialogue in drama; and form and research in creative nonfiction. Analysis of literary models, critiques of students' work, and craft discussions will aid students in creating a final portfolio.

**Prerequisite:** EH 102 (may be taken concurrently) Minimum Grade of C or EH 101 (may be taken concurrently) Minimum Grade of C or EH 105 (may be taken concurrently) Minimum Grade of C

**EH 203 Literary Genres - 3 cr**

Variable-content course featuring literary forms. May be repeated once for a total of 6 credits. Prerequisites: EH 101 and EH 102.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 204 Literary Themes - 3 cr**

Variable-content course treating particular concepts that recur in literature. May be repeated once for a total of 6 credits when topics vary. Prerequisites: EH 101 and EH 102.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 207 Literature and Gender 3 cr**

A variable-topics course to study gender issues in literary texts. Can only be taken for a maximum of 3 credits.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 215 Brit Lit before 1785 3 cr**

This course introduces students to the cultural heritage of the British Isles by studying representative literary works from the Middle Ages through the 18th Century.

**Prerequisite:** (EH 102 (may be taken concurrently) Minimum Grade of C or EH 105 (may be taken concurrently) Minimum Grade of C)

**EH 216 Brit Lit after 1785 3 cr**

This course introduces the student to the cultural heritage of the British Isles by studying representative literary works from the 19th Century to the present.

**Prerequisite:** (EH 102 (may be taken concurrently) Minimum Grade of C or EH 105 (may be taken concurrently) Minimum Grade of C)

**EH 225 Am Lit before 1865 3 cr**

This course traces the development of American literature from its beginning through 1865 by studying the works of representative writers. Core course.

**Prerequisite:** (EH 102 (may be taken concurrently) Minimum Grade of C or EH 105 (may be taken concurrently) Minimum Grade of C)

**EH 226 Am Lit after 1865 3 cr**

This course traces the development of American literature from 1865 to the present by studying the works of representative writers. Core Course.

**Prerequisite:** (EH 102 (may be taken concurrently) Minimum Grade of C or EH 105 (may be taken concurrently) Minimum Grade of C)

**EH 235 World Lit before 1650 3 cr**

A survey of literature from the Ancient World, the Middle Ages, and the Renaissance, featuring selections in translation. Core Course.

**Prerequisite:** (EH 102 (may be taken concurrently) Minimum Grade of C or EH 105 (may be taken concurrently) Minimum Grade of C)

**EH 236 World Lit after 1650 3 cr**

A survey of literature from Neoclassicism, Romanticism, Nineteenth-century Realism and Naturalism, and the Modern World, featuring selections in translation. Core course.

**Prerequisite:** (EH 102 (may be taken concurrently) Minimum Grade of C or EH 105 (may be taken concurrently) Minimum Grade of C)

**EH 242 Black Writers in America 3 cr**

A survey of literature by major African-American authors from the days of slavery to the present. Readings will include fiction, poetry, drama, autobiography, and polemical prose.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** EH 357

**EH 288 Academic Writing - W 3 cr**

Practice in the writing necessary in various academic disciplines.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 290 Sp Top 3 cr**

A variable-content course treating selected topics in literature and language. May be repeated once for a total of 6 credits when topic varies.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 300 Intro to Literary Study 3 cr**

This course offers an introduction to the study of literature with special emphasis on critical writing. Required for 400-level literature classes.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 301 Poetry Crit Reading-Analysis 3 cr**

Introduction to close reading and interpretation of poetry, including written explications and analysis.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 302 Drama Crit Reading-Analysis 3 cr**

Introduction to close reading and interpretation of drama, including written analysis. Prerequisites: EH 101 and EH 102.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 303 Fiction Critical Rdnng Analysis 3 cr**

Introduction to close reading and interpretation of fiction, including written analysis.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 310 Classical Mythology 3 cr**

Through the disciplines of English and Philosophy, this course will provide an introduction to myths and to the literature that recounts the myths, legends, and folktales of ancient Greece and Rome. Not only will this course offer a survey of Greek and Roman myth, but it will also look at how different writers treat the material and why their treatments vary. Cross-listed with PHL 310 and REL 310. Credit cannot be received for both EH 310 and either PHL 310 or REL 310.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** CLA 310, PHL 310, REL 310

**EH 314 Medieval Literature 3 cr**

This course will introduce students to major texts of medieval literature, including narrative poetry, drama, prose, and lyric poetry.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 315 Chaucer 3 cr**

This course will introduce students to Chaucer's major works in the original language; no prior knowledge of Middle English is required.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 320 Shakespeare's Plays 3 cr**

Study of Shakespeare's plays from across all the kinds he wrote: tragedies, histories, comedies, and romances.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 321 Renaissance Literature 3 cr**

Non-dramatic literature of the English Renaissance through 1600.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 324 17th Century Literature 3 cr**

Non-dramatic literature 1600-1660.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 331 American Novel to 1900 3 cr**

American novel from its beginning to 1900.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 332 American Nonfiction Prose 3 cr**

Major American nonfiction prose.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 334 American Poetry to 1900 3 cr**

American poetry from its beginning to 1900.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 335 Native American Literature 3 cr**

Survey of Native American Literature from the 18th century to the present.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 340 Restoration Early 18th Lit 3 cr**

Literature of the period, including such authors as Behn, Dryden, Finch, Defoe, Pope, Montagu, Swift, and Fielding.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 342 Later 18th Century Lit - W 3 cr**

Literature of the period, including such authors as Gray, Boswell, Johnson, Sheridan, Radcliffe, Wollstonecraft, Blake, and Austen.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 343 18th Century British Novel 3 cr**

Eighteenth-Century British novel.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 351 British Romanticism 3 cr**

The poetry and prose of Romantic-era writers, including Wordsworth, Coleridge, Byron, Keats and Shelley.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 352 Victorian Poetry 3 cr**

A study of poetry of the Victorian period.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 353 Victorian Prose 3 cr**

A study of prose, emphasizing nonfiction, of the Victorian period.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 354 19th Century British Novel 3 cr**

Novels of the Romantic and Victorian periods.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 357 Black Writers in America 3 cr**

A survey of literature by African-American authors from the early colonial period to the present. Readings will include fiction, poetry, drama, autobiography, and polemical prose.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 360 Anglo-Am Poetry since 1900 3 cr**

A study of Anglo-American poets such as D.H. Lawrence, T.S. Eliot, Ezra Pound, Robert Graves, W.H. Auden, Dylan Thomas, Derek Walcott, Paul Muldoon, Eavan Boland, Seamus Heaney, Galway Kinnel, Adrienne Rich, Robert Penn Warren, John Crowe Ransom, Margaret Walker, Elizabeth Bishop, Gwendolyn Brooks, Gary Snyder, Charles Olson, Allen Ginsberg, Anne Sexton, and Sylvia Plath.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 361 American Novel since 1900 3 cr**

Twentieth-century American novel. Prerequisites: EH 101 and EH 102.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 362 Am. Novel from 1900 to 1945 3 cr**

A study of the American novel from 1900 to 1945.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 363 American Novel since 1945 3 cr**

A study of the American novel since 1945.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 364 Brit. Novel from 1900 to 1945 3 cr**

A study of the British novel from 1900 to 1945.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 365 British Novel since 1945 3 cr**

A study of the British novel since 1945.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 366 Contemporary Fiction 3 cr**

An introduction to literary fiction of the contemporary era.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 367 British Novel since 1900 3 cr**

Twentieth-century British novel. Prerequisite: EH 101 and EH 102.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 369 Modern Short Story 3 cr**

Representative modern short story writers.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 370 History of English Language 3 cr**

A study of the development from Old English through Middle English to Modern English.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 371 Approaches to Eng Grammar - W 3 cr**

A course designed primarily to help education majors translate between the languages of conventional grammar and the syntactical grammar relevant to the teaching of English at pre-college levels. Consideration will also be given to the rationales basic to the formation of different grammars and to methods of presenting grammatical material in a classroom situation. Non-education majors interested in a sophisticated approach to the study of grammar might also benefit from this course.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** ARG 371

**EH 372 Technical Writing - W 3 cr**

The purpose of this course is to train students in the kinds of written reports required of practicing professionals, aiming to improve mastery of the whole process of report writing from conceptual stage through editing stage.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 373 Writing in Professions - W 3 cr**

Practice in the kinds of writing done in such professions as speech pathology and audiology, nursing, teaching, criminal justice, and business. Assignments, which emphasize persuasive writing, may include position papers, correspondence, and reports.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 379 Horror 3 cr**

A study of the history and themes of horror from the early 19th century to the present, including representative texts, films, and scholarship.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 380 Science Fiction 3 cr**

Study of the history and themes of science fiction literature and film from the end of the nineteenth century to the present.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 390 Sp Top - 3 cr**

A variable-content course addressing selected topics in literature and writing. May be repeated for a total of 6 credits when course content varies.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 391 Fiction Writing 3 cr**

Intensive practice in the short story with contemporary readings.

Constructive, critical discussions are conducted on each composition. Emphasis is on the creation of compelling short fiction.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and EH 200 Minimum Grade of C

**EH 393 Creative Nonfiction Writing 3 cr**

Intensive study of and practice in writing creative nonfiction - nonfiction that stresses personal voice and the use of literary elements. Concentrates on genres of creative nonfiction (personal or narrative essay, travel and nature writing, cultural criticism, memoir) with an emphasis on producing high-quality writing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and EH 200 Minimum Grade of C

**EH 395 Poetry Writing 3 cr**

Intensive study in different modes and forms in contemporary poetry such as fixed, open, and spoken word. Readings in contemporary poetry will serve as models for students' creation of new poems. Workshops a primary component of the class.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and EH 200 Minimum Grade of C

**EH 401 Teaching Composition-W 3 cr**

Study of theories of composition and their applications for teaching writing at the secondary school level.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 402 Rhetoric-Ancient and Modern-W 3 cr**

Readings in rhetorical theory, ancient and modern, are applied in specific writing assignments which encourage students to adopt a point of view and address a specific audience.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** ARG 402, CLA 402

**EH 404 Grant Proposal Writing 3 cr**

Extensive preparation in the discourse and generic conventions of grant proposals written by practicing professionals, aiming to promote mastery of the whole process of grant writing from conceptual stage through editing stage.

**Prerequisite:** (EH 101 Minimum Grade of C and EH 102 Minimum Grade of C) or EH 105 Minimum Grade of C

**EH 405 Editing and Document Design 3 cr**

Covers general editing principles, levels and types of editing, and technical editing terms, along with theories and aesthetic principles of document design and production. The course offers extensive, hand-on experience in both areas.

**Prerequisite:** (EH 101 Minimum Grade of C and EH 102 Minimum Grade of C) or EH 105 Minimum Grade of C

**EH 421 Literary Criticism to 1900-W 3 cr**

Classical, Neo-Classical, Romantic, and Victorian literary theory. Identical to PHL 421. Credit cannot be received for both PHL 421 and EH 421.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** PHL 421

**EH 422 Lit Criticism Since 1900-W 3 cr**

Modern and contemporary literary theory. Identical to PHL 422. Credit cannot be received for both EH 422 and PHL 422.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** PHL 422

**EH 461 Tudor and Stuart Drama 3 cr**

A historical and generic study of plays by authors including Kyd, Marlowe, Dekker, Jonson, Middleton, Beaumont, Fletcher, and Webster.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 462 Restor-18th Century Drama - W 3 cr**

A historical and generic study of plays by authors such as Wycherley, Etheridge, Behn, Dryden, Otway, Congreve, Steele, Goldsmith, and Sheridan.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 463 Drama 1890 to Present 3 cr**

Twentieth-century British, American, and Continental drama, with major emphasis on the plays of Ibsen, Chekhov, Shaw, Pirandello, O'Neill, and Beckett.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 465 Middle English Literature 3 cr**

Major romances and dream-visions of the late Middle Ages such as Sir Gawain and the Green Knight, Troilus and Criseyde, Sire Orfeo, Pearl, and Parliament of Birds.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 467 Milton 3 cr**

Milton's major poems, with emphasis on Paradise Lost.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 468 Contemporary Black Fiction 3 cr**

A close reading of selected fiction published since World War II by such authors as James Baldwin, Ralph Ellison, Alice Walker, Toni Morrison, Ernest J. Gaines, Gloria Naylor, and Julius Lester.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 470 Medieval Lit 3 cr**

A variable content course in specific topics from medieval literature. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 471 Renaissance Lit 3 cr**

A variable content course in specific topics from Renaissance literature. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 472 Shakespeare 3 cr**

A variable content course in specific topics on Shakespeare. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 474 Restoration Lit 3 cr**

A variable content course in specific topics in Restoration and 18th Century literature. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 475 19th Century Lit 3 cr**

A variable content course in specific topics from 19th Century literature. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 476 Studies in 20th Century Lit 3 cr**

A variable content course in specific topics from 20th-Century literature. May be repeated once for credit when course content varies for up to six credit hours.

**Prerequisite:** (EH 102 Minimum Grade of C) or EH 105 Minimum Grade of C

**EH 477 Genre 3 cr**

A variable content course in specific topics from various genres. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 478 Film 3 cr**

A variable content course in specific topics from film studies. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 479 Mod/Postmodern Poetry 3 cr**

A variable content course in specific topics from modern/postmodern poetry. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 480 Gender and Lit 3 cr**

A variable content course in specific topics dealing with gender and literature. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 481 Comp and Rhetoric - W 3 cr**

A variable content course in specific topics concerned with writing, rhetoric, or language studies. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** ARG 481

**EH 482 Am Literature 3 cr**

A variable content course in specific topics from American literature. May be repeated once for credit when course content varies for up to six credit hours. Junior standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 483 Advanced Fiction Writing 3 cr**

Innovative study in various forms of fiction for students with experience in the techniques of fiction writing. Discussion include cultural and critical context as well as foundational models.

**Prerequisite:** EH 102 Minimum Grade of C or EH 105 Minimum Grade of C and EH 200 Minimum Grade of C and EH 391 Minimum Grade of C

**EH 485 Advanced Poetry Writing 3 cr**

Advanced poetry writing course that explores different styles of contemporary American poetry such as political poetry, eco-poetry, ekphrastic poetry and more. Students will create at least ten new poems and submit them for workshop.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (EH 200 Minimum Grade of C and EH 395 Minimum Grade of C)

**EH 487 Screenwriting for Film 3 cr**

Craft talks and guided workshops on how to create a feature-length screenplay.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and EH 200 Minimum Grade of C

**EH 488 Screenwriting for Television-W 3 cr**

Craft talks and guided workshops on how to create a television series and write the pilot episode.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** CA 488

**EH 489 Folklore and Ways of Listening 3 cr**

This course focuses on the collection of folklore and expressive culture, providing a contemporary glimpse at collective memory. Students learn ethnographic fieldwork methods, oral history interviewing techniques, transcription, and the evaluation of oral evidence.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C and EH 300 (may be taken concurrently) Minimum Grade of C)

**EH 490 Special Topics 1-3 cr**

Selected topics in writing in literary studies. May be repeated for a total of 9 credits when course content varies.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 491 Special Topics in Creative Writing 3 cr**

Selected topics in creative writing. May be repeated for a total of 9 credits when course content varies.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (EH 200 Minimum Grade of C)

**Corequisite:** EH 300

**EH 492 Seminar - 3 cr**

Specific topics in literature. Can be taken twice for a total of 6 credits when topics vary.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 494 Directed Studies 1-3 cr**

Directed individual study. Requires permission of the directing professor and department chair. Course can be repeated for a total of 8 credits.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 496 Professional Studies - Intern 1-2 cr**

On-the-job experience related to the student's classroom work in the field of English. A maximum of two hours of credit may be earned in internships. Students consult with the English department chair regarding internship opportunities and eligibility. English majors and minors who are juniors or seniors may enroll. Pre-requisites: Permission of English department chair and the supervising professor, completion of EH 101 and EH 102 (or EH 105), 3.0 GPA, and junior or senior standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 497 Adv Creative Nonfiction Writ. 3 cr**

Advanced study and practice of writing creative nonfiction.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 499 Senior Honors Project-H 3-6 cr**

With the guidance of a faculty mentor, Honors Students will identify and carry out an independent scholarly project in English. The outcome of the project will include a formal presentation and defense before the faculty and a written senior thesis. The Honors Senior Project will be evaluated and graded by three members of the faculty and chaired by the project faculty mentor. The student must complete a total of six hours of Honors Senior work, be accepted to the University Honors Program or the Department Honors Program, and have an approved project prospectus. University Honors Program participants must have completed HON 301.

**Prerequisite:** HON 301 Minimum Grade of D and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**EH 501 Introduction to Crit Theory 3 cr**

Required of all M.A. students in the Literature Concentration in their first year of work. Surveys current literary theory from structuralism to the present. The purpose is to introduce the conceptual lexicons and reading strategies of advanced literary analysis. Topics treated include structuralism, deconstruction, psychoanalysis, hermeneutics, Marxism, feminism, and reception theory.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 502 Graduate Writing for English 3 cr**

A course preparing students for research and academic writing at the graduate level in English studies. Required of all MA students in their first year of work. Prerequisite: Admitted to Graduate Program

**EH 505 Teaching College Writing 3 cr**

A study of contemporary theories in writing and rhetoric, with an emphasis on their application in a college level curriculum.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 506 Composition Theory & Research 3 cr**

Traces development of theoretical movements in composition, addressing research methodologies as well. Covers pedagogy but also theoretical and empirical issues such as relationship of composition to cultural criticism, ways of knowing and assessment.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 507 Topics in Rhetoric/Composition 3 cr**

A variable-content course treating selected topics in Rhetoric/Composition Studies. Possible topics include histories of rhetoric, digital literacy in composition and rhetorical analyses of texts.

**Prerequisite:** EH 502 Minimum Grade of C

**EH 508 Workplace Writing Contexts 3 cr**

Study of theories, practices, and histories of professional writing.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 510 Introduction to Old English 3 cr**

Old English poetry and prose studied in its original linguistic form.

**EH 511 Beowulf 3 cr**

A study of the Old English poem Beowulf in its original linguistic form.

**Prerequisite:** EH 510

**EH 513 Studies in Chaucer 3 cr**

A study of selections of Chaucer's Canterbury Tales and dream visions.

**Prerequisite:** EH 502 Minimum Grade of C

**EH 514 Renaissance Poetry 3 cr**

Examination of non-dramatic Renaissance poetic development, including the sonnet.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 520 Studies in Shakespeare 3 cr**

Study of Shakespeare's plays from across all the kinds that he wrote: tragedies, histories, comedies, and romances.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 521 17th Century Poetry 3 cr**

A historical and formal study of the poetry of the early seventeenth century, including the works of Donne, Jonson, Herbert, Vaughn, Herrick, Marvell, Wroth, Lanyer, and Philips. The course will emphasize the close reading of poems.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 525 Restor-Early 18th Century Lit 3 cr**

A study of literature in the period, including such authors as Dryden, Rochester, Behn, Congreve, Defoe, Pope, Swift, and Gay.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 532 Early Romantics 3 cr**

A study of early Romantic poetry and prose, with emphasis on the poetry of William Wordsworth and S.T. Coleridge.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 534 Late Romantics 3 cr**

A study of late romantic poetry and prose, with emphasis on the poetry of Lord Byron, Percy Shelley, and John Keats.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 536 Victorian and Edwardian Poetry 3 cr**

A study of poetry of the Victorian and Edwardian periods.

**EH 538 Victorian and Edwardian Prose 3 cr**

A study of novels and short fiction of the Victorian and Edwardian periods.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 543 American Romanticism 3 cr**

A study of writers of the American Romantic Movement, such as Irving, Emerson, Thoreau, Douglass, Whitman, and Dickinson, focusing primarily on nonfiction prose and poetry.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 544 Antebellum American Fiction 3 cr**

Examines the emergence and development of American fiction before the Civil War, focusing on the tale and the novel, and including such figures as Cooper, Hawthorne, Poe, Melville, and Stowe.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 545 American Realism 3 cr**

A study of writers of the American Realist Movement, such as Twain, James, Crane, Dreiser, Chopin, Cheitnutt, and Jewett.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 548 Native American Fiction 3 cr**

Study of fiction written by Native Americans since 1900.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 551 African Am. Lit. to 1900 3 cr**

Study of literature written by African Americans to 1900.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 552 African Am. Lit. since 1900 3 cr**

Study of literature written by African Americans since 1900.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 562 20th Century Poetic Revolution 3 cr**

A study of the key figures in the shaping of modern poetry - Yeats, Eliot, Pound, Stevens, and Frost.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 570 Studies in Medieval Literature 3 cr**

Theme-based study of Medieval texts; possible topics include late medieval chivalry, medieval sexualities, Arthurian tradition.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 571 Modern British Fiction 3 cr**

Examination of selected works of such authors as Conrad, D.H. Lawrence, Woolf, Forster, Joyce, Greene, and Lessing.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 572 Modern American Fiction 3 cr**

Examination of selected works of such authors as Anderson, Dickey, Faulkner, Fitzgerald, and Hemingway.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 573 Contemporary Fiction 3 cr**

Examines significant trends in contemporary literary fiction.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 574 Folklore and Ways of Listening 3 cr**

This course focuses on the collection of folklore and expressive culture, providing a contemporary glimpse at collective memory. Students learn ethnographic fieldwork methods, oral history interviewing techniques, transcription, and the evaluation of oral evidence.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 577 Studies in Genre - 3 cr**

Seminar in specific topics from various genres. May be repeated once for credit when content varies.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 581 Screenwriting Workshop 3 cr**

Screenwriting Workshop. May be repeated for a total of 6 credits when course content varies.

**EH 583 Grad Fiction Writing Wksp I 3 cr**

Special individual instruction in fiction writing. This course requires special permission.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 584 Grad Fiction Writing Wksp II 3 cr**

Special individual instruction in fiction writing. This course requires special permission.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 585 Grad Poetry Writing Wksp I 3 cr**

Special individual instruction in poetry writing. This course requires special permission.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 586 Grad Poetry Writing Wksp II 3 cr**

Special individual instruction in poetry writing. This course requires special permission.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 588 Writing and Diversity 3 cr**

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 589 Creative Nonfiction Writing 3 cr**

Intensive study of and practice in writing creative nonfiction that stresses personal voice and the use of literary elements. Focus on the personal or narrative essay, travel and nature writing, and cultural criticism.

**EH 590 Special Topics - 3 cr**

A graduate seminar designed to allow close study of selected literary topics or figures. May be repeated twice for credit when the subject offerings are from different literary areas.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 591 Topics in Creative Writing 3 cr**

Selected topics in creative writing. May be repeated for a total of 6 credits when the course content varies.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 592 Seminar - 3 cr**

A specific subject in American or British literature to be assigned prior to each semester. May be taken once for credit when the subject offerings are from different literary areas.

**Prerequisite:** EH 502 Minimum Grade of C

**EH 594 Dir St - 1-8 cr**

Directed individual study on a topic not covered by an existing course.

**Prerequisite:** Prior permission of the directing professor and the department chair. May be taken for a total of 8 credits.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 596 Professional Studies--Intern 1,2 cr**

On-the-job experience related to the student's classroom work in the field of English. A maximum of two hours of credit may be earned in internships. Students consult with the English Department Graduate Coordinator regarding internship opportunities and eligibility. **Prerequisites:** Permission from the Graduate Coordinator and the English Department Chair.

**EH 598 Literature Capstone 3 cr**

The literature Capstone is a directed study class required for students completing the Literature Concentration in their last semester of coursework. Working with a mentor, students create a research portfolio and give a departmental presentation.

**Prerequisite:** EH 502 (may be taken concurrently) Minimum Grade of B

**EH 599 Thesis - 6 cr**

One to six credits per semester with a maximum of six hours of credit.

**Pre-requisite:** Admitted to the Graduate Program.

## English Lang Teaching (ELT) (ELT)

**ELT 325 Survey of ESL 3 cr**

A comprehensive survey of current research, methodology and materials in the field of English as a Second Language and historical, philosophical, political, legal, social and educational issues that have contributed to policy regarding public school services for language minority students.

**ELT 330 Methods and Materials for ESL 3 cr**

Techniques of teaching English as a second language will be introduced and applications explored. Acquaints students with methodology and materials, with instruction on the preparation of audio and visual teaching aids, lesson plans and the use of educational technology, behavioral objectives, state ESOL objectives and teaching strategies for English learners in the ESL or mainstream classroom. ELT 525 is a recommended pre-requisite or co-requisite course, but is not a requirement.

**ELT 345 Cross-Cultural Understanding 3 cr**

Investigates the roles of language and culture in education. Addresses the social processes involved in second language acquisition, including developmental influences, influences of home language and culture, culture variation, home vs. school cultural differences and working parents/family of ELL students.

**ELT 358 Cross-Cultural Understanding 3 cr**

This course provides knowledge of linguistics including English syntax, semantics, pragmatics, morphology, phonemics and phonology as applied to teaching English Language Learners. Students will review theories in first and second language acquisition. Students will apply linguistic theory, issues in sociolinguistics, psycholinguistics and neurolinguistics to teach English to ELLs, with emphasis on pronunciation, intonation and structural analysis of English and contrastive analysis of English and non-English linguistic systems.

**ELT 525 Found Tchng Eng as Sec Lang 3 cr**

A comprehensive survey of current research, methodology and materials in the field of English as a Second Language and historical, philosophical, legal, social, and educational issues that have contributed to policy regarding public school services for language minority populations.

**ELT 530 Methods and Materials Tch ESL 3 cr**

Techniques of teaching English as a second language will be introduced and applications explored. Acquaints students with methodology and materials, with instruction on the preparation of audio and visual teaching aids, lesson plans, and the use of educational technology, behavioral objectives, state ESOL objectives, and teaching strategies for the ELL student in the ESL or mainstream classroom. Course restricted to majors in ESOL education.

**ELT 545 Cross-Cultural Understand Tch 3 cr**

Investigates the roles of language and culture in education. Addresses the social processes involved in the second language acquisition, including developmental influences, influences of home language and culture, cultural variation, home vs. school cultural differences, and working with parents/family of ELL students.

**ELT 553 LA Assess Eval of ELL Students 3 cr**

Selection, administration, and interpretation of measurement instruments. Includes entry and placement procedures, language proficiency/achievement testing, linguistic and cultural aspects of intelligence testing, multiple intelligence assessment, ELL student assessment in the mainstream classroom, and application of testing to instruction. Course restricted to majors in ESOL education.

**ELT 558 Applied Ling for Teach of ELL 3 cr**

This course provides knowledge of linguistics including English syntax, semantics, pragmatics, morphology, phonemics, and phonology as applied to teaching English Language Learners. Students will review theories in first and second language acquisition. Students will apply linguistics theory, issues in sociolinguistics, psycholinguistics, and neurolinguistics, to teach English to ELLs with emphasis on pronunciation, intonation, and structural analysis of English and contrastive analysis of English and non-English linguistic systems. Course restricted to majors in ESOL education.

**ELT 590 Spec Top- 1-3 cr**

Current topics of special concern to ESOL Educators. A different topic will be covered each time the course is offered. Not more than six semester hours may be applied toward a degree program.

**ELT 594 Directed Study and Research 1-3 cr**

Students explore through directed study problems and issues of special interest or significance in ESOL Education. Not more than three semester hours may be applied toward a degree program.

**ELT 595 ESOL Internship 3,6 cr**

Three hundred hours of supervised on-the-job experience in teaching English to speakers of other languages (ESOL) in P-12 settings. Interns are engaged in the full scope of teaching activities including planning, delivering lessons, evaluating students, and conducting managerial tasks related to teaching English as a Second Language. Teaching experience will be accompanied by scheduled observations and discussions to analyze and evaluate each student's internship experience. Course restricted to majors in ESOL education.

**Prerequisite:** ELT 525 Minimum Grade of C and ELT 530 Minimum Grade of B and ELT 545 Minimum Grade of C and ELT 553 Minimum Grade of C and ELT 558 Minimum Grade of C

## Environmental Toxicology (EXT) (EXT)

**EXT 515 Environmental Toxicology 4 cr**

Introduction to the scientific and technical principles of toxicological processes in the context of the ecosystem. Students will understand both the types of major environmental toxicants and how to properly evaluate their toxicity and factors that influence toxicity. Students will recognize and coherently formulate risk assessment and by using the tools and techniques acquired, develop and communicate proposals for remedy.

**Prerequisite:** (BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C) and (CH 201 Minimum Grade of C and CH 202 Minimum Grade of C) and (CH 540 Minimum Grade of B and CH 541 Minimum Grade of B)

**Cross-Listed:** CH 515, MAS 515

**EXT 594 Directed Studies 1-6 cr**

Students pursue a research project under the direction of a graduate faculty member. The course requires special permission from the program director, to make sure that the study is in line with the curriculum that the student is pursuing.

**EXT 599 Research Thesis 1-8 cr**

Research project directed by a member of the graduate faculty. Prerequisite: Approval of research prospectus by the graduate committee.

## Family Practice - MD (FMP)

**FMP 096 Primary Care Sports Medicine 2 cr**

1. To become familiar with the clinical and radiographic evaluation of sports injuries. 2. Understand the non-surgical management of the more common sports injuries. 3. Familiarization with on-field management of athletic injuries. 4. Understand the special healthcare needs of the athletic population. 5. Understand the duties and responsibilities of a team physician.

**FMP 097 Family Practice Office Exper 3 cr**

The students will assist attending physician and medical house staff in the evaluation and treatment of outpatients presenting to the outpatient facility.

**FMP 098 Family Practice Morning Report 1-3 cr**

The students will attend and participate in Family Practice Morning Report, an interactive didactic conference designed to guide house staff and medical students in developing management, differential diagnosis, and plan of treatment for hospitalized patients.

**FMP 099 Fam Prac-Hospital Teach Rounds 2 cr**

The student will attend and participate in Family Practice hospital teaching rounds at USAMC with a ward team. The student will participate in discussions of pertinent medical literature, patient presentations, and bedside teaching sessions.

**FMP 311 Family Practice 6 cr**

The clerkship in Family Practice is designed as a preceptorship with students assigned to family physician preceptors. The majority of the clerkship is spent with a community family physician in Alabama. In addition to learning Family Practice in a one-on-one setting with the preceptors, specific learning objectives include clinical problem-solving, diagnosis and management of common medical problems, the family, health maintenance and preventive medicine, and the development of life long learning skills.

**FMP 400 Family Practice Externship 4 cr**

To be determined.

**FMP 430 Fam Prac Elec - Population Med 4 cr**

The student will work in the Family Medicine Clinic from 8:30am to 5:00 pm Monday through Friday. The student will attend noon conferences 4 days a week from 12 to 1:30pm. Reading materials will be assigned. Students will also participate in community activities of a Patient Centered Medical Home.

**FMP 444 Sp Elec-Fam Prac and Comm Med 4 cr**

To be prepared by the student in conjunction with the Course Director and approved by the Vice Dean before course can be added to schedule. This course is designed to offer students and faculty/clinical faculty an opportunity to develop electives which are not offered in the Elective Manual. Such an elective may be made permanent and printed in the next edition of the Elective Manual at the request of the Course Director and with the approval of the Curriculum Committee. At the discretion of the Vice Dean, this elective may count as the required "in-house" elective.

**FMP 450 Acting Intern - Family Prac 4 cr**

To provide students the opportunity to gain additional experience in (1) the diagnosis and management of patients encountered in a Family Practice in-patient service, and (2) improve technical and procedural skills involved in the care of such patients.

**FMP 460 Adv Fam Prac Preceptorship 4 cr**

To become familiar with the clinical and radiographic evaluation of sports injuries, understand the non-surgical management of the more common sports injuries, familiarization with on-field management of athletic injuries, understand the special healthcare needs of the athletic population, and understand the duties and responsibilities of a team physician.

**FMP 461 Family Practice Office Elect 4 cr**

The student will work one-on-one with faculty physicians and Family Practice residents in the departmental ambulatory care clinic. This is an outpatient only elective.

**FMP 471 Adv Family Practice Preceptors 1-4 cr**

The student will work under the supervision of a family physician preceptor in the office/community hospital setting. Preceptors are available both in Mobile and in the surrounding area. The student will participate in the care of patients with acute, chronic, or emergency medical problems with an emphasis placed on managing patients within the context of the family and their total environment. Special attention will be given to assist the student in meeting his/her specific learning objectives based on the individual student's own interests, capabilities, or needs.

**FMP 472 Maternal-Child Health 1-4 cr**

The student will participate in obstetrical care provision in the Family Practice site and learn about circumstances relevant to this care. The elective will consist of co-care of a patient and family during pregnancy, delivery, and the post-partum period with a Family Practice faculty member. The elective will also address care of the newborn in the early post-partum period.

**FMP 473 Community Medicine 1-4 cr**

The students would have regular activities in a school-based educational project, our home health care and home visit program, a community-based occupational medicine clinic, a community battered women's shelter, and other such community-based projects. Time would also be devoted to having the students attain a basic familiarity with community agencies that can assist physicians in providing care and services for patients. Remaining time will be spent completing community medicine. Optionally, the students can spend time on a number of other related activities, depending on their interests and needs, including: (1) our sports medicine program, assisting at school sporting events; (2) a medical informatics project; (3) our nursing home practice, or (4) other such projects as determined individually.

**FMP 475 Acting Intern-Family Practice 1-4 cr**

During this rotation the student will serve as an acting intern on the Family Practice in-patient service at the USAMC. The acting intern will function side by side with regularly assigned first-year residents and assume similar responsibilities under the supervision of the ward resident and attending physician. The student (acting intern) will be responsible for the history, physician examination, preparation of a problem list, design of a diagnostic work-up, and implementation of a therapeutic regimen. The student will be expected to consult standard textbooks of medicine and current scientific literature in a manner similar to that expected of the first year residents.

**FMP 476 Family Practice Office Elect 1-4 cr**

The student will work one-to-one with faculty physicians and Family Practice residents in the departmental ambulatory care clinic.

**FMP 480 Primary Care Sports Medicine 4 cr**

To become familiar with the clinical and radiographic evaluation of sports injuries.

## Finance (FIN) (FIN)

**FIN 300 Personal Finance 3 cr**

General principles and techniques of finance as applied to personal business transactions and the management of personal funds. Finance majors may not count this course as a finance elective.

**FIN 305 Introduction to Finance 3 cr**

A survey course covering corporate financial management. Basic concepts such as interest rates, time value of money, cost of capital, and risk are discussed and applied to stock, bond, and long-term investment valuation. Guidelines are developed for corporate financial decision-making in such areas as working capital management and capital structure policy, but with emphasis on short-term financial management and financial planning. The impact of ethical considerations and global financial markets are discussed. This course is for non-business and non-economics majors only.

**Prerequisite:** ACC 212 Minimum Grade of D and (ECO 212 Minimum Grade of D or ECO 215 Minimum Grade of D) and (BUS 245 Minimum Grade of D or ST 175 Minimum Grade of D or ST 210 Minimum Grade of D)

**FIN 315 Business Finance 3 cr**

A survey course covering corporate financial management. Basic concepts such as interest rates, time value of money, cost of capital, and risk are discussed and applied to stock, bond and long-term investment valuation. Guidelines are developed for corporate, financial decision making in the areas of capital structure policy, dividend policy, long-term financing, corporate control, and working capital management. The impact of ethical considerations and global financial markets are discussed.

**Prerequisite:** (ECO 215 Minimum Grade of D and ACC 211 Minimum Grade of D and MA 120 Minimum Grade of D or MA 121 Minimum Grade of D or MA 126 Minimum Grade of D or MA 125 Minimum Grade of D or MA 131 Minimum Grade of D or MA 287 Minimum Grade of D) and (BUS 245 Minimum Grade of D or ST 175 Minimum Grade of D or ST 210 Minimum Grade of D)

**FIN 332 Multinational Finance 3 cr**

Analysis of financial management of multinational firms. Introduces the environment of international capital and foreign exchange markets and examines the effects of international business environment on risk, capital budgeting, working capital management, and capital structure decisions of the firm.

**Prerequisite:** FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D

**FIN 343 Money Mkts and Fin Instit 3 cr**

An examination of the major financial institutions operating in our economy, and the environment in which they operate. In light of the changing environment of the financial institutions area, the changing roles of the various financial markets, major legislation, and the regulatory agencies are also studied in this course. Credit for both FIN 343 and ECO 340 is not allowed.

**Prerequisite:** FIN 315 (may be taken concurrently) Minimum Grade of D or FIN 341 (may be taken concurrently) Minimum Grade of D

**Cross-Listed:** ECO 340

**FIN 344 Real Estate 3 cr**

Introduction to the tools used to make intelligent decisions regarding real estate as a wealth-building asset. Topics include legal rights, valuation, financial analysis, contracts, and brokerage with practical applications. Emphasis is given to local supply and demand conditions and property location and their impact on typical consumer decisions.

**FIN 345 Principles of Insurance 3 cr**

Examines risks facing the individual and business organizations and applications of public and private insurance to reduce or eliminate such risks. This is a survey course involving all classes of insurance.

**FIN 346 Alabama Real Estate Law & Reg 1 cr**

Course required for students planning to take the Alabama Real Estate License Examination. Topics include current Alabama Real Estate License Law, Administrative Rules and regulations, Consumer Guides, State Court Cases and relevant readings in Real Estate Risk Management. Requires Consent of Instructor.

**Prerequisite:** FIN 344 (may be taken concurrently) Minimum Grade of D or MKT 345 Minimum Grade of D

**FIN 350 Fin Stmt Analysis & Corp Strat 3 cr**

In-depth coverage of the principles and practices of effective analysis of the financial statements of firms for the purpose of understanding (1) the economic and financial characteristics and current conditions of the firm, (2) particular strategies the firm may select with which to compete, and (3) the accounting principles and procedures underlying the financial statements. The course integrates concepts from accounting, economics, finance and management. Credit cannot be received for both ACC 350 and FIN 350.

**Prerequisite:** FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D

**Cross-Listed:** ACC 350

**FIN 370 Short-Term Financial Management 3 cr**

In-depth coverage of liquidity, management of working capital, corporate cash management, short term investment, financing and forecasting.

**Prerequisite:** FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D

**FIN 410 Intermediate Bus Finance 3 cr**

In-depth coverage of financial planning and management. including cost of capital, capital budgeting, valuation and other topics.

**Prerequisite:** (FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D) and (BUS 255 Minimum Grade of D or ST 275 Minimum Grade of D)

**FIN 411 Advanced Business Finance - W 3 cr**

Actual and simulated cases in finance from business and industry; includes businesses of all sizes.

**Prerequisite:** FIN 350 Minimum Grade of D and FIN 410 Minimum Grade of D or FIN 441 Minimum Grade of D

**FIN 420 Investments 3 cr**

Survey of the characteristics of investment alternatives and the investment environment, including market operations and regulations, sources and uses of information, and an introduction to capital market theory.

**Prerequisite:** (FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D) and (BUS 245 Minimum Grade of D or ST 175 Minimum Grade of D or ST 210 Minimum Grade of D)

**FIN 421 Sec Analy-Portfolio Mgt 3 cr**

The development of the theory and practice of security analysis and portfolio management. Security analysis involves the fundamental determination of security values through economic, industry, and firm analysis. Portfolio management addresses asset selection and allocation for the construction and maintenance of portfolios that meet specific investment objectives in a risk-return context.

**Prerequisite:** FIN 420 Minimum Grade of D or FIN 441 Minimum Grade of D

**FIN 425 Student Managed Invest Fund I 3 cr**

This is the first in a sequence of two courses whereby students manage a real portfolio of securities. The selected students research the prospective investments, generate reports, and make decisions to buy or sell the securities. Administrative responsibilities are assigned and analyst teams are formed. Students accepted into this course must enroll in FIN 426 (Student Managed Investment Fund II) the following term unless otherwise disqualified. Requires Department Chair permission.

**Prerequisite:** FIN 420 Minimum Grade of B

**FIN 426 Student Managed Invest Fund II 3 cr**

This is the second in a sequence of two courses whereby students manage a real portfolio of securities. The selected students research the prospective investments, generate reports, and make decisions to buy or sell the securities. Administrative responsibilities are assigned and analyst teams are formed. Students build on and add depth to skills and knowledge acquired in FIN 425. Requires Department Chair permission.

**Prerequisite:** FIN 425 Minimum Grade of B

**FIN 430 Derivative Securities 3 cr**

Covers principles of Options and Futures contracts and their economic functions. Options: basic strategies; combinations and spreads; pricing; and the various types of contracts. Futures: fundamentals of the market; contract specifications and their uses. Program trading and portfolio insurance.

**Prerequisite:** (FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D)

**FIN 442 Real Estate Dev & Prop Mgmt 3 cr**

This course provides an overview of the real estate development and property management processes, as well as introduces students to various disciplines, professionals, and industry sectors, and how they interact and participate in these processes.

**Prerequisite:** FIN 344 Minimum Grade of D

**FIN 444 Real Estate Valuation - W 3 cr**

Emphasis is given to the valuation process and the analysis that leads to valid estimates of value. The cost, sales comparison, and income approaches to value are examined and illustrated within the Uniform Standards of Professional Appraisal Practice requirements. Preparation of typical valuation reports is covered.

**Prerequisite:** FIN 344 Minimum Grade of D and MKT 345 Minimum Grade of D and EH 101 Minimum Grade of C and EH 102 Minimum Grade of C

**FIN 445 Life and Disability Insurance 3 cr**

Principles and practices of insurance used for family and income protection against premature death and disability; retirement and pension plans including group insurance and social security.

**Prerequisite:** FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D

**FIN 446 Real Estate Finance & Invest 3 cr**

Analysis of income property debt and equity instruments, financing documents, financial analysis and risk scenarios of different property types, and relevant local, state, and federal laws and court cases.

**Prerequisite:** FIN 344 Minimum Grade of D or MKT 345 Minimum Grade of D

**FIN 448 Real Estate Law 3 cr**

A detailed examination of the contracts, documents, and instruments used in a transaction on one or more of the real property rights, and relevant local, state, and federal laws and court cases.

**Prerequisite:** FIN 344 Minimum Grade of D or MKT 345 Minimum Grade of D

**FIN 470 Depository Institution Mgt I 3 cr**

Analysis of depository institution management processes focusing on management of capital, assets, and liabilities with emphasis on the regulatory environment in which depository institutions operate.

**Prerequisite:** (FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D)

**FIN 471 Depository Institutions Mgt II 3 cr**

In-depth analysis of consumer, real estate, commercial, and agricultural lending areas of depository institution.

**Prerequisite:** FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D

**FIN 490 Special Topics 3 cr**

Designed to provide senior students an opportunity to study selected topics of particular interest. A student may count no more than six hours of Special Topics in the concentration. Prerequisite: Approval of Department Chair.

**Prerequisite:** FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D

**FIN 492 Seminar - Finance 3 cr**

Oral reports on readings of various aspects of business finance.

**Prerequisite:** FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D

**FIN 494 Directed Studies 3 cr**

Primarily designed to give superior students an opportunity to study selected topics of particular interest. Grades are awarded on a satisfactory/unsatisfactory basis. Prerequisites: a cumulative GPA 2.5 and approval of Department Chair.

**Prerequisite:** (FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D) and FIN 343 Minimum Grade of D and FIN 410 Minimum Grade of D and FIN 350 Minimum Grade of D and (FIN 420 Minimum Grade of D or FIN 441 Minimum Grade of D)

**FIN 496 Finance Internship 3 cr**

The internship program is designed to give students practical experience in their field of study. Students complete directed projects under the supervision of the Department Chair. Prerequisites: Junior or Senior standing, declared major in finance, overall GPA of least 2.0, Internship Agreement signed by the Department Chair, FIN 315 Minimum grade of D.

**Prerequisite:** FIN 315 Minimum Grade of D

**FIN 508 Introduction to Corp Finance 3 cr**

Coverage of fundamental finance concepts and techniques. Major topics include time value of money, risk, asset valuation including fixed income securities and stock, financial markets, term structure of interest rates, risk management (derivatives), and multinational financial management issues. Cases will be used as appropriate.

**FIN 590 Sp Top - 3 cr**

Designed to provide graduate students an opportunity to study selected topics. (A student may count no more than 3 hours of Special Topics in the M.B.A. degree program). Prerequisites: Approval of Department Chair

**Prerequisite:** MBA P

**FIN 594 Independent Study in Finance 3 cr**

Reading and research on selected topics. Conference and formal research report required. Prerequisites: Approval of Department Chair.

**Prerequisite:** MBA P

## Foreign Lang Less Taught (LGS) (LGS)

**LGS 101 Introductory Japanese I 3 cr**

The first of a two-semester sequence in Introductory Japanese. The goal of the course is to introduce students to Japanese as it is spoken today. Emphasis on developing speaking and listening skills through intensive drills, exposure to basic structural patterns, and functional vocabulary. LGS 101 is a NASILP course. Core Course.

**LGS 102 Introductory Japanese II 3 cr**

A continuation of Japanese 101. Core Course.

**Prerequisite:** LGS 101 Minimum Grade of C

**LGS 106 Introductory Arabic I 3 cr**

The first of a two-semester sequence in Introductory Arabic. Its purpose is to introduce students to Arabic as it is spoken today. Emphasis on developing speaking and listening skills through intensive drills, exposure to basic structural patterns, and functional vocabulary. Study requires extensive use of audio-tapes. LGS 106 is a NASILP course. Core Course.

**LGS 107 Introductory Arabic II 3 cr**

A continuation of Arabic I. Core Course.

**Prerequisite:** LGS 106 Minimum Grade of C

**LGS 110 Intro American Sign Language I 3 cr**

The first of a two-semester sequence in introductory American Sign Language (ASL). The goal of the two semester course is to introduce students to ASL as it is used today. Emphasis is on developing skills in signing through intensive drills, exposure to basic ASL structural patterns and functional vocabulary. LGS 110 is a LTLs course.

**LGS 111 Intro American Sign Lang II 3 cr**

The second of a two-semester sequence in introductory ASL. The goal of the two-semester course is to introduce students to ASL as it is used today. Emphasis is on developing skills in signing through intensive drills, exposure to basic ASL structural patterns and functional vocabulary. LGS 111 is a LTLs course.

**Prerequisite:** LGS 110 Minimum Grade of C

**LGS 171 Introductory Korean I 3 cr**

LGS 171 is the first of a two semester sequence of Introductory Korean. The course develops speaking and listening skills, as well as reading and writing skills through intensive drills, exposure to basic structural patterns, and functional vocabulary. Core Course.

**LGS 172 Introductory Korean II 3 cr**

The second of a two-semester sequence in introductory Korean. The goal of the two-semester course is to introduce students to Korean as it is spoken today. Emphasis is on building upon skills learned in LGS 171 and developing speaking and listening skills through intensive drills, exposure to basic structural patterns and functional vocabulary. LGS 172 is an LTLs course. Core Course.

**Prerequisite:** LGS 171 Minimum Grade of C

**LGS 201 Intermediate Japanese I 3 cr**

The first of a two-semester sequence. A continuation of the training necessary to build fluency in understanding and speaking Japanese. LGS 201 is a NASLIP course. Core Course.

**Prerequisite:** (LGS 102 Minimum Grade of C or LGS 103 Minimum Grade of D)

**LGS 202 Intermediate Japanese II 3 cr**

A continuation of LGS 201. Core Course.

**Prerequisite:** LGS 201 Minimum Grade of C

**LGS 206 Intermediate Arabic I 3 cr**

The first of two-semester sequence in Intermediate Arabic. This is a continuation of Introductory Arabic II. It continues to develop speaking and listening skills as well as reading and writing skills through intensive drills, exposure to basic structural patterns, and functional vocabulary. Study requires extensive use of audio -tapes. Core course.

**Prerequisite:** (LGS 107 Minimum Grade of C or LGS 108 Minimum Grade of D)

**LGS 207 Intermediate Arabic II 3 cr**

A continuation of Intermediate Arabic I. Core Course.

**Prerequisite:** LGS 206 Minimum Grade of C

**LGS 210 Intermediate ASL I 3 cr**

The first of a two-semester sequence in intermediate ASL. This is a continuation of Introductory ASL II. It continues to develop signing and interpreting skills through intensive drills, exposure to the basic ASL structure patterns and functional vocabulary. LGS 210 is a LTL's course. Core Course

**Prerequisite:** LGS 111 Minimum Grade of C

**LGS 211 Intermediate ASL II 3 cr**

A continuation of Intermediate ASL I. LGS 211 is a LTLs course. Core Course

**Prerequisite:** LGS 210 Minimum Grade of C

**LGS 271 Intermediate Korean I 3 cr**

The first of a two-semester sequence. A continuation of the training necessary to build proficiency in understanding and speaking Korean. Core Course.

**Prerequisite:** LGS 172 Minimum Grade of C

**LGS 272 Intermediate Korean II 3 cr**

A continuation of Intermediate Korean I. Core Course.

**Prerequisite:** LGS 271 Minimum Grade of C

## Foreign Languages and Lit (LG) (LG)

**LG 101 Introductory Latin I 3 cr**

Introductory Latin I is the first half of a two-course sequence in Classical Latin. The goal of the courses is to achieve basic proficiency in understanding and reading Latin and to acquire a basic knowledge of Roman customs, history and culture.

**LG 102 Introductory Latin II 3 cr**

Introductory Latin II is the second half of a two-course sequence in Classical Latin. The goal of the courses is to achieve basic proficiency in understanding and reading Latin and to acquire a basic knowledge of Roman customs, history and culture.

**Prerequisite:** LG 101 Minimum Grade of D

**LG 110 World Languages 3 cr**

The general aim of this introductory-level course is to ground students in a basic understanding of the social, political, economic and cultural realities of language around the globe, including the importance of mastering one or more languages other than one's native tongue. Students taking the course will profit from an understanding of language value in the global marketplace and will gain new insight into their own native language through a brief examination of the structures of several of the world's major languages. The course may feature guest presenters and will also discuss techniques of language acquisition.

**LG 111 Introductory French I 3 cr**

The first of a two-semester sequence in introductory French. The goal of the two-semester sequence is to achieve a basic proficiency in understanding, speaking, reading, and writing French, and to acquire basic knowledge of French-speaking cultures. Core Course.

**LG 112 Introductory French II 3 cr**

The second semester of the introductory course. Core Course.

**Prerequisite:** LG 111 Minimum Grade of D

**LG 121 Introductory Chinese I 3 cr**

First half of the first-year sequence in Modern Standard Mandarin Chinese. Develops speaking, listening, reading and writing equally. Builds a solid foundation in pronunciation, syntax & vocabulary. Students will be able to hold simple conversations at the end.

**Cross-Listed:** LGS 121

**LG 122 Introductory Chinese II 3 cr**

Second half of the first-year sequence in Modern Standard Mandarin Chinese. Develops speaking, listening, listening, reading and writing equally. Builds a solid foundation in pronunciation, syntax & vocabulary. Students will be able to hold simple conversations at the end.

**Prerequisite:** LG 121 Minimum Grade of D

**Cross-Listed:** LGS 122

**LG 131 Introductory Spanish I 3 cr**

The first of a two-semester sequence in introductory Spanish. The goal of the two-semester course is to achieve a basic proficiency in communication in Spanish through the development of listening, speaking, reading, and writing skills. Core Course.

**LG 132 Introductory Spanish II 3 cr**

The second semester of the introductory course. Core course.

**Prerequisite:** LG 131 Minimum Grade of D

**Cross-Listed:** LG 134

**LG 141 Intro Classical Greek I 3 cr**

Introductory Classical Greek I is the first half of a two-course sequence in Classical Greek. The goal of the courses is to achieve basic proficiency in understanding and reading Greek and to acquire a basic knowledge of ancient Greek customs, history, and culture.

**LG 142 Intro Classical Greek II 3 cr**

Introductory Classical Greek II is the second half of a two-course sequence in Classical Greek.

**Prerequisite:** LG 141 Minimum Grade of C

**LG 151 Introductory German I 3 cr**

The first of a two-semester sequence in introductory German. The goal of the two-semester course is to achieve a basic proficiency in understanding, speaking, reading, and writing German, and to acquire basic knowledge of German-speaking cultures. Core Course.

**Cross-Listed:** LG 153

**LG 152 Introductory German II 3 cr**

The second semester of the introductory course. Core Course.

**Prerequisite:** LG 151 Minimum Grade of D

**LG 153 Accelerated Intro German 6 cr**

A one-semester intensive first-year course for highly motivated students. This course covers the material taught in LG 151 and LG 152 and satisfies the Arts and Sciences Foreign Language requirement. By permission of instructor. Core Course.

**Cross-Listed:** LG 151, LG 152

**LG 171 Introductory Russian I 3 cr**

The first of a two-semester sequence in Introductory Russian. The goal of the two-semester course is to achieve a basic proficiency in understanding, speaking, reading, and writing Russian. Core Course.

**LG 172 Introductory Russian II 3 cr**

The second semester of the introductory course. Core course.

**Prerequisite:** LG 171 Minimum Grade of D

**LG 173 Accelerated Intro Russian 6 cr**

A one-semester intensive first-year course for highly motivated students with prior instruction in a foreign language (either high school or college level) with a B average or better. This course covers material taught in LG 171 and 172 and satisfies the Arts and Sciences foreign language requirement. By permission of the instructor. Usually taught in the Spring semester. Fees.

**Cross-Listed:** LG 172

**LG 190 Sp Top - 1-3 cr**

Topics to be determined by student need and interest. Course may be repeated when content varies for a total of 12 credit hours.

**LG 193 Study Abroad 1-6 cr**

This course is an introductory language and culture course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**LG 201 Intermediate Latin I 3 cr**

The first of a two-semester sequence in intermediate Latin. The course is a continuation of the study necessary to achieve fluency in reading, understanding, and translating Classical Latin. A comprehensive review of grammar is accompanied with the presentation of material beyond the scope of Introductory Latin I and II. All texts for reading and translation are presented in the original classical texts, unabridged and complete. Emphasis on the development of the periods of classical Roman literature as well as pertinent events in Roman history and culture.

**Prerequisite:** LG 102 Minimum Grade of C

**LG 202 Intermediate Latin II 3 cr**

The second of a two-semester sequence in intermediate Latin.

**Prerequisite:** LG 201 Minimum Grade of C

**LG 205 Modern Lit in Translation 3 cr**

A varying-content course designed to introduce the student to selected major works of one language other than English. Works from English-speaking countries may occasionally be used for the purpose of cross-cultural comparison. The student may choose from a number of specific topics that will be designated prior to each semester. All readings and discussions are in English. May be repeated for credit when course content varies. Foreign Language majors wishing to have one or several of these courses count toward their major must seek prior approval from their advisor.

**Prerequisite:** (EH 102 Minimum Grade of B or EH 105 Minimum Grade of B)

**LG 211 Intermediate French I 3 cr**

The first of a two-semester sequence in intermediate French.

A continuation of the training necessary to achieve fluency in understanding, speaking, reading and writing French. A comprehensive grammar review is complemented by elaboration of grammatical topics and lexical development beyond the scope of Introductory French I and II. Readings of literary and cultural texts treating French-speaking areas of the world. Emphasis on fluency in conversation and cultural fluency through class discussion of both written and recorded texts from the Francophone world. Core Course.

**Prerequisite:** (LG 112 Minimum Grade of C or LG 113 Minimum Grade of C)

**LG 212 Intermediate French II 3 cr**

The second semester of the intermediate sequence. Core Course.

**Prerequisite:** LG 211 Minimum Grade of C

**Cross-Listed:** LG 213

**LG 213 Accelerated Inter French - H 4 cr**

A one-semester intensive intermediate course for students who have successfully completed LG 113 (Accelerated Introductory French-Honors), or the equivalent. This course covers material taught in LG 211 and 212. Usually taught in the Spring semester. By permission of instructor.

**Prerequisite:** LG 112 Minimum Grade of C or LG 113 Minimum Grade of C

**Cross-Listed:** LG 212

**LG 221 Intermediate Chinese I 3 cr**

First half of the second-year sequence in Modern Standard Mandarin Chinese. Furthers communicative competence in all aspects of language learning: listening, speaking, reading and writing. Students will be able to write essays at the end.

**Prerequisite:** LG 122 Minimum Grade of D

**Cross-Listed:** LGS 221

**LG 222 Intermediate Chinese II 3 cr**

Second half of the second-year sequence in Modern Standard Mandarin Chinese. Furthers communicative competence in all aspects of language learning: listening, speaking, reading and writing. Students will be able to write essays at the end.

**Prerequisite:** LG 221 Minimum Grade of D

**Cross-Listed:** LGS 222

**LG 231 Intermediate Spanish I 3 cr**

The first of a two-semester sequence in intermediate Spanish. A continuation of the training necessary to achieve fluency. Grammar review, class discussions, extensive oral and written work, short readings in literature and culture are included. Core Course.

**Prerequisite:** (LG 132 Minimum Grade of C or LG 133 Minimum Grade of C or LG 134 Minimum Grade of C)

**LG 232 Intermediate Spanish II 3 cr**

The second semester of the intermediate sequence. Core Course.

**Prerequisite:** LG 231 Minimum Grade of C

**Cross-Listed:** LG 234

**LG 234 Inter Spanish Accel -H 6 cr**

A one-semester intensive intermediate course for students who have successfully completed LG 134 (Accelerated Introductory Spanish), or the equivalent. This course covers the material taught in LG 231 and 232. Core Course. By permission of the instructor.

**Prerequisite:** (LG 132 Minimum Grade of C or LG 133 Minimum Grade of C or LG 134 Minimum Grade of C)

**Cross-Listed:** LG 232

**LG 241 Intern Classical Greek I 3 cr**

The first of a two-semester sequence in intermediate Classical Greek.

The course is a continuation of the study necessary to achieve fluency in reading, understanding and translating Classical Greek. A comprehensive review of grammar is accompanied with the presentation of material beyond the scope of Introductory Classical Greek I and II. All texts for reading and translation are presented in the original classical texts, unabridged and complete. Emphasis on the development of the periods of classical Greek literature as well as pertinent events in Greek history and culture.

**Prerequisite:** LG 142 Minimum Grade of C

**LG 242 Intern Classical Greek II 3 cr**

The second of a two-semester sequence in intermediate Classical Greek.

**Prerequisite:** LG 241 Minimum Grade of C

**LG 251 Intermediate German I 3 cr**

The first of a two-semester sequence in Intermediate German.

A continuation of the training necessary to achieve fluency in understanding, speaking, reading, and writing German. Reading of literary, cultural, and historical texts. Class discussions, reports in German, both oral and written, are required. Core Course.

**Prerequisite:** (LG 152 Minimum Grade of C or LG 153 Minimum Grade of C)

**LG 252 Intermediate German II 3 cr**

The second semester of the intermediate sequence. Core Course.

**Prerequisite:** LG 152 Minimum Grade of C

**LG 253 Accelerated Intermediate German 4 cr**

Intermediate German builds on skills learned in the introductory sequence (LG 151-152). In this course, students will continue to develop their faculties in listening comprehension, oral proficiency, grammatical accuracy, written ability, and cultural knowledge. Special emphasis will be placed on adding depth to reading comprehension and improving students' oral competencies. The course will be organized around ACTFL's five standards of language learning: communication, cultures, connections, comparisons, and communities. The goal of this course is to increase students' competence in all five of these areas for the German-speaking context, and to prepare student for advanced-level work. 4 credit hours. Prerequisite: LG 152, placement exam, or approval of instructor. **Prerequisite:** LG 152 Minimum Grade of C or LG 153 Minimum Grade of C

**LG 271 Intermediate Russian I 3 cr**

The first of a two-semester sequence in intermediate Russian. A continuation of the training necessary to achieve fluency and understanding in speaking, reading, and writing Russian. Reading of literary and cultural texts. Increased practice in Russian conversation. Core Course. **Prerequisite:** (LG 172 Minimum Grade of C or LG 173 Minimum Grade of C)

**LG 272 Intermediate Russian II 3 cr**

The second semester of intermediate Russian. Core Course. **Prerequisite:** LG 271 Minimum Grade of C

**LG 273 Intensive Second Year Russian 4 cr**

A one-semester intensive Second Year course for students who have successfully completed the LG 171 and 172 sequence or LG 173 (Intensive First Year Russian). This course covers material taught in LG 271 and 272. By permission of instructor. **Prerequisite:** LG 171 Minimum Grade of C and LG 172 Minimum Grade of C or LG 173 Minimum Grade of C

**LG 283 Chinese HY in Film and Lit 3 cr**

This course will introduce students to major topics in Chinese history, covering both ancient periods such as the Three Kingdoms period, and twentieth-century events such as the war with Japan and the Cultural Revolution. Post-Tiananmen Chinese society will also be stressed. Students will explore these themes through Chinese film and literature, and will thus become familiar with major directors, including Zhang Yimou and Jia Zhangke, and writers such as Yu Hua. **Cross-Listed:** CA 283, HY 283

**LG 290 Sp Top - 1-3 cr**

Topics to be determined by student need and interest. Course may be repeated when content varies for a total of 12 hours.

**LG 293 Study Abroad 1-6 cr**

This course is an introductory language and culture course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**LG 305 Studies in Gender and Writing 3 cr**

A varying-content course that provides an in-depth study of gender-related questions in a literary and cross-cultural context. Unless otherwise indicated, all readings and discussions are in English. May be repeated for credit for a total of nine hours when course content varies. Foreign Language majors wishing to have one or several of these courses count toward their major must seek prior approval from their advisor. **Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**LG 311 Introduction to Literature in French I (to 1789) 3 cr**

The first part of a two-semester introduction to literature written in French touching on the major genres, authors, and literary traditions from the Medieval period until the French Revolution. The two courses (LG 311 and LG 312 do not need to be taken in order.) **Prerequisite:** (LG 212 Minimum Grade of C or LG 213 Minimum Grade of C)

**LG 312 Introduction to Literature in French II (from 1789 to present) 3 cr**

The first part of a two-semester introduction to literature written in French touching on the major genres, authors, and literary traditions from French Revolution to the present. The two courses (LG 311 and LG 312 do not need to be taken in order.) **Prerequisite:** (LG 212 Minimum Grade of C or LG 213 Minimum Grade of C)

**LG 314 Advanced French Conversation 1 cr**

Intensive conversation with practice using various levels of the spoken language from slang to formal speech. Emphasis on the sounds and idioms of French. The course meets one hour per week with the instructor and one hour per week for a lab session, often with a native speaker. The content of this course will vary over four consecutive semesters. This course may be repeated for a maximum of four credits. **Prerequisite:** LG 212 Minimum Grade of C or LG 213 Minimum Grade of C

**LG 321 Advance Chinese I 3 cr**

First half of the third-year sequence in Modern Standard Mandarin Chinese. By the end, the students will be able to hold a sustained conversation, and read and write informal essays of a substantial length. **Prerequisite:** LG 222 Minimum Grade of D

**LG 322 Advanced Chinese II 3 cr**

Second half of the third-year sequence in Modern Standard Mandarin Chinese. By the end, the students will be able to hold a sustained conversation, and read and write informal essays of a substantial length. **Prerequisite:** LG 321 Minimum Grade of D

**LG 324 Literary Chinese 3 cr**

Introduces advanced learners of modern Chinese Mandarin to the set expressions, vocabulary, and grammar of literary Chinese that continues to be used today. By the end students are better equipped for reading formal writing in modern Chinese. **Prerequisite:** LG 222 Minimum Grade of D or LGS 202 Minimum Grade of D or LGS 272 Minimum Grade of D

**LG 326 Advanced Communication in French 3 cr**

Advanced language course focusing on vocabulary acquisition and mastering the more complex features of French grammar. Emphasis on both written and oral communication. **Prerequisite:** (LG 212 Minimum Grade of C or LG 213 Minimum Grade of C)

**LG 327 Adv French Comp-Conversatn - W 3 cr**

Intensive course in writing French coupled with oral presentations and activities designed to enhance the student's command of the language. **Prerequisite:** LG 212 Minimum Grade of C or LG 213 Minimum Grade of C

**LG 333 Spanish Conversatn-Comp 3 cr**

Extensive oral and written work through a variety of activities to review and reinforce acquired language skills, emphasizing vocabulary acquisition and fluency in the language. **Prerequisite:** (LG 232 Minimum Grade of C or LG 234 Minimum Grade of C)

**LG 334 Adv Spanish Grammar-Comp - W 3 cr**

Extensive study of major aspects of Spanish grammar with emphasis on increasing proficiency in the four language skills. Special emphasis is placed on descriptive and narrative writing.

**Prerequisite:** LG 232 Minimum Grade of C or LG 234 Minimum Grade of C

**LG 335 Commercial-Technical Spanish 3 cr**

Advanced course in written and spoken business and technical Spanish. Emphasis on writing proficiency in various aspects of business, government, technical and general commercial writing. Development of related speaking skills for commerce. Note: This course cannot be counted toward fulfilling degree requirements for B.A. concentration in Spanish.

**Prerequisite:** LG 333 Minimum Grade of C or LG 334 Minimum Grade of C

**LG 336 Intro Textual Analys Hisp Lit 3 cr**

Introductory course to literary analysis, literary and critical terminology, and genres as they appear in short works from both Spain and Latin America.

**Prerequisite:** LG 232 Minimum Grade of D or LG 234 Minimum Grade of D

**LG 337 Spanish for Medical Prof 3 cr**

LG 337 is designed for the advanced language student interested in further developing his/her linguistic proficiency in Spanish while acquiring terminology useful to the health care professional. In addition, the course affords the student an opportunity to gain insight into the health care needs of the non-English speaking Hispanic population in the U.S., as well as to begin understanding in general terms its diverse cultural milieu. The course is highly interactive and is conducted in its entirety in the target language. Note: This course cannot be counted toward fulfilling degree requirements for B.A. concentration in Spanish.

**Prerequisite:** LG 333 Minimum Grade of B and LG 334 Minimum Grade of B

**LG 338 Spanish for Legal Professions 3 cr**

Spanish for Legal Professionals introduces students to legal Spanish language as well as topics about the nature and functioning of law in the Spanish-speaking world and, in this country, the impact of the US legal system on the US-Hispanic population.

**Prerequisite:** LG 232 Minimum Grade of B or LG 333 Minimum Grade of C or LG 334 Minimum Grade of C or LG 335 Minimum Grade of C or LG 336 Minimum Grade of C

**LG 348 19th C Cntl Phl-Lit Theory 3 cr**

An examination of selected themes and issues in 19th Century Continental Philosophy and Literary Theory. Topics may include Idealism, Romanticism, Existentialism, Marxism, Freudianism. Identical with PHL 348 and EH 348. Credit cannot be received for both LG 348 and either PHL 348 or EH 348. (For LG credit, students will be required to do some coursework in their language of concentration.)

**Cross-Listed:** EH 348, PHL 348

**LG 349 20th C Cntl Phl-Lit Theory 3 cr**

An examination of selected themes and issues in 20th Century Continental Philosophy and Literary Theory. Topics may include Phenomenology, Existentialism, Hermeneutics, Structuralism, and Post-Structuralism. Identical with PHL 349 and EH 349. Credit cannot be received for both LG 349 and either PHL 349 or EH 349. (For LG credit, students will be required to do some coursework in their language of concentration.)

**Cross-Listed:** EH 349, PHL 349

**LG 351 Mythen, Marchen and Musik 3 cr**

In this course we will critically examine some of the myths and legends that form the foundation of some of Germanic civilization's most powerful cultural artifacts. By examining artistic interpretations and reinterpretations of these myths, we will come to a deeper understanding of the foundational role they play in German culture. Among the myths, legends and fairy tales we will consider are that of the hero Siegfried, the Faust myth, and the legend of Kaspar Hauser. Further, through a dialectic examination of how these myths are presented in text and music, students in this course will come to a deeper understanding of the importance of music to the totality of German culture. Composers whose work will be considered include Mozart, Beethoven, Mendelssohn and Wagner. This course will be conducted in German.

**Prerequisite:** LG 252 Minimum Grade of C

**LG 352 Crisis, Change, Transformation 3 cr**

This course explores how literature reflects various crises in the German-speaking world-cultural, linguistic, social, and political. Various literary forms, including short stories, novellas, and poems from the Middle Ages through the 21st century, will allow us to explore the source of the crisis as well as the proposed solutions, tracing these themes over the centuries. We will look at these crucial turning points, focusing on some key questions: What defines a crisis? Who (individual, family, group, nation) experiences it? How are these parties impacted? How do cultural or social or political norm shift? What kind of change, adjustment, or transformation is suggested in our text(s)? How does the crisis and/or its resolution later evolve? This course will be conducted in German.

**Prerequisite:** LG 252

**LG 361 German Lit thru Classicism 3 cr**

Origin and development of German Civilization (literature, thought, the arts, and society in a historical context) during the period of unification and industrialization, including Romanticism, Realism, Naturalism, and early Modernism. Extensive reading, class discussion, and oral and written reports in the language are required.

**Prerequisite:** LG 252 Minimum Grade of C or LG 253 Minimum Grade of C

**LG 362 German Cult-Lit 19th Century 3 cr**

Development of German civilization (literature, thought, the arts, and society in a historical context) during the period of unification and industrialization, including Romanticism, Realism, Naturalism, and early Modernism. Extensive readings, class discussions, and oral and written reports in the language are required.

**Prerequisite:** (LG 252 Minimum Grade of C or LG 253 Minimum Grade of C)

**LG 363 Modern-Contemp German Cult-Lit 3 cr**

Development of German civilization (literature, thought, the arts, and society in a historical context) from the early twentieth century through the present. Extensive readings, class discussions, and oral and written reports in the language are required.

**Prerequisite:** (LG 252 Minimum Grade of C or LG 253 Minimum Grade of C)

**LG 364 Highlights German Cult-Lit 3 cr**

A capstone course highlighting masterpieces of German literature and culture from a particular genre (e.g., the Novelle); a particular period or movement (e.g., Romanticism); an author or group of authors (e.g., Brecht); or a particular thematic focus. Extensive readings, class discussions, and oral and written reports in the language are required.

**Prerequisite:** LG 361 Minimum Grade of C or LG 362 Minimum Grade of C or LG 363 Minimum Grade of C

**LG 366 Adv German Grammar 3 cr**

Designed for the student who wishes to teach or do advanced work. Comprehensive study of formal grammar and structured practice in oral and written expression.

**Prerequisite:** (LG 252 Minimum Grade of C or LG 253 Minimum Grade of C)

**LG 367 Advanced German Conversation 3 cr**

Intensive conversation with practice in using various levels of the spoken language from slang to formal speech. Emphasis on the sounds and idioms of German. Students will gain familiarity with German cultural history, as well as contemporary political and popular culture. This course may be repeated for a maximum of six credits.

**Prerequisite:** (LG 251 (may be taken concurrently) Minimum Grade of C or LG 252 (may be taken concurrently) Minimum Grade of C)

**LG 368 Adv German Composition - W 3 cr**

Intensive course in writing German. Emphasis is on writing as a process, the communicative purposes of writing, and the development of critical reflection. Analysis of authentic texts and extensive practice in various genres of written German, including description, narrative, report, critical review, and interpretation.

**Prerequisite:** (LG 252 Minimum Grade of C or LG 253 Minimum Grade of C)

**LG 370 Special Topics - 1-3 cr**

Topics to be determined by student need and interest. Course may be repeated when content varies. A subtitle identifying the topic will be entered on the student's record.

**Prerequisite:** LG 212 (may be taken concurrently) Minimum Grade of C or LG 232 (may be taken concurrently) Minimum Grade of C or LG 252 (may be taken concurrently) Minimum Grade of C or LG 272 (may be taken concurrently) Minimum Grade of C

**LG 372 Golden Age of Russian Lit - W 3 cr**

A survey course designed to familiarize the student with the essential works of 19th century Russian literature. Students read and discuss works by Pushkin, Lermontov, Gogol, Dostoevsky, Turgenev, Tolstoy, and Chekhov. In English. Russian majors are required to read excerpts of works in Russian and to complete a course project in Russian.

**Prerequisite:** LG 272 Minimum Grade of C

**LG 373 Intensive Third Year Russian 4 cr**

A one-semester intensive Third Year course for students who have successfully completed the LG 271 and 272 sequence or LG 273 (Intensive Second Year Russian). This course is usually taught during the spring following LG 273, abroad during the summer or in the Fall following a semester abroad and acts as a bridge course. This course is meant to fill in any gaps in knowledge of Russian grammar before continuing to Advanced Grammar and Composition courses. Special attention is paid to nuances in Russian culture. By permission of instructor.

**Prerequisite:** LG 271 Minimum Grade of C and LG 272 Minimum Grade of C or LG 273 Minimum Grade of C

**LG 374 Adv Russian Grammar 3 cr**

A course designed to give students active control of the more complex features of Russian grammar. Structured practice in oral and written expression.

**Prerequisite:** LG 272 Minimum Grade of C

**LG 375 Adv Russian Conversation 2 cr**

Intensive conversation practice in using the various levels of modern spoken Russian. The course meets two hours per week. The content of this course will vary over eight consecutive semesters. This course may be repeated for a maximum of eight credits.

**Prerequisite:** LG 272 Minimum Grade of D

**LG 376 Adv Russian Composition - W 3 cr**

This course provides extensive practice in writing Russian. Students read, discuss, and write about texts which reflect the controversial and topical issues of the day.

**Prerequisite:** LG 272 Minimum Grade of C

**LG 380 Russian Poetry 3 cr**

Designed to enhance the student's overall command of spoken Russian through the study of Russia's rich poetic tradition. Russian poems and songs provide the basic materials for this course. Lectures, materials, and discussions in Russian.

**Prerequisite:** LG 272 Minimum Grade of C

**LG 381 Russian Prose in Context 3 cr**

A course designed to enhance the student's ability to read, translate, and discuss Russian texts. Students read works from both 19th and 20th century fiction, which they analyze both thematically and stylistically. Class work and assignments are geared towards increasing the student's vocabulary and understanding of Russian stylistics. All texts, lectures, and discussions in Russian.

**Prerequisite:** LG 272 Minimum Grade of C

**LG 384 Japanese Film 3 cr**

This course will introduce students to major themes in recent Japanese history, including samurai culture and other issues pertaining to social class, Westernization, the postwar family, sixties radicalism, and recent popular culture. Students will explore these themes through Japanese film and literature, and will thus become familiar with major directors, including Akira Kurosawa, Yasujiro Ozu and Juzo Itami, and novelists such as Junichiro Tanizaki and Yukio Mishima.

**Cross-Listed:** CA 284, HY 284, HY 384, LG 284

**LG 390 Special Topics - 1-6 cr**

Topics to be determined by student need and interest. Course may be repeated for a total of 12 hours.

**Prerequisite:** (LG 212 (may be taken concurrently) Minimum Grade of C or LG 213 (may be taken concurrently) Minimum Grade of C) or (LG 232 (may be taken concurrently) Minimum Grade of C or LG 234 (may be taken concurrently) Minimum Grade of C) or (LG 252 (may be taken concurrently) Minimum Grade of C or LG 253 (may be taken concurrently) Minimum Grade of C) or LG 272 (may be taken concurrently) Minimum Grade of C

**LG 393 Study Abroad 1-6 cr**

This course is an advanced language and culture course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**LG 394 Dir St PreStudy Abrod - 1 cr**

Working under the direction of their faculty advisor, language majors will prepare for their required study abroad experience through an examination of selected country-specific readings as well as cross-cultural orientation materials. Prerequisite: completion of intermediate sequence in student's concentration or equivalent.

**Prerequisite:** (LG 212 Minimum Grade of B or LG 213 Minimum Grade of B) or (LG 252 Minimum Grade of B or LG 253 Minimum Grade of B) or (LG 232 Minimum Grade of B or LG 234 Minimum Grade of B) or LG 271 Minimum Grade of B

**LG 400 Applied Linguistics 3 cr**

LG 400 is one of the required core classes for the Applied Linguistics minor. The course introduces linguistics concepts to the students and gives them the foundation needed for the higher level classes required as part of the minor. Required core course. Pre-requisite: LG/LGS 200-level sequence with a C or better and sophomore standing.

**Prerequisite:** LG 200 (may be taken concurrently) Minimum Grade of C or LGS 200 (may be taken concurrently) Minimum Grade of C

**LG 412 Readings Francophone Lit 3 cr**

Study of the literature of the Francophone world, including West and North Africa, the Caribbean, and Quebec, in their cultural and historical context.

**Prerequisite:** (LG 311 Minimum Grade of C or LG 323 Minimum Grade of C) or (LG 312 Minimum Grade of C or LG 325 Minimum Grade of C)

**LG 415 Readings in the French Novel 3 cr**

Study of the development of the novel in French from the romantic period through the contemporary novel.

**Prerequisite:** (LG 311 Minimum Grade of C or LG 323 Minimum Grade of C) or (LG 312 Minimum Grade of C or LG 325 Minimum Grade of C)

**LG 416 Identites Francaises 3 cr**

Study of how different minority groups have been represented and have represented themselves in Nineteenth and Twentieth Century French and Francophone literature, essays, and film.

**Prerequisite:** (LG 311 Minimum Grade of C or LG 323 Minimum Grade of C) or (LG 312 Minimum Grade of C or LG 325 Minimum Grade of C)

**LG 431 Hispanic Civilizations 3 cr**

In-depth study of various aspects of Hispanic civilization and its contribution to world culture; emphasis upon on geographical, historical, social, political and artistic forces. Extensive class discussion, oral and written reports in the language are required.

**Prerequisite:** LG 333 Minimum Grade of C or LG 334 Minimum Grade of C or LG 336 Minimum Grade of C

**LG 432 Rdgs in Spanish Literature 3 cr**

Representative readings reflecting major literary movements and cultural events in Spain. Extensive class discussion, oral and written reports are required.

**Prerequisite:** LG 333 Minimum Grade of C or LG 334 Minimum Grade of C or LG 336 Minimum Grade of C

**LG 433 Rdgs in Latin Amer Literature 3 cr**

Representative readings reflecting major literary movements and cultural events in Latin America. Extensive class discussions, oral and written reports are required.

**Prerequisite:** LG 333 Minimum Grade of C or LG 334 Minimum Grade of C or LG 336 Minimum Grade of C

**LG 451 The Aesthetic Lens 3 cr**

In this course we will examine the tectonic shifts in German culture and history from the founding of the Weimar Republic to the present through the lens of lyric poetry and film. For each major period-the Weimar Republic: National Socialism and Second World War; the postwar period; the rise and fall of the Berlin Wall; Reunification-we will study the major poetic voices and two films both on their own aesthetic merits and relative to the historical contexts within which they were produced. We will also analyze the relationship between these works of art and the historical context in which they were produced. This class will be conducted in German.

**Prerequisite:** LG 366 Minimum Grade of C and LG 367 Minimum Grade of C and LG 368 Minimum Grade of C

**LG 452 Love, Friendship and Family 3 cr**

Representative readings addressing the concepts of love, friendship and family in German literature over a range of historical periods.

**Prerequisite:** LG 366 Minimum Grade of C or LG 367 Minimum Grade of C or LG 368 Minimum Grade of C

**LG 480 Senior Seminar - W 3 cr**

This course is designed to broaden and enhance the study-abroad experience and to serve as a capstone to the foreign-language major. Building on the study-abroad experience, students will (1) contextualize their experience through readings, (2) continue their experience by maintaining consistent contact with the target culture, and (3) communicate their experience and their enhanced understanding of topics such as culture shock, culture stereotypes, cultural metaphors, and cross cultural comparisons of behavior and mind-set. Classes will consist of lectures, discussions of readings, and a major research paper and public presentation of their research. Capstone Course. Prerequisite: completion of the Study Abroad requirement.

**Prerequisite:** EH 102 Minimum Grade of C and IS 391 Minimum Grade of S

**LG 490 Special Topics - 1-6 cr**

Topics to be determined by student need and interest. Course may be repeated when content varies. A subtitle identifying the topic will be entered on the student's record.

**LG 492 Seminar - 1-3 cr**

A course designed for advanced students to pursue a special topic in depth through readings, critical discussions, and delivery of a seminar paper. This course may be repeated for a maximum of 6 credits.

**Prerequisite:** Normally limited to juniors and seniors.

**LG 493 Study Abroad 1-6 cr**

This course is an advanced language and culture course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**LG 494 Directed Studies- 1-3 cr**

Directed study under the supervision of a member of the foreign language faculty. This course may be repeated for a maximum of 6 credits.

Requires permission of department chair.

**LG 496 Internship - Foreign Languages 1-9 cr**

Supervised professional work with mandatory reading list and written report. This course may be repeated for a maximum of nine credits.

**Prerequisites:** Permission of the Department Chair is required.

**LG 499 Honors Senior Project - H 3-6 cr**

Under the advice and guidance of a faculty mentor Honors Students will identify and carry out a research project, relevant to the field of foreign language study, that will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty chaired by the honors mentor.

**LG 511 Intro Span for Health Profs 3 cr**

LG 511 trains healthcare professionals to effectively serve Spanish-speaking patients. Learners will acquire a sustained novice mid/novice high level of proficiency in understanding, speaking, reading, and writing Spanish for the medical field.

**Cross-Listed:** GIS 511

**LG 512 Inter Span for Health Profs 3 cr**

LG 512 expands learners' Spanish language skills through a range of assignments related to healthcare and Spanish-speaking populations.

**Prerequisite:** LG 511 Minimum Grade of C

**Cross-Listed:** GIS 512

**LG 513 Adv Span for Health Profs 3 cr**

LG 513 will develop learners' Spanish language skills and cultural competency through readings and discussions on topics related to healthcare delivery for Hispanic populations. Students will also acquire an advanced medical terminology in Spanish.

**Prerequisite:** LG 512 Minimum Grade of C

**Cross-Listed:** GIS 513

**LG 514 Pract Span for Health Profs 3 cr**

This practicum is the capstone for the Certificate in Spanish for Healthcare Professionals. Students will complete 45 hour clinical practicum at a USA-approved healthcare facility within the US or abroad.

**Prerequisite:** LG 513 (may be taken concurrently) Minimum Grade of C

**Cross-Listed:** GIS 514

**LG 590 Sp Top - 1-3 cr**

Topics to be determined by student need and interest. Content will vary. A subtitle identifying the topic will be entered on the student's record.

**LG 592 Seminar - 1-3 cr**

A course designed for graduate students to pursue a special topic in-depth with readings, critical discussion and delivery of a seminar paper.

**LG 594 Directed Studies- 1,3 cr**

Directed study under the supervision of a member of the Foreign Languages and Literatures faculty having Graduate Faculty status.

This course may be repeated for a maximum of 15 credits. Prerequisite: Permission of department chair.

## Foundations of Human Health-MD (FHH)

**FHH 110 Foundations of Human Health 9 cr**

Foundations of Human Health introduces the principles of basic and clinical sciences and lays the foundation for medical practice. It provides students with tools to effectively master application-based material in the subsequent system based modules. Students will develop the ability to identify key principles of human health and disease in both the internal biologic milieu and the external environment. Basic mechanisms of human biology, psychology and social systems are developed, as all are essential to clinical reasoning, problem solving, patient-centered care and system-based practice. Throughout this module students will engage in lectures, team-based learning sessions, independent study and clinical experiences. These activities will provide students with opportunities to strengthen communication skills, observe and participate in systems-based practice, and exercise practice-based learning techniques in a variety of settings that require and foster professional behavior and personal integrity.

**FHH 112 Foundations of Human HealthII 9 cr**

Foundations of Human Health II introduces the principles of basic and clinical sciences and lays the foundation for medical practice. It provides students with tools to effectively master application-based material in the subsequent system based modules. Students will develop the ability to identify key principles of human health and disease in both the internal biologic milieu and the external environment. Basic mechanisms of human biology, psychology and social systems are developed, as all are essential to clinical reasoning, problem solving, patient-centered care and system-based practice. Throughout this module students will engage in lectures, team-based learning sessions, independent study and clinical experiences. These activities will provide students with opportunities to strengthen communication skills, observe and participate in systems-based practice, and exercise practice-based learning techniques in a variety of settings that require and foster professional behavior and personal integrity.

**FHH 201 Foundations of Human Health II 9 cr**

## Gender Studies (GS) (GS)

**GS 101 Intro to Gender Studies 3 cr**

This course provides an interdisciplinary, multicultural overview of the concept of gender and gender roles in patriarchal society. This course examines the social construction of gender in our society and how that has shaped such areas as economics, politics, cultural/social values, and the impact upon women and men in historical and contemporary terms.

**GS 290 Sp Tp-#MeToo, Black Lives Matter & Beyond 3 cr**

Study of selected topics with an area in gender studies. May be repeated for credit when content varies.

**GS 301 Moving Beyond Diversity 3 cr**

This course explores ways of fighting injustice and dismantling systemic oppression for those who are being disproportionately impacted generationally. The course offers a framework for activism that focuses on creating a culture that stands up for what is right by fighting against normalizing cycles of perpetuated injustices. Students will examine diverse perspectives that center on the capacity to mobilize solidarity for those efforts, strategies, and practices that negate performative allyship with systems-changing action for today's realities.

**GS 302 Black Women and Activism 3 cr**

This fully online three-hour credit course is interdisciplinary in nature and addresses the need to recognize and validate contributions made by Black women that sought and continue to uplift Black America throughout the late 19th and early 21st centuries. This cadre of activism will be contextualized through both womanist and feminist theories. Central to these works will be an examination for how multiple oppressions have shaped Black women's lives throughout their ongoing efforts to redefine self and bring empowerment to their communities through racial solidarity and advancement as a people. These women's underlying resistance strategies and intellectual discourse for offsetting the negative effects of racism and other oppressive measures will be mirrored through the use of race and gender as a socio-political construct. A postmodern response depicted through the lens of contemporary Black feminists for how both mainstream feminism and Black America have responded to these heroic forms of activism will be analyzed. These activists' contributions will unfold through the following curricula foci: 1) early roots of nationalism, 2) the emergence of both Black Feminist and Womanist Thought, and 3) political movements involving Black women activists. Additional cornerstones for learning will include participating in a posting process that involve sharing research and writing projects which in return will facilitate lively discussions on today's black women activism from their own respective domain (e.g. music, spirituality, film, arts and letters, judicial system, the intellectual and socio-political arenas).

**GS 304 #Me Too, Black Lives Matter & 3 cr**

The velocity of national protests fighting for human rights across the constitutional continuum of justice, dignity, and safety have evolved into an epidemic throughout American infrastructures. This course will plunge into the #MeToo Era, Black Lives Matter, and Woke Movements. Significant visibility for how social constructs of gender, race, and sexuality intersect with these protesters' outcries will be examined. Further considerations will be given to exposing those accused of sexual violence on various fronts as well as existing allegations of wrongful deaths will be a part of the course curriculum. An added dimension to the curriculum will include also focusing on political strategies and an operative activism model that are being used to effectively penetrate these existing cultures of power and dominance.

**GS 390 Special Topics 3 cr**

Advanced study of selected topics with an area in gender studies. May be repeated for credit when content varies.

**GS 490 Special Topics 3 cr**

Advanced study of selected topics within an area in Gender Studies. May be repeated for credit when content varies for a total of six hours.

**GS 492 Gender Studies Seminar - 3 cr**

Advanced study of selected topics in Gender Studies. May be repeated for credit when content varies for a total of six hours.

**GS 494 Directed Studies 1-3 cr**

Directed research under the guidance of a Gender Studies faculty member. Requires permission of instructor. Student is restricted to taking a maximum of six hours of Directed Studies.

**Prerequisite:** GS 101 Minimum Grade of D

**GS 496 Internship - 3-6 cr**

Practical learning through occupational or community work with an approved agency dealing with gender-related issues. Readings and final report supervised by gender studies faculty. Special Permission required.

**Prerequisite:** GS 101 Minimum Grade of D

## Geographic Info Techn (GIT) (GIT)

**GIT 420 Computer Apps in Earth Science 4 cr**

An introduction to basic Python programming, with examples and exercises pertinent to Earth Science and GIS applications.

**Prerequisite:** MA 112 Minimum Grade of D or MA 110 Minimum Grade of C

**Cross-Listed:** MET 420

**GIT 442 Remote Sensing II 4 cr**

Analysis of remotely sensed digital data for detection and mapping of Earth resources. Minimum grade of "B" needed in course prerequisite.

**Prerequisite:** (GEO 332 Minimum Grade of B or GY 332 Minimum Grade of B)

**GIT 460 Intro to GIT 4 cr**

Fundamentals of Geographic Information Systems technology, including software functionality (ArcGIS), data processing, cartography and spatial analysis.

**GIT 461 Environmental GIS 4 cr**

Application of Geographic Information Systems to the studies of the natural environment.

**Prerequisite:** (GIT 460 Minimum Grade of C or GEO 460 Minimum Grade of C or GY 460 Minimum Grade of C)

**GIT 462 GIT Apps II-Business/Soc Sci 4 cr**

Application of Geographic Information Systems to Business and the Social Sciences. Prerequisite: GIS 460, with a grade of "C" or better, or permission of instructor.

**Prerequisite:** (GIT 460 Minimum Grade of C or GEO 460 Minimum Grade of C or GY 460 Minimum Grade of C)

**GIT 463 GIS for Business and Urban Analysis 4 cr**

In GIS for Business and Urban Analysis, students will learn advanced spatial analysis methods and spatial statistics, providing a robust theoretical foundation while equipping students with hands-on proficiency in GIS (ArcGIS Pro) and geostatistical software (GeoDa) applications. Through exploration of business, public health, crime, demographic, and transportation-related research questions, students will gain practical insights into the pivotal role of GIS in addressing real-world challenges. Throughout the course, students will engage in various case studies that guide them through the entire lifecycle of advanced GIS projects. From crafting an executable research design to data acquisition, analysis, and the visualization of results, participants will develop a comprehensive skill set.

**Prerequisite:** (GIT 460 Minimum Grade of C or GEO 460 Minimum Grade of C or GY 460 Minimum Grade of C)

**GIT 490 Special Topics 2-4 cr**

Geographic Information Technology topics not covered in current GIT courses. May be repeated when content varies for a maximum of 8 credit hours.

**Prerequisite:** GIT 460 Minimum Grade of C or GEO 460 Minimum Grade of C or GY 460 Minimum Grade of C

**GIT 494 Directed Studies 2-4 cr**

Geographic Information Technology topics not covered in current GIT courses. May be repeated when content varies for a maximum of 8 credit hours.

**Prerequisite:** GIT 460 Minimum Grade of C or GEO 460 Minimum Grade of C or GY 460 Minimum Grade of C

**GIT 496 Internship in GIT 1-4 cr**

On-the-job learning through occupational or professional work with an approved firm or agency. Open to geography majors only. No more than 4 hours of internship credit is allowed.

**Prerequisite:** GIT 460 Minimum Grade of C or GEO 460 Minimum Grade of C or GY 460 Minimum Grade of C

**GIT 520 Computer Applications in Earth Sciences 4 cr**

An introduction to basic Python programming, with examples and exercises pertinent to Earth Sciences and GIS applications.

**Prerequisite:** MA 112 Minimum Grade of D or MA 110 Minimum Grade of D

**GIT 542 Remote Sensing II 4 cr**

Analysis of remotely sensed digital data for detection and mapping of Earth resources. Minimum grade of "B" needed in course prerequisite. Special project required.

**Prerequisite:** (GEO 332 Minimum Grade of B or GY 332 Minimum Grade of B)

**GIT 560 Intro to GIT 4 cr**

Fundamentals of Geographic Information Systems technology, including software functionality (ArcGIS), data processing, cartography and spatial analysis. Credit for GIT 460 and GIT 560 not allowed. Special project required.

**GIT 561 Environmental GIS 4 cr**

Application of Geographic Information Systems to the studies of the natural environment. Credit for GIT 461 and GIT 561 not allowed. Special project required.

**Prerequisite:** (GIT 460 Minimum Grade of C or GIT 560 Minimum Grade of C or GEO 460 Minimum Grade of C or GY 460 Minimum Grade of C or GEO 560 Minimum Grade of C)

**GIT 562 GIT Apps II-Business/Soc Sci 4 cr**

Application of Geographic Information Systems to business and the social science. Credit for GIT 462 and GIT 562 not allowed. Special project required.

**Prerequisite:** (GIT 460 Minimum Grade of C or GEO 460 Minimum Grade of C or GY 460 Minimum Grade of C or GIT 560 Minimum Grade of C or GEO 560 Minimum Grade of C)

**GIT 563 GIS for Business and Urban Analysis 4 cr**

In GIS for Business and Urban Analysis, students will learn advanced spatial analysis methods and spatial statistics, providing a robust theoretical foundation while equipping students with hands-on proficiency in GIS (ArcGIS Pro) and geostatistical software (GeoDa) applications. Through exploration of business, public health, crime, demographic, and transportation-related research questions, students will gain practical insights into the pivotal role of GIS in addressing real-world challenges. Throughout the course, students will engage in various case studies that guide them through the entire lifecycle of advanced GIS projects. From crafting an executable research design to data acquisition, analysis, and the visualization of results, participants will develop a comprehensive skill set.

**Prerequisite:** (GIT 460 Minimum Grade of C or GIT 560 Minimum Grade of C or GEO 460 Minimum Grade of C or GY 460 Minimum Grade of C)

**GIT 590 Special Topics - 2-4 cr**

Geographic Information Technology topics not covered in current GIT courses. May be repeated when content varies for a maximum of 8 credit hours.

**Prerequisite:** GIT 460 Minimum Grade of C or GIT 560 Minimum Grade of C or GEO 460 Minimum Grade of C or GY 460 Minimum Grade of C or GEO 560 Minimum Grade of C

**GIT 594 Directed Studies 1-4 cr**

Graduate level independent study under the direction of a member of the graduate faculty. May be used to learn new techniques or to explore research questions of special interests.

## Geography (GEO) (GEO)

**GEO 101 Environmental Geography 3 cr**

Study of the Earth's environment, specifically: Weather, Climate Change, Vegetation, and Ecosystem Science with an emphasis on connections between the atmosphere, biosphere, and human influence.

**Corequisite:** GEO 101L

**GEO 101L Environmental Geography Lab 1 cr**

Laboratory exercises associated with GEO 101. GEO 101 must be taken concurrently. Together, GEO 101 and GEO 101L count as one laboratory science course, partially fulfilling general education requirements.

**Corequisite:** GEO 101

**GEO 102 Earth and the Environment 3 cr**

Study of the Earth's environment, specifically volcanoes, earthquakes, and landforms created by water, ice, and wind, emphasizing human influence on the physical environment and vice versa.

**Corequisite:** GEO 102L

**GEO 102L Earth and the Environment Lab 1 cr**

Laboratory exercises associated with GEO 102. GEO 102 must be taken concurrently. Together, GEO 102 and GEO 102L count as one laboratory science course, partially fulfilling general education requirements.

**Corequisite:** GEO 102

**GEO 114 People, Places, Environment 3 cr**

Explore human interaction and manipulation of the environment through population, economics, politics, urban development, and local cultures, emphasizing geography's spatial approach to solving societal problems.

**GEO 115 World Regional Geography 3 cr**

A survey of the major regions of the world, excluding North America, and the interrelationship of environmental, cultural, economic, and political factors that characterize each. Core Course.

**GEO 201 Geography Orientation 1 cr**

This 1-credit hour course will cover topics that are important to geography students, such as: which geography courses to choose, the major sub-disciplines of geography, and career choices available for geography majors. You will meet the Geography faculty as they give brief overviews of the courses they teach and their research interests. Field trips, which will generally take place during the class time, are included in the course and will showcase examples of the research interests of faculty members. Core Course.

**GEO 312 World Economic Geog 3 cr**

Emphasis is placed on the location, spatial distribution, and spatial interaction of economic activities within a global context. Topics covered include population, natural resources, primary, secondary and tertiary activities, development and international trade and aid. Students will write technical reports using word processing and spreadsheet software.

**Prerequisite:** GEO 114 Minimum Grade of D and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**GEO 313 Geography of U.S. and Canada 3 cr**

An analysis of the environmental, historical, cultural, and economic factors that create the spatial patterns, development processes and distinctiveness of Canada and the United States.

**GEO 314 Geography of Europe 3 cr**

An analysis of the environmental, historical, social and economic factors that create the diversity of countries and their unique spatial characteristics on the subcontinent of Europe.

**GEO 315 Geography of Latin America 3 cr**

A systematic survey of Latin America landscapes. Attention is directed to natural resources, human activities and regional differentiation.

**Prerequisite:** GEO 101 Minimum Grade of D or GEO 102 Minimum Grade of D or GEO 114 Minimum Grade of D or GEO 115 Minimum Grade of D

**GEO 320 Alabama Geography 3 cr**

Spatial study of physical and human features in Alabama. Includes geomorphology, climate, vegetation, agriculture, development, population, and environmental issues within the state.

**Prerequisite:** (GEO 101 Minimum Grade of D or GEO 102 Minimum Grade of D or GEO 114 Minimum Grade of D or GEO 115 Minimum Grade of D) and (EH 102 Minimum Grade of D or EH 105 Minimum Grade of D)

**GEO 321 Nat'l Parks Conservation 3 cr**

An analysis of the motives and processes for establishing national parks and nature reserves, the primary conservation and preservation issues they have and the influences of ecology, politics, and culture on their planning and management. U.S. national parks are emphasized.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (GEO 101 Minimum Grade of D or GEO 102 Minimum Grade of D or GEO 114 Minimum Grade of D or GEO 115 Minimum Grade of D)

**GEO 331 Computer Graphs and Maps 4 cr**

Introductory review of the application of computers to the production of graphs and thematic maps for geographical analysis. Core course. Meets computer proficiency requirement for Geography majors.

**GEO 332 Remote Sensing I 4 cr**

Interpretation of maps, air photos and satellite images (identical to GY 332). Core course.

**Cross-Listed:** GY 332

**GEO 342 Severe Weather 3 cr**

A study of the cause, structure and impact of tornadoes, hurricanes, thunderstorms, and severe weather systems (Identical to MET 342). Prerequisite: GEO 353 or MET 353. Minimum grade of 'C' needed in course prerequisite.

**Prerequisite:** (GEO 353 Minimum Grade of C or MET 353 Minimum Grade of C)

**Cross-Listed:** MET 342

**GEO 353 General Meteorology 4 cr**

An overall view of the field of meteorology for science majors and minors. This course uses a quantitative approach to study the composition of the atmosphere, atmospheric processes, global circulation, and storm development (identical to MET 353). Prerequisites: MET 140, MET 140L, and MA 112. Minimum grade of 'C' needed in course prerequisites.

**Prerequisite:** (MA 112 Minimum Grade of C or MA 171 Minimum Grade of C) or (MA 113 Minimum Grade of C or MA 172 Minimum Grade of C) or (MA 125 Minimum Grade of C or MA 132 Minimum Grade of C) and (MET 140 Minimum Grade of C and MET 140L Minimum Grade of C)

**Cross-Listed:** MET 353

**GEO 353L General Meteorology Lab 1 cr**

Laboratory exercises associated with GEO 353. Particular attention is given to hands-on weather analysis of meteorological charts.

**Corequisite:** GEO 353

**Cross-Listed:** MET 353L

**GEO 365 Urban Geography and Planning 3 cr**

Concentrates upon the evolution and function of the urban spatial system, and upon the internal spatial structure of an urban area's residential, commercial, and industrial land use. This course also introduces basic concepts and strategies of urban and regional planning with a focus on the domestic realm.

**Prerequisite:** GEO 114 Minimum Grade of D or GEO 115 Minimum Grade of D

**GEO 370 International Tourism 3 cr**

The study of the components of the Tourism industry, their spatial distribution, the environmental and cultural effects of Tourism, and the requisites and techniques for planning tourism development.

**Prerequisite:** (GEO 101 Minimum Grade of D or GEO 102 Minimum Grade of D or GEO 114 Minimum Grade of D or GEO 115 Minimum Grade of D)

**GEO 381 Cultural Geography 3 cr**

Study of the development and differentiation of cultural landscapes and the economic, political, technological, and cultural processes that shape them. Prerequisite: GEO 114 or GEO 115.

**Prerequisite:** (GEO 113 Minimum Grade of D or GEO 115 Minimum Grade of D) or GEO 114 Minimum Grade of D

**GEO 404 Geography of Alcohol 3 cr**

By synthesizing ideas considered in lectures, readings, discussions with industry experts, and through practical lab experiments, students will learn about the historical, political, economic, and environmental footprint of the global alcohol industry and its place in society.

**Prerequisite:** (GEO 101 Minimum Grade of C or GEO 102 Minimum Grade of C or GEO 114 Minimum Grade of C or GEO 115 Minimum Grade of C)

**GEO 405 Natural Hazards and Disasters 3 cr**

An overview of natural hazards and disasters from a scientific perspective that focuses on the occurrence and impact of environmental hazards, such as volcanoes, earthquakes, tsunamis, floods, mass movements, and coastal hazards. Mitigation techniques used to make the human environment more resilient against natural hazards are also covered. In addition, the viewpoint of hazard and emergency managers toward natural disasters will be studied.

**Prerequisite:** GEO 102 Minimum Grade of C or (GY 101 Minimum Grade of C or GY 111 Minimum Grade of C)

**GEO 409 Environmental Earth Sciences 3 cr**

This course studies environmental problems and issues from an Earth Systems Science perspective. The class will review and discuss past, present, and future environmental issues while addressing one or more of the competencies in sustainability. The topics for the course include energy and mineral resources, atmospheric and water pollution, climate change, and water resources (identical to GY 409).

**Prerequisite:** GEO 101 or GEO 102 or GY 111 or GY 112

**GEO 410 Biogeography 3 cr**

Analysis of spatial patterns of life on earth. Biogeography emphasizes the influence of the physical environment, paleogeography, and past and possible future climate change on the biomes and biogeographic realms.

**Prerequisite:** GEO 101 Minimum Grade of D

**GEO 411 Soils 3 cr**

A review of soil formation, processes and properties (identical to GY 411).

**Prerequisite:** GEO 102 Minimum Grade of D

**Cross-Listed:** GY 411

**GEO 414 Urban Geography & Planning 3 cr**

Concentrates upon the evolution and function of the urban spatial system, and upon the internal spatial structure of an urban area's residential, commercial, and industrial land use. This course also introduces basic concepts and strategies of urban and regional planning with a focus on the domestic realm.

**Prerequisite:** (GEO 114 Minimum Grade of D or GEO 115 Minimum Grade of D)

**Cross-Listed:** GEO 365

**GEO 417 Health and Place 3 cr**

This course illustrates how geographic concepts help us better understand health and well-being, through the exploration of theories, methodologies, and contributions of medical geography to the social and health sciences. Using spatial tools, such as mapping and Geographic Information Systems, this course will examine the geographical patterns of health and disease. This course encourages students to examine the theoretical and technological tools geography brings to topics related to health and provides them with a foundation for studying geographic differences in health and health services.

**Prerequisite:** EH 102 Minimum Grade of C

**GEO 420 Geostatistics 3 cr**

Applied bivariate and multivariate statistics to problems in Geography, Geology, and Meteorology; parametric and non-parametric procedures in correlation, regression, analysis of variance, etc. Time series analysis, trend surface analysis, and kriging and analysis of spatial (map) data. Identical to GY 420.

**Prerequisite:** ((GY 111 Minimum Grade of C and GY 111L Minimum Grade of C) or GY 101 Minimum Grade of C) or ((GY 112 Minimum Grade of C and GY 112L Minimum Grade of C) or GY 103 Minimum Grade of C) and (MA 112 Minimum Grade of C or MA 171 Minimum Grade of C) or (ST 210 Minimum Grade of C or ST 175 Minimum Grade of C)

**Cross-Listed:** GY 420

**GEO 435 Research Methods Geography 3 cr**

This course serves as an introduction to geography as a research discipline. Emphasis is placed on geographic problem solving, data collection, data analysis, and reporting. Micro computer oriented statistical and mapping packages will be used to analyze geographic data. Prerequisites: Junior standing. Core course.

**Prerequisite:** ST 210 (may be taken concurrently) Minimum Grade of D

**GEO 440 Coastal Zone Management 2 cr**

A review of ecological features and of management policies for coastal communities with a description of relevant federal and state programs. Taught only at Dauphin Island Sea Lab.

**GEO 441 Coastal Climatology 2 cr**

Study of the controlling factors and features of the world's climates, with particular attention to coastal areas, and application and interpretation of climate data. Taught only at Dauphin Island Sea Lab.

**GEO 442 Remote Sensing II 4 cr**

Analysis of remotely sensed digital data for detection and mapping of earth resources (identical to GY 442). Prerequisite: GEO 332 or GY 332. Minimum grade of 'B' needed in course prerequisite.

**Prerequisite:** GEO 332 Minimum Grade of B or GY 332 Minimum Grade of B

**Cross-Listed:** GY 442

**GEO 443 Climatology-W 3 cr**

Analysis of global climate as aggregate weather. Component elements, factors controlling distribution, resulting area patterns, and climatic classification are studied (identical to MET 443). Fee

**Prerequisite:** MET 140 Minimum Grade of C or GEO 101 Minimum Grade of C

**Cross-Listed:** MET 443

**GEO 460 Introduction to GIS 4 cr**

Fundamentals of Geographic Information Systems technology, including software functionality (ArcGIS), data processing, cartography and spatial analysis (identical to GY 460.) Prerequisite: CIS 150 with a grade of B or better or passing the computer proficiency exam.

**Prerequisite:** CIS P or CIS 150 Minimum Grade of B

**Cross-Listed:** GY 460

**GEO 461 GIS Apps I-Environment 4 cr**

Application of Geographic Information Systems to studies of the natural environment (identical to GY 461). Permission Prerequisite: GEO 460 or GY 460 or permission of instructor. Minimum grade of 'B' needed in course prerequisite. Fee

**Prerequisite:** GEO 460 Minimum Grade of B or GY 460 Minimum Grade of B

**Cross-Listed:** GY 461

**GEO 462 GIS Apps II-Business/Social Sc 4 cr**

Application of Geographic Information Systems to Business and the Social Sciences. Prerequisite: GEO 460 or GY 460 or permission of instructor. Minimum grade of 'B' needed in course prerequisite.

**Prerequisite:** GEO 460 Minimum Grade of B or GY 460 Minimum Grade of B

**GEO 475 Field Work in Geography 1-6 cr**

Students will travel to pre-determined location to perform field work for a project that was pre-determined by the professor and student. Once in the field, students will gather data and learn about the landscape(s).

**Prerequisite:** EH 102 Minimum Grade of D

**GEO 485 Seminar Geographic Thought - W 3 cr**

This course serves as the capstone course for geography majors in which students integrate their knowledge of human and physical geography, as well as the geographic techniques, to investigate real-world problems with a spatial component. Students gain experience in working in small groups and in written and oral presentation of project results. Students will also lead discussions on key or pertinent research articles in geography. Taught Spring only.

**Prerequisite:** GEO 435 (may be taken concurrently) and GEO 331 and GEO 332 (may be taken concurrently)

**GEO 490 Special Topics 2-4 cr**

Geographic topics not covered in current geography courses. May be repeated when content varies for a maximum of 8 credit hours.

**GEO 492 Seminar - 1-3 cr**

Departmental seminar investigating a selected field of geography. May be repeated when content varies for a maximum of 3 credit hours.

**GEO 494 Directed Studies 1-4 cr**

Independent research under the direction of a member of the geography faculty. No more than 8 hours of Directed Studies is allowed.

**GEO 496 Internship in Geography 1-4 cr**

On-the-job learning through occupational or professional work with an approved firm or agency. Open to geography majors only. No more than 4 hours of Internship credit is allowed.

**GEO 542 Remote Sensing II 4 cr**

Analysis of remotely sensed digital data for detection and mapping of earth resources. Credit for both GEO 442 or GY 442 and GEO 542 is not allowed. Prerequisite: GEO 332 or GY 332. Special project required.

**Prerequisite:** GEO 332 Minimum Grade of B or GY 332 Minimum Grade of B

**Cross-Listed:** GEO 442, GY 442

**GEO 560 Introduction to GIS 4 cr**

Fundamentals of Geographic Information Systems technology, including software functionality (ArcGIS), data processing, cartography and spatial analysis. Credit for both GEO 460 or GY 460 and GEO 560 is not allowed. Prerequisite: CIS 150 with a grade of 'B' or better or computer proficiency exam. Special project required.

**Prerequisite:** CIS 150 Minimum Grade of B or CIS P

**Cross-Listed:** GEO 460, GY 460

**GEO 561 GIS Apps I-Environment-C 4 cr**

Application of Geographic Information Systems to studies of the natural environment. Credit for both GEO 461 or GY 461 and GEO 561 is not allowed. Prerequisite: GEO 560 or GEO 460 or GY 460 with a grade of 'B' or better or permission of instructor. Special project required.

**Prerequisite:** GEO 560 Minimum Grade of B or GEO 460 Minimum Grade of B or GY 460 Minimum Grade of B

**Cross-Listed:** GEO 461, GY 461

**GEO 562 GIS Apps II-Business/Social 4 cr**

Application of Geographic Information Systems to Business and the Social Sciences. Credit for both GEO 462 and GEO 562 is not allowed. Prerequisite: GEO 560 or GEO 460 or GY 460 with a grade of 'B' or better or permission of instructor. Special project required.

**Prerequisite:** GEO 560 Minimum Grade of B or GEO 460 Minimum Grade of B or GY 460 Minimum Grade of B

**Cross-Listed:** GEO 462

**GEO 590 Sp Top - 1-6 cr**

An in-depth course for advanced students in geography. Topics and titles will be selected to examine the subject matter in an area of current interest to students and in an area of particular faculty expertise. Includes specialized topics not currently listed in the Bulletin course offerings.

**GEO 594 Grad Dir Study in Geography- 1-4 cr**

Independent research in Geography at the graduate level. May be used to learn new techniques or explore research questions of special interest under the direction of a member of the Geography graduate faculty.

## Geology (GY) (GY)

**GY 111 Physical Geology 3 cr**

Materials that make up the Earth as well as the properties and geological processes that operate in the Earth. Special topics include plate tectonics, mineral chemistry, the rock cycle, sedimentary processes, metamorphism and geological map reading. Core course.

**Corequisite:** GY 111L

**GY 111L Physical Geology Lab 1 cr**

Laboratory course for Physical Geology.

**Corequisite:** GY 111

**GY 112 Earth History 3 cr**

The origin and history of the earth as seen in the rocks and their contained life record. Core Course.

**Corequisite:** GY 112L

**GY 112L Earth History Lab 1 cr**

Laboratory course for Earth History.

**Prerequisite:** GY 111 Minimum Grade of D and GY 111L Minimum Grade of D

**Corequisite:** GY 112

**GY 113 Honors Geoscience Field - H 3 cr**

A two-week field course emphasizing the recognition and understanding of geologic processes in the field environment. The course is based in the Taos Ski Valley, New Mexico, with field trips ranging across northern New Mexico and southern Colorado during the interim session.

**Prerequisite:** ((GY 101 Minimum Grade of D or (GY 111 Minimum Grade of D and GY 111L Minimum Grade of S) and ((GY 103 Minimum Grade of D or (GY 112 Minimum Grade of D and GY 112L Minimum Grade of S))

**GY 301 Geomorphology 3 cr**

Principles of landform development as it relates to specific processes (fluvial erosion, glacial erosion, etc.), construction of topographic base maps with Alidade/Total Station, GPS navigation and surveying, and rock/mineral resource evaluation.

**Prerequisite:** (GY 101 Minimum Grade of D or GY 111 Minimum Grade of D)

**GY 302 Crystallography and Mineralogy 4 cr**

Introduction to elementary crystallography, crystal chemistry, and atomic structure of minerals, as well as the identification, characterization and use of common rock-forming minerals and important ore minerals.

**Prerequisite:** (GY 101 Minimum Grade of D or (GY 111 Minimum Grade of D and GY 111L Minimum Grade of D)) and (GY 103 Minimum Grade of D or (GY 112 Minimum Grade of D and GY 112L Minimum Grade of D)) and (CH 131 (may be taken concurrently) Minimum Grade of D or CH 115 Minimum Grade of D)

**GY 303 Igneous & Meta Petrology 4 cr**

The study of the formation and classification of igneous and metamorphic rocks.

**Prerequisite:** (GY 101 Minimum Grade of D or GY 111 Minimum Grade of D) and (GY 232 Minimum Grade of D or GY 302 Minimum Grade of D or GY 342 Minimum Grade of D)

**GY 304 Stratigraphy - W 3 cr**

The development of the stratigraphic column; correlation and field procedures.

**Prerequisite:** (EH 102 (may be taken concurrently) Minimum Grade of C or EH 105 Minimum Grade of C) and (GY 103 Minimum Grade of D or GY 112 Minimum Grade of D)

**GY 305 Geophysics 4 cr**

Application of classical physics to the study of the Earth and the solution of problems in Earth sciences, including analysis of seismic refraction and reflection surveys, earthquakes, gravity and magnetic fields, and electrical geophysical surveys.

**Prerequisite:** GY 111 Minimum Grade of D and GY 301 Minimum Grade of D

**GY 306 Sedimentology & Stratigraphy-W 4 cr**

Study the principles pertaining to the description and classification of sedimentary rocks, with emphasis on sedimentary processes and depositional environments.

**Prerequisite:** GY 111 Minimum Grade of D and GY 111L Minimum Grade of D and GY 112 Minimum Grade of D and EH 102 Minimum Grade of C or EH 105 Minimum Grade of C

**Cross-Listed:** GY 344, GY 402

**GY 310 Environmental Earth Science 3 cr**

A spatial perspective on major global environmental problems. Topics include population pressure, loss of biodiversity, ozone depletion, global warming, water, energy and mineral resources, food supplies, waste disposal, geological hazards and political/economic forces (identical to GEO 310).

**Prerequisite:** GY 111 Minimum Grade of D or GEO 101 Minimum Grade of D or GEO 102 Minimum Grade of D

**Cross-Listed:** GEO 310

**GY 332 Remote Sensing I 4 cr**

Interpretation of maps, air photos and satellite images (identical to GEO 332).

**Prerequisite:** GEO 102 (may be taken concurrently) Minimum Grade of C and GEO 102L (may be taken concurrently) Minimum Grade of C and GY 301 Minimum Grade of C

**Cross-Listed:** GEO 332

**GY 401 Paleontology - W 4 cr**

Evolutionary, ecological, and environmental processes from the study of marine invertebrate fossil groups.

**Prerequisite:** (EH 102 Minimum Grade of C) and (GY 111 Minimum Grade of D) or (GY 112 Minimum Grade of D and GY 112L Minimum Grade of D)

**GY 403 Structural Geology 4 cr**

Study of the deformation of the internal Earth and the structures that result.

**Prerequisite:** (GY 101 Minimum Grade of D or GY 111 Minimum Grade of D) and (GY 301 Minimum Grade of D or GY 325 Minimum Grade of D) and ((PH 112 Minimum Grade of D or PH 114 Minimum Grade of D) or (PH 201 Minimum Grade of D or PH 216 Minimum Grade of D))

**GY 409 Environmental Earth Sciences 3 cr**

This course studies environmental problems and issues from an Earth Systems Science perspective. The class will review and discuss past, present, and future environmental issues while addressing one or more of the competencies in sustainability. The topics for the course include energy and mineral resources, atmospheric and water pollution, climate change, and water resources (identical to GY 409).

**Prerequisite:** GEO 101 or GEO 102 or GY 111 or GY 112

**GY 411 Soils 3 cr**

A review of soil formation, processes and properties (identical to GEO 411).

**Prerequisite:** (GEO 102 Minimum Grade of D and GEO 102L Minimum Grade of D and GY 301 Minimum Grade of D)

**Cross-Listed:** GEO 411

**GY 413 Coastal Geomorphology 2 cr**

An introduction to coastal sediment processes and their applied coastal geomorphology with emphasis on waves, tides, sediments, and their interactions including the impacts of anthropogenic influences. Taught only at Dauphin Island Sea Lab.

**GY 420 Geostatistics 3 cr**

Applied bivariate and multivariate statistics to problems in Geography, Geology, and Meteorology; parametric and non-parametric procedures in correlation, regression, analysis of variance, etc. Time series analysis, trend surface analysis, kriging and analysis of spatial (map) data. Identical to GEO 420.

**Prerequisite:** (GY 111 Minimum Grade of C and GY 112 Minimum Grade of C) and (MA 112 Minimum Grade of C or ST 210 Minimum Grade of C)

**Cross-Listed:** GEO 420, GY 520

**GY 421 Applied Environ Geology - W 3 cr**

A geological applications course designed to familiarize students with techniques used by environmental and engineering geologists in their studies of land use, land development and assessment of geological hazards. Material is illustrated with case studies from the Mobile area.

**Prerequisite:** (GY 101 Minimum Grade of D or GY 111 Minimum Grade of D) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**GY 422 Sedimentary Geology 3 cr**

A course examining sedimentation with emphasis on environments of deposition, sea-level and other controls on sedimentation in the rock record, and petroleum exploration. Credit for both GY 422 and GY 522 will not be allowed.

**Prerequisite:** (GY 101 Minimum Grade of D or GY 111 Minimum Grade of D) and (GY 103 Minimum Grade of D or GY 112 Minimum Grade of D)

**GY 425 Hydrology 4 cr**

Principles of sources, occurrences, and movement of groundwater. Surface and subsurface investigations of groundwater and elementary groundwater hydrology and chemistry. Credit for both GY 425 and GY 525 will not be allowed.

**GY 426 Contaminant Hydrogeology 3 cr**

Flow systems, mass transport in the vadose and saturated zones; advection and dispersion; transformation, retardation and attenuation of solutes; low temperature geochemical processes and kinetics of chemical reactions; contaminant modeling using finite difference-finite element methods. Credit for both GY 426 and GY 526 will not be allowed.

**Prerequisite:** (GY 425 Minimum Grade of D or GY 475 Minimum Grade of D)

**GY 431 Optical Mineralogy-Crystallogr 4 cr**

Theory and use of the petrographic microscope in the recognition and identification of crystallographic and optical properties in non-opaque minerals.

**Prerequisite:** (GY 232 Minimum Grade of D or GY 302 Minimum Grade of D or GY 342 Minimum Grade of D)

**GY 433 X-Ray Analytical Methods 4 cr**

Theory and use of x-ray diffraction systems as applied to crystallography, mineralogy, chemistry, and metallurgy.

**Prerequisite:** GY 302 Minimum Grade of D

**Cross-Listed:** GY 533

**GY 442 Remote Sensing II 4 cr**

Analysis of remotely sensed digital data for detection and mapping of Earth resources (identical to GEO 442). Prerequisite: GY 332 or GEO 332. Minimum grade of 'B' needed in course prerequisite.

**Prerequisite:** GEO 332 Minimum Grade of B or GY 332 Minimum Grade of B

**Cross-Listed:** GEO 442

**GY 446 Marine Geology 4 cr**

A study of the geology of the ocean basins, with special emphasis on the continental shelves, their sediments, and sedimentary processes at work there.

**Prerequisite:** (GY 101 Minimum Grade of D or GY 111 Minimum Grade of D) and (GY 103 Minimum Grade of D or GY 112 Minimum Grade of D)

**GY 450 Thin-Section Techniques 1 cr**

A laboratory based course illustrating techniques employed by geologists to prepare thin-sections from geological materials. Students will produce thin-sections and write up reports detailing the petrography of the samples examined.

**Prerequisite:** (GY 232 Minimum Grade of D or GY 302 Minimum Grade of D or GY 342 Minimum Grade of D) and (GY 233 Minimum Grade of D or GY 303 Minimum Grade of D or GY 343 Minimum Grade of D) and (GY 344 Minimum Grade of D or GY 402 (may be taken concurrently) Minimum Grade of D)

**GY 460 Introduction to GIS 4 cr**

Fundamentals of Geographic Information Systems technology, including software functionality (ArcGIS), data processing, cartography and spatial analysis (identical to GEO 460). **Prerequisite:** CIS 150 with a grade of B or better or passing the computer proficiency exam.

**Prerequisite:** CIS P or CIS 150 Minimum Grade of B

**Cross-Listed:** GEO 460

**GY 461 GIS Apps I-Environment 4 cr**

Application of Geographic Information Systems to studies of the natural environment (identical to GEO 461). **Prerequisite:** GY 460 or GEO 460 or permission of instructor. Minimum grade of 'B' needed in course prerequisite.

**Prerequisite:** GEO 460 Minimum Grade of B or GY 460 Minimum Grade of B

**Cross-Listed:** GEO 461

**GY 480 Field Geology 6 cr**

A six-week, summer field course on the methods of geologic surveying, the nature and construction of geologic maps and cross-sections, measurements of stratigraphic sections and preparation of geologic reports. This course serves as a capstone class for geology majors.

**Prerequisite:** (GY 303 Minimum Grade of D and GY 403 Minimum Grade of D and GY 402 Minimum Grade of D and HS 170 Minimum Grade of P)

**GY 490 Special Topics 1-4 cr**

Geological topics not covered in current geology courses. **Prerequisite:** Junior or Senior standing.

**GY 492 Seminar - 1-3 cr**

Departmental seminar investigating a selected field of geology (topic announced prior to registration). May be repeated when content varies for a maximum of 3 credits

**GY 494 Directed Studies 1-4 cr**

Independent research in the field or laboratory under the direction of a member of the Geology faculty. Students must have an acceptable project approved before registering for this course. **Prerequisite:** Permission of the Chair, Junior or Senior standing. No more than 8 hours of directed study is allowed.

**GY 496 Internship in Geology 1-3 cr**

On-the-job training through occupational or professional work through an approved geological organization. Only open to geology majors. **Prerequisite:** Permission of chair; Junior or Senior standing. No more than 3 hours of internship is allowed.

**GY 520 Geostatistics 4 cr**

Applied bivariate and multivariate statistics to problems in Geography, Geology, and Meteorology; parametric and non-parametric procedures in correlation, regression, analysis of variance, etc. Time series analysis, trend surface analysis, kriging and analysis of spatial (map) data. Identical to GEO/GY 420. Credit for both GY 420 and GY 520 will not be allowed.

**Prerequisite:** (ST 175 Minimum Grade of B or ST 210 Minimum Grade of B) or (MA 125 Minimum Grade of C or MA 132 Minimum Grade of C)

**Cross-Listed:** GEO 420, GY 420

**GY 531 Optical Mineralogy-Crystallogr 4 cr**

Theory and use of the petrographic microscope in the recognition and identification of crystallographic and optical properties in non-opaque minerals. Graduate credit will require an additional project specified by the instructor. Credit for both GY 431 and GY 531 will not be allowed.

**Prerequisite:** (GY 232 Minimum Grade of D or GY 302 Minimum Grade of D or GY 342 Minimum Grade of D)

**GY 533 X-Ray Analytical Methods 4 cr**

Theory and use of x-ray diffraction systems as applied to crystallography, mineralogy, chemistry, and metallurgy.

**Prerequisite:** (GY 231 Minimum Grade of D or GY 341 Minimum Grade of D)

**Cross-Listed:** GY 433

**GY 543 Sel Appls in Remote Sensing 3 cr**

Critical assessment of selected remote sensing applications in earth science. Application subject designation prior to registration. Graduate credit will require an additional project specified by the instructor. Credit for both 443 and 543 will not be allowed.

**Prerequisite:** GY 332 Minimum Grade of D or GEO 332 Minimum Grade of D

**Cross-Listed:** GY 442

**GY 544 Sedimentary Geology 3 cr**

A study examining sedimentation with emphasis on environments of deposition, sea-level and other controls on sedimentation in the rock record, and petroleum exploration. Credit for both GY 444 and GY 544 will not be allowed.

**Prerequisite:** MAS 603 Minimum Grade of C or GY 344 Minimum Grade of D

**Cross-Listed:** GY 444

**GY 575 Hydrology 4 cr**

Principles of sources, occurrences, and movement of ground water. Surface and sub-surface investigations of ground water and elementary ground water hydrology and chemistry.

**Prerequisite:** (GY 232 Minimum Grade of D or GY 342 Minimum Grade of D)

**Cross-Listed:** GY 475

**GY 576 Contaminant Hydrogeology 4 cr**

Flow systems, mass transport in the vadose and saturated zones; advection and dispersion; transformation, retardation and attenuation of solutes; low temperature geochemical processes and kinetics of chemical reactions; contaminant modeling using finite difference-finite element methods. Credit for both GY 426 and GY 576 will not be allowed.

**Prerequisite:** GY 425 Minimum Grade of D or GY 475 Minimum Grade of D or GY 575 Minimum Grade of D

**Cross-Listed:** GY 476

**GY 590 Sp Top - 1-6 cr**

An in-depth course for advanced students in geology. Topics and titles will be selected to examine the subject matter in an area of current interest to students and in an area of particular faculty expertise. To include specializing topics not currently listed in Bulletin course offerings.

**GY 592 Seminar - 1-6 cr**

Students and faculty meet weekly in an interactive discussion of current literature in geological sciences. The focus will be on 'state of the art' theories and methodologies as they occur in the primary literature. Student presentation is required to receive credit.

**GY 594 Directed Research 1-6 cr**

Independent research under the direction of a member of the graduate faculty. May be used to learn new techniques or to explore research questions of special interest. A maximum of 6 hours may be earned for this course.

## Gerontology (GRN) (GRN)

**GRN 272 Gender and Aging 3 cr**

This course examines the dynamics of gender and aging within society from an interdisciplinary perspective. Students will be introduced to controversies in gender over the life course. These include, but are not limited to, definitions and cultural boundaries, gender in childhood, gender and relationships, gender in education and the workplace, gender and sexuality, as well as gender in late life.

**GRN 290 Special Topics - 3 cr**

This designation is used for interdisciplinary courses on aging on a variety of subjects. This course does not replace any course in a single discipline. May be repeated as long as the topic changes, to maximum of six semester hours.

**GRN 435 Health Disparities Life Span 3 cr**

This course examines differences in health status across the life span. The course will focus heavily on racial/ethnic and socioeconomic disparities in health applying a social determinants' of health framework. Issues that will be considered include how income, education, neighborhood conditions, access to health care, and other community factors shape opportunities to be healthy. The course is cross-listed as SY 435 and GRN 435 and has been approved as an elective for the Undergraduate Certificate in Gerontology and the interdisciplinary minor in Gerontology.

**Prerequisite:** SY 109 Minimum Grade of D

**Cross-Listed:** SY 435

**GRN 490 Special Topics 3 cr**

This course is designated for upper division students and graduate students, particularly those pursuing studies for the Certificate of Gerontology. The course content focuses on interdisciplinary treatments on various topics on aging. This course does not replace any course in a single discipline. (Examples of special topics: Trends and Issues in Gerontology; Leadership and Advocacy in Gerontology; Housing and Lifestyle Changes over the Life Course). May be repeated as long as the topic changes, to maximum of six semester hours.

**Prerequisite:** SY 372 Minimum Grade of D

**GRN 494 Directed Studies 1-3 cr**

Under the guidance of a faculty member, the student will pursue directed research on readings of an approved topic in Gerontology. May be repeated as long as the topic changes, to a maximum of six semester hours. Requires permission of Director of Gerontology.

**Prerequisite:** SY 372 Minimum Grade of D

**GRN 496 Internship - Gerontology 3,6 cr**

This course is to provide a practicum experience in gerontology in a setting selected by the student and approved by the Program Director. The course emphasis is on the experiential learning process and outcomes. The undergraduate student will apply theoretical concepts in specific areas of interest related to aging and intergenerational relations. Interns will meet as a group three times during the semester for orientation, professional development, and evaluation activities. The 3-hour internship requires 100 contact hours; the 6-hour internship requires 200 hours. Permission of Director of Gerontology is required.

**Prerequisite:** SY 372 Minimum Grade of C

**GRN 535 Health Disparities Life Span 3 cr**

The main purpose of this seminar is to provide students with an understanding of how social factors contribute to racial/ethnic, socioeconomic and gender disparities in health and health care. We will examine how dyadic relationships such as interpersonal forms of discrimination, marriage, and social ties may contribute to health disparities. We will also examine the ways in which neighborhood and community context, as well as inequalities in socioeconomic status materially shape health and access to health care services. The course is cross-listed as GRN 435/535 and SY 435/535 and has been approved as an elective for the Undergraduate/Graduate Certificate in Gerontology and the interdisciplinary minor in Gerontology.

**Cross-Listed:** SY 535

**GRN 594 Dir St in Gerontology - 1-3 cr**

Under the guidance of a faculty member, the student will pursue directed research or readings of an approved topic in Gerontology. May be repeated as long as the topic changes, to maximum of six credit hours. Requires permission of the Director of Gerontology.

**GRN 596 Internship - Gerontology 3,6 cr**

This course is to provide a practicum experience in gerontology in a setting selected by the student and approved by the Program Director. The course emphasis is on the experiential learning process and outcomes. The graduate student will apply theoretical concepts to leadership roles, conducting research and influencing social and health care policies related to aging and intergenerational relationships. Interns will meet as a group three times during the semester for orientation, professional development, and evaluation activities. The 3-hour internship requires 100 contact hours; the 6-hour internship requires 200 hours. Permission of Director of Gerontology is required.

**Prerequisite:** SY 523 Minimum Grade of B

**GRN 597 GRN Teaching Apprenticeship 1-3 cr**

Directed Studies/Apprenticeship that focuses on teaching Gerontology. The student will work directly with a member of the Gerontology graduate faculty to learn pedagogy, innovation in teaching, and course content that will equip the student for future teaching assignments. Many PhD programs offer both Teaching Assistantships and Research Assistantships. Gerontology students need to show evidence that they have had some teaching-related experience to compete strongly for the TA position. This course is also appropriate for students who anticipate careers in teaching within the field of Gerontology (aging or intergenerational studies). Arrangements must be made prior to registration. Permission of the Program Director is required.

**Prerequisite:** SY 372 Minimum Grade of C

## Grad Interdiscpl Studies (GIS) (GIS)

### GIS 501 Responsible Conduct of Research 1 cr

This course is designed to expose future professionals to a variety of topics concerning Responsible Conduct in Research including issues concerning Research Integrity as well as standards and policies affecting research and life in Academia. The weekly sessions include lectures, open discussions, and analyses of case studies.

### GIS 502 Innovation in Technology Commercialization: I-Corps 3 cr

This course will teach the National Science Foundation I-Corps curriculum of Lean Launch and Business Model canvas. It delivers best practices for innovative, team-based entrepreneurship in a semester-long format that provides real-world, hands-on learning experiences in how to successfully transfer knowledge into products and processes that benefit society. Significant time will be devoted outside the classroom to testing hypotheses on each part of the team's business hypothesis and potential customers and partners. Typically, graduates of this curriculum increase their chance of winning a grant from 17% to 60%, a greater than three-fold increase in the odds of success.

### GIS 503 Fundamentals in Teaching 0 cr

How do you know if your students 'got it'? What instructional strategies help students to 'get it'? In this course, you'll be introduced to the science of learning and instructional fundamentals for the college or university classroom. Application of evidence-based learning theory, instructional strategies, and inclusive pedagogies will be explored. Through readings, reflections, and micro-teach assignments, students in this course will explore the role of metacognition, motivation, assessment, and feedback in teaching. Upon successful completion of this course, students will be able to design, develop, and deliver an effective lesson in a college class. The course consists of three phases and it is informed by the following framework: 1. Theory 2. Practice 3. Reflection The first phase, which is geared towards informing the learners with theoretical knowledge about the science of learning, consists of six modules and it is self-paced. The second phase is of a practical nature, where the learners would have the opportunity to practice the theoretical knowledge that they gained in the first phase. Finally, the third phase is discussion-based. It aims at providing the learners with the space to reflect upon their FIT journey. After exposing the learners to the various learning theories and allowing them to bring them into practice, they are encouraged to reflect and share their experiences with their fellow learners in a discussion setting. Below you can find the course outline along with the learning assessment plan.

### GIS 504 Fundamentals in Teaching Part 2: Course Design and Assessment 0 cr

Part two of the Certificate of College and University Teaching, learners in this course will create a clear and consistent module and assessment design that encourages student engagement with the content, students, and instructor regardless of how the course is delivered. Moving beyond the fundamentals of teaching to explore student engagement practices, transparent assessment design, and strategies to develop a course that respects and celebrates diverse talents and ways of learning to promote a sense of belonging, cultivate curiosity and build a community of learners. Upon successful completion of this course, students will be able to design, deliver, and assess an effective lesson, module, and ultimately a full course.

**Prerequisite:** (GIS 503 Minimum Grade of P)

### GIS 596 Graduate Internship 1-3 cr

GIS graduate internship is designed to provide students practical experience in a discipline specific setting. See program for the number of hours that may be counted towards a degree. Requires permission of the program internship director.

### GIS 799 Dissertation 1-6 cr

An investigation of an original problem related to Chemical and Biomolecular Engineering conducted under the guidance of the student's Ph.D. research advisor. Requires approval of the student's research advisor.

## Health and Safety (HS) (HS)

### HS 170 First Aid 1 cr

The scope, needs, and limitations of first aid with laboratory training in the techniques and methods of injury care. Opportunity for American Red Cross or American Heart Association first aid and CPR certification.

### HS 262 Personal Health 3 cr

Current health issues as related to the individual with emphasis on sociological, psychological, and economic factors.

### HS 340 Health in the Sec Classroom 3 cr

A study of instructional practice and application in the secondary health classroom. Pre-requisite: Admission to teacher candidacy required.

**Corequisite:** HS 430

### HS 351 Safety Education 3 cr

Traffic safety and safety at home, work, school, and play. Organization of safety education programs in the school and community. Methods and materials for teaching safety.

### HS 352 Traffic Safety Education 3 cr

A survey of the highway transportation system and traffic problems designed to give the driver education teacher an opportunity to develop an understanding of the scope and background of the various agencies and systems involved in the management of vehicular traffic at the national, state, and local level.

### HS 353 Driver Education I 3 cr

History, principles, problems and the inventory of skills in driver education.

### HS 361 School Comm Health-Impl Curric 3 cr

Contemporary school health and public health issues. Epidemiological concepts and methods. Governmental and volunteer health agencies. Curriculum development based on epidemiological data. Incorporates reading into the curriculum.

### HS 362 Drug Education 3 cr

A survey of substance abuse issues. Attention is given to specific drug classifications, use and abuse patterns, prevention, treatment, and future implications.

### HS 365 HPE Curr/Methods-Elem Teachers 3 cr

The development and implementation of appropriate health and physical education curriculum for elementary teachers. Content knowledge and the application of methodological and assessment strategies are adapted for appropriate learning environments.

### HS 429 School Lab Experiences-Health 3 cr

Professional laboratory observation and participation in health settings at local public schools. Prerequisite: Admission to teacher candidacy.

**Corequisite:** HS 460

**HS 430 School Lab Exp- Health II 0 cr**

Professional Laboratory observation and participation in classroom health settings at a local public schools. Requires Admission to Teacher Candidacy.

**Corequisite:** HS 340

**HS 451 Driver Education II 3 cr**

Methods and techniques, teaching aids, teaching resources and materials, and program and curriculum construction. Practical experience in teaching students to drive.

**HS 452 Simulation in Driver Education 3 cr**

Simulation as an audio-visual instructional method and designed to complement and supplement other instructional techniques used in the driver education program to prepare individuals to function safely and effectively in today's traffic.

**HS 453 Range-Lab Prog in Driver Ed 3 cr**

An examination of the aims, objectives, and role of laboratory programs in driver education. Directed laboratory experiences will be provided.

**HS 460 Methods in Health Ed - W 3 cr**

Topic selection and teaching unit preparation. Presentation and classroom practice of teaching methodologies. Practical mini-teaching experiences in local schools. Field experiences required. HE (6-12) and PE (P-12) majors only. Prerequisite: Admission to teacher candidacy. Co-requisite: HS 429.

**Corequisite:** HS 429

**HS 463 Human Sexuality: Health Ed Per 3 cr**

An exploration of human sexuality with implications for health education.

**HS 473 Problems in Health Education 3 cr**

Special problems are assigned to individuals and to groups of students.

**HS 475 Public Health 3 cr**

A study of public health organizations and available community health resources, including the official and non-official health agencies at various levels. An examination of causative community factors in disease, community diagnosis of and programs to combat these conditions.

**Cross-Listed:** HS 462

**HS 490 Sp Top - 3 cr**

A varying content course treating several aspects of Health Education. May be repeated for credit when course content varies.

**HS 494 Directed Studies 1-3 cr**

Directed research. No more than two directed studies can be counted toward the bachelor's degree and Class B certification. HPELS advisor approval required.

**HS 510 Current Health Issues 3 cr**

Identification, exploration, and definition of current health issues such as drug abuse, mental health, aging, death and dying, human sexuality, chronic and communicable diseases.

**HS 560 Methods in Health Edu 3 cr**

Development, selection, and implementation of classroom teaching strategies and classroom techniques in the Health Sciences area.

**Cross-Listed:** HS 520

**HS 562 Drug Use and Abuse 3 cr**

A study of the drug spectrum including legal and illegal drug use and abuse. Discussion of education and preventive strategies.

**HS 565 Community Health 3 cr**

An introductory course in Community Health. Includes a survey of contemporary health problems of both communities and schools. A review of school and community health programs.

**HS 567 Aging and Health 3 cr**

An overview of the normal aging process, including physical, psychological and social changes, myths, diseases, related community resources, and the team approach to meeting needs.

**HS 575 Public Health 3 cr**

A study of public health organizations and available community health resources, including the official and non-official health agencies at various levels. An examination of causative community factors in disease, community diagnosis of and programs to combat these conditions.

## Health Informatics (HI) (HI)

**HI 300 Health Info Clinical Environme 3 cr**

This course provides an overview of concepts, terms, organization, and processes associated with patient care and clinical environments as they pertain to health informatics. The entire process of how a person accesses, moves within, and exits the system both as in inpatient and outpatient to obtain care. Students will observe and report on a variety of clinical settings and healthcare specializations throughout the semester. This course is designed for students with no prior clinical experience.

**Cross-Listed:** ISC 300

**HI 410 Health Informatics 3 cr**

This course provides an overview of the concepts, terms, tools, and architectures associated with health informatics as applied to healthcare delivery. Topics include: electronic record systems, computerized physician order entry, health system standards, terminologies, workflow modeling, security and privacy of clinical data, clinical reporting, and the impact of information technology use on the quality and efficiency of health care delivery and outcomes.

**Cross-Listed:** ISC 310, ISC 410

**HI 450 Health Data Secur/Compliance 3 cr**

This course involves a thorough examination of the security and privacy requirements of the Health Insurance Portability and Accountability Act (HIPAA) and the implementation of these requirements in the clinical environment. Students will learn how to address security issues from system development all the way through post-implementation, how to evaluate systems for vulnerabilities, and how to identify protected health information and covered entities.

**Prerequisite:** ISC 300 Minimum Grade of C or HI 300 Minimum Grade of C and (ISC 410 Minimum Grade of C or HI 410 Minimum Grade of C)

**Cross-Listed:** ISC 450

**HI 455 Hlth Data Mgt & Decision Supp 3 cr**

This course focuses on the design and management of electronic medical record systems and clinical decision support systems. Course content related to electronic medical record systems includes architectural components, technical design issues, and management; and, content related to clinical decision support systems includes decision support roles, extracting useful information from data, and legal and regulatory restrictions. Laboratory assignments will provide students with opportunities to interact with these systems. Prerequisites: HI 300 or ISC 300 and HI 410 or ISC 410.

**Prerequisite:** ISC 300 Minimum Grade of C or HI 300 Minimum Grade of C and ISC 410 Minimum Grade of C or HI 410 Minimum Grade of C

**Cross-Listed:** ISC 455

**HI 460 Consumer Health Informatics 3 cr**

This course provides an overview of the concepts, terms, tools, and architectures associated with consumer health informatics. It explores the design, use and impact of technologies that aim to engage consumers to participate in their health and healthcare. Topics include: patient engagement, persuasive system design, gamification, behavior change theory, patient portals, wearables, IoT and mHealth (mobile health).

**Prerequisite:** (HI 300 Minimum Grade of C and HI 410 Minimum Grade of C)

**HI 550 Health Data Secur/Compliance 3 cr**

This course involves a thorough examination of the security and privacy requirements of the Health Insurance Portability and Accountability Act (HIPAA) and the implementation of these requirements in the clinical environment. Students will learn how to address security issues from system development all the way through post-implementation, how to evaluate systems for vulnerabilities, and how to identify protected health information and covered entities.

**HI 555 Hlth Data Mgt & Decision Supp 3 cr**

This course focuses on the design and management of electronic medical record systems and clinical decision support systems. Course content related to electronic medical record systems includes architectural components, technical design issues, and management; and, content related to clinical decision support systems includes decision support roles, extracting useful information from data, and legal and regulatory restrictions. Laboratory assignments will provide students with opportunities to interact with these systems.

## Health Sciences (HSC) (HSC)

**HSC 101 Interprofessional Freshman Sem 2 cr**

The purpose of this course is to introduce the unique requirements and opportunities of the Health Sciences Division to beginning students who have declared or are considering a Health Science major (Nursing, Medicine, Pharmacy, Allied Health Professions, etc.). The course focuses on the value of higher education as a base for a career in Health Sciences and develops an awareness of activities and support services available within the University to enhance student success. Academic rules, regulations and policies related to admission, progression, and graduation in the University and Colleges of Nursing, Medicine, and Allied Health Professions are discussed.

**Cross-Listed:** AHP 101

**HSC 324 Death and Dying 2 cr**

Provides the student an opportunity to analyze theories, concepts, socioethical issues, and research related to dying and death. Focus is on assisting students to explore their feelings regarding death as well as developing self-awareness of the feelings of patients and families. Emphasis is on the acceptance of the process of mourning and death and applicable nursing interventions. Elective.

**HSC 342 Administration of Medication 1 cr**

The purpose of this course is to prepare the student to accurately calculate medication dosages. Mathematical and metric apothecary concepts are stressed.

**HSC 342B Administration of Medication 1 cr**

The purpose of this course is to prepare the student to accurately calculate medication dosages. Mathematical and metric apothecary concepts are stressed.

**HSC 343 Clinical Pharmacology 3 cr**

The purpose of the course is to provide the student with the opportunity to acquire information related to the clinical application of drug therapy and the concepts relating to the mechanisms of drug actions, interactions and adverse reactions, including the immunologic-idiosyncratic-allergic responses. Emphasis is on the current evidence related to pharmacokinetics, dosage, methods of administration, and adverse effects of major classifications of drugs to inform nursing care. Prerequisites: Admission to Professional Component or special permission of instructor.

**Prerequisite:** (NU 311 (may be taken concurrently) and NU 325 (may be taken concurrently))

**HSC 343B Clinical Pharmacology 3 cr**

The purpose of the course is to provide students with the opportunity to acquire information related to clinical application of drug therapy and concepts relating to the mechanisms of drug actions, interactions and adverse reactions, including the immunologic-idiosyncratic-allergic responses. Emphasis is placed on current evidence related to pharmacokinetics, dosage, methods of administration, and adverse effects of major classifications of drugs to inform nursing care. Restricted to students enrolled in RN to BSN programs.

**Cross-Listed:** HSC 343

**HSC 385 Study Abroad Public Healthcare 3 cr****HSC 390 Special Topics - 1-9 cr**

Selected topics in Health Sciences. Requires special permission. Variable title and 1 to 9 variable credit hours.

**HSC 400 Gender Discrim and Healthcare 3 cr**

The purpose of this course is to provide students with an overview of gender discrimination and disparities in healthcare, with special attention to the intersection of gender and other vulnerable social identities (i.e., historically marginalized identities). Students will learn to identify instances of gender discrimination and disparities across the full gender spectrum, and to advocate for equitable healthcare.

**HSC 401 Diversity, Equity, and Inclusion in Healthcare 1 cr**

Healthcare professionals must be equipped to provide care to a diverse, multicultural population. This course will introduce diversity, equity, and inclusion terminology and examine its relationship in providing equitable and quality healthcare. Content includes topics related to but is not limited to implicit bias, cultural diversity, social determinants of health and healthcare discrimination.

**HSC 450 Ethical Consider Care of Aging 3 cr**

Interdisciplinary course on a critical investigation of ethical issues across the lifespan and on application of ethical principles.

**HSC 500 Address Gender Discrimination 3 cr**

The purpose of this course is to provide students with an overview of historical and current manifestations of gender discrimination and disparities in healthcare, with special attention to the intersection of gender and other vulnerable social identities (i.e., historically marginalized identities). Students will learn to trace historical discriminatory healthcare practices to modern indications of gender discrimination and disparities across the full gender spectrum, and to advocate for and implement equitable healthcare.

**HSC 501 Found of Diversity Healthcare 2 cr**

In a multicultural society, healthcare professionals must be able to work with patients and colleagues from a variety of backgrounds. This course will provide students with theoretical knowledge and introduce practical skills necessary to understand and promote diversity, equity and inclusion in healthcare. The course will introduce diversity, equity, and inclusion terminology and examine implicit biases, historical and institutionalized bias, and discrimination influencing health and healthcare in the community.

**HSC 502 Diversity Equity & Inclusion 2 cr**

The purpose of this course is for program participants to examine population-focused health disparities and the role of policy, socioeconomics, the environment, and the medical community in their origin and continuation. This course encourages students to reflect on the responsibility to provide culturally competent care as an expression of their professional values. The emphasis is on forming an evidence-based foundation for knowledge, attitude, and skill transformation that can reduce the incidence of suboptimal outcomes among certain groups through improved policy, clinical decision-making, and cross-cultural interactions with clients.

**Prerequisite:** (HSC 501 (may be taken concurrently) Minimum Grade of C)

**HSC 503 Curr Issues & Trends Diversity 2 cr**

This course will focus on issues and trends involving diversity, equity, and inclusion from a variety of healthcare perspectives. Students will reflect on current and critical topics and engage in online discussions about how these topics impact healthcare. The course provides a broader perspective of emerging issues and trends through interactive activities and community-based projects.

**Prerequisite:** (HSC 501 (may be taken concurrently) Minimum Grade of C)

**HSC 504 Lead&Change Mang Adv Diversity 2 cr**

This course will focus on leading and influencing change and fostering inclusive climates at the organizational and community level.

**Prerequisite:** (HSC 501 (may be taken concurrently) Minimum Grade of C)

**HSC 510 IPT for TI-IBH Primary Care 1 cr**

The purpose of this course is to prepare the healthcare professional for interprofessional practice within integrated behavioral health settings. This course will bring together students from multiple professional disciplines to learn about, from and with each other in service to promote effective clinical collaboration within behavioral health settings. Emphasis is on the team-based collaboration within administrative, screening, and intervention roles as trauma-informed behavioral health providers in integrated settings serving youth.

**HSC 511 IPT Telehealth Deliv TI-IBH 1 cr**

The purpose of this didactic course is preparation of delivery of team-based, trauma-informed integrated behavioral healthcare in telehealth settings across the lifespan. This course is available to students from multidisciplinary professions, to fully embody the spirit of integrated, interprofessional care.

**HSC 512 TI-MI in IBH Seminar 1 cr**

The purpose of this course is to offer interprofessional practice preparation within an integrated behavioral health setting. This course will bring together students from multiple disciplines to learn about, from, and with each other in the service of enabling effective motivational interviewing within integrated behavioral health settings. Emphasis is on motivational interviewing during screening, intake, intervention and trauma-informed care as behavioral health providers in integrated settings serving across the life-span.

**HSC 571 Managing Healthcare Personnel 3 cr**

The purpose of this course is to analyze frameworks for managing health care personnel. The course focuses on exploration and application of human resource management. Emphasis within the course is placed on leadership, communication, relationship management, diversity, legal and ethical principles, and workforce planning and maintenance.

**HSC 573 Resp Prescrib Common Used Drug 1 cr**

This course allows the student to become familiar with most-prescribed drugs in several areas including cardiac, respiratory, psychiatric, endocrine and gastrointestinal medicine. The student will examine use of commonly-prescribed agents in diverse patient populations, focusing on drug selection, dosing, laboratory values and follow-up. Additionally, the process of drug development will be studied, so that the student may become familiar with rationales for drugs coming to market, pricing, and ethical use.

**Prerequisite:** NU 578 Minimum Grade of C

**HSC 580 OUD/SUD Prevention/Screening 2 cr**

This course serves as a one of three courses in the Addictions Subspecialty nursing program. The purpose of this didactic course is preparation of OUD/SUD Screening in integrated health care and telehealth settings across the lifespan. While preparation is across the life span, emphasis will be focused on child, adolescent, and transitional age-populations. This course is available to students from any health-related discipline, to fully embody the spirit of integrated, interprofessional care.

**HSC 581 OUD/SUD Assessment/Treatment 2 cr**

This course serves as a one of three courses in the Addictions Subspecialty nursing program. The purpose of this didactic course is preparation of OUD/SUD Assessment and Treatment in integrated health care and telehealth settings across the lifespan. While preparation is across the life span, emphasis will be focused on child, adolescent, and transitional age-populations. This course is available to students from any health-related discipline, to fully embody the spirit of integrated, interprofessional care.

**Prerequisite:** (HSC 580 Minimum Grade of C)

**HSC 582 OUD/SUD Recovery/Sys Practice 2 cr**

This course serves as a one of three courses in the Addictions Subspecialty nursing program. The purpose of this didactic course is preparation of OUD/SUD recovery in integrated health care and telehealth settings across the lifespan. While preparation is across the life span, emphasis will be focused on child, adolescent, and transitional age-populations. This course is available to students from any health-related discipline, to fully embody the spirit of integrated, interprofessional care.

**Prerequisite:** (HSC 580 Minimum Grade of C and HSC 581 Minimum Grade of C)

**HSC 585 Study Abroad Public Healthcare 3 cr**

The purpose of this course for the undergraduate/graduate student is to develop an improved understanding of culture, to recognize any cultural practices that affect health care and other professions, and to incorporate this understanding into the provision of care.

**HSC 590 Special Topics 1-6 cr**

Study of topics significant to the health professions. Content varies and may be repeated.

**HSC 595 Evidence Based Lipid Practice 2 cr**

This course serves as a foundational course in the Clinical Lipidology Subspecialty program. The purpose of this didactic course is to prepare the Clinical Lipid Specialist student to evaluate CVD epidemiology, cardiometabolic risk, and evidence based lipid practice in those with selected health care needs across the lifespan.

**HSC 596 Adv Vascular Biology 2 cr**

This course serves as a foundational course in the Clinical Lipidology Subspecialty program. The purpose of this didactic course is to prepare the Clinical Lipid Specialist student to evaluate lipoprotein metabolism and vascular biology in those with selected health care needs across the lifespan.

**HSC 597 Adv Pharm Complex Dyslipidemia 2 cr**

This course serves as a foundational course in the Clinical Lipidology Subspecialty program. The purpose of this didactic course is to prepare the Clinical Lipid Specialist student to evaluate advanced pharmacologic options in treating those with selected health care needs across the lifespan.

**Prerequisite:** (HSC 595 Minimum Grade of C and HSC 596 (may be taken concurrently) Minimum Grade of C)

**HSC 598 Diag/Mgt C-plex Dyslipidemia 2 cr**

This course serves as a final course in the Clinical Lipidology Subspecialty program. The purpose of this didactic course is to prepare the Clinical Lipid Specialist student to evaluate and manage complex dyslipidemia in those with selected health care needs across the lifespan.

**Prerequisite:** HSC 597 Minimum Grade of C

**HSC 603 Assmnt Vulnerable Populations 1 cr**

This online interdisciplinary course will implement evidence based and collaborative models to assess the needs of vulnerable populations who have multiple physical needs such as those evidenced by adults, elders, and returning veterans with multiple chronic illnesses and/or acute injury. The student will synthesize, critique, and apply evidence to improve patient care outcomes. The student will work in groups to complete an assessment of need for vulnerable patient populations.

**Prerequisite:** HSC 602 Minimum Grade of C

**Corequisite:** AHN 595, AHN 596

**HSC 690 Special Topics- 1-9 cr**

Study of health professional topics at the doctoral level. Credit hours will vary based on student need and depth of course subject matter. Content will vary and may be repeated up to 9 credits. Requires special permission.

## Hematology and Host Defense-MD (HHD)

**HHD 120 Hematology and Host Defense 10 cr**

The Hematology and Host Defense Module covers the hematologic system that constitutes blood and the immune system that defends the body against infection. Both of these systems affect all organ systems and are critical for human health. The module will focus on fundamental knowledge regarding the normal development, structure and function of the hematologic and immune systems, how these systems interface with infectious agents and how defects in these systems cause health problems such as anemia, cancer, immunodeficiency, allergy, autoimmunity and infection. Thus, the module will equip students to understand the cellular and molecular mechanisms underlying each disorder and will develop their ability to deliver appropriate patient care through proper diagnosis, treatment, management and prevention of these diseases. Throughout the module, students will engage in lectures, active learning sessions, independent study and clinical experiences. These activities will provide students with opportunities to strengthen communication skills, observe and participate in systems-based practice and exercise practice-based learning techniques in a variety of settings that require and foster professional behavior and personal integrity.

## Higher Education (HED) (HED)

**HED 501 Digital Leader 3 cr**

This course will explore the role of digital media, including social media, in higher education administration.

**HED 503 Higher Ed Finance 3 cr**

This course will examine national, state and local economic factors and their impact upon budgeting and financial management work of higher education administrators/leaders.

**HED 603 Current Probs Higher Education 3 cr**

Analysis of current issues affecting higher education.

**HED 611 Human Relations in Higher Edu 3 cr****HED 621 Program and Curriculum Develop 3 cr**

Designed to assess and improve the student's level of competency in program development skills, instructional strategies, systems analysis, and change innovation.

**HED 631 Sem Higher Ed Mgt Skills 3 cr**

Designed to assess and improve the student's knowledge of decision making styles, problem-solving processes, leadership skills, implementation of organizational change, and physical environments which promote productivity, all in the context of higher education.

**HED 701 Adv Org Theory for Higher Edu 3 cr**

This course is designed to provide students with an in-depth exploration of organizational theories and models and organizational approaches in higher education. Topics covered include administrative structure and leadership, accountability and change.

**HED 702 Higher Ed Finance 3 cr**

This course is designed to provide students with an overview of finance in higher education. The overview will include the financial benefits of higher education, access and affordability issues, state and federal funding, price-setting, tuition discounting, merit aid, sources of revenue and expenditures, cost-cutting measures, budgeting and college athletics.

**HED 703 Adv Leadership for Higher Ed 3 cr**

This course is designed to provide students with an in-depth exploration of leadership theories and models. Students will create a personal knowledge base from which to create a plan to develop or revise a leadership perspective.

**HED 704 Current Issues in Higher Ed 3 cr**

This course offers an in-depth analysis of current issues in and challenges to higher education.

**HED 707 Multiculturalism and Organizational Change in Higher Education 3 cr**

Students will examine the role of University leaders, at Universities and diverse student populations, and study strategies and organizational models relative to the solution of problems associated with the implementation of organizational diversity plans.

**HED 732 Ethics and Law for Higher Ed 3 cr**

An examination of ethical and legal issues present in higher education.

**HED 6313 Sem Higher Ed Mgt Skills 3 cr**

## History (HY) (HY)

**HY 101 HY of Western Civilization I 3 cr**

History of humankind, emphasizing the development of the West to c. 1600 C.E. Topics may include Mesopotamia and Egypt, Ancient Greece and Rome, the origins of monotheistic religions, and medieval Europe, Core Course.

**HY 102 HY of Western Civilization II 3 cr**

History of humankind, emphasizing the rise of the West, from c. 1600 C.E. Topics may include the Enlightenment, the French Revolution, WWI, WWII and the Cold War. Core course. Note: History 101 and 102 are related courses but need not be taken in order.

**HY 103 HY of Asian Civilization I 3 cr**

A survey of traditional cultures, values, ideas, and institutions of East, South, Southeast Asia to 1800.

**HY 104 HY of Asian Civilization II 3 cr**

The responses of East, South, and Southeast Asia to the impact of Western challenges and their roles in the modern world. Economic and political structure; the emergence of China and Japan as major world political and economic powers.

**HY 121 World Civilization I 3 cr**

This course will cover the history of World Civilization from its evolutionary beginnings in Africa to the beginning of the Protestant Reformation in Europe (c. 1550s CE).

**HY 122 World Civilization II 3 cr**

This course will cover the history of World Civilization from approximately 1550 through the contemporary era.

**HY 135 US History to 1877 3 cr**

Survey of US History to 1877. Topics may include Native American societies, colonial societies, the American Revolution, slavery, the Civil War, and Reconstruction. Core course.

**HY 136 US History since 1877 3 cr**

Survey of US History from 1877. Topics may include Western frontiers and Native Americans, Progressive Era, immigration, the Great Depression and Civil Rights Movements. Core Course. Note: History 135 and 136 are related courses but need not be taken in order.

**HY 190 Special Topics - 1-3 cr**

Special topics and their development, illustrating historical concepts. May be repeated twice for credit when content varies.

**HY 212 Japanese Film 3 cr**

This course will introduce students to major themes in recent Japanese history, including samurai culture and other issues pertaining to social class, Westernization, the postwar family, sixties radicalism, and recent popular culture. Students will explore these themes through Japanese film and literature, and will thus become familiar with major directors, including Akira Kurosawa, Yasujiro Ozu, and Juzo Itami, and novelists such as Junichiro Tanizaki and Yukio Mishima.

**HY 228 Latin America 3 cr**

An introductory survey of Latin American history from the time of European conquest to the present.

**HY 283 Chinese Film 3 cr**

This course will introduce students to major topics in Chinese history, covering both ancient periods such as the Three Kingdoms period, and twentieth-century events such as the war with Japan and the Cultural Revolution. Post-Tiananmen Chinese society will also be stressed. Students will explore these themes through Chinese film and literature, and will thus become familiar with major directors, including Zhang Yimou and Jia Zhangke, and writers such as Yu Hua.

**HY 288 History of the Mass Media 3 cr**

The role of journalism in American society from the Revolution to the present. This course is equivalent to CA 288.

**Cross-Listed:** CA 388, HY 388

**HY 290 Special Topics- 3 cr**

Special topics and their development, illustrating historical concepts. May be repeated twice for credit when content varies.

**HY 303 Warfare Society Modern World 3 cr**

Examines the mutual interrelations between warfare and society in western civilization since the 14th century.

**Prerequisite:** HY 102 Minimum Grade of C

**HY 305 History of Military Thought-W 3 cr**

An intellectual history of the place of armed conflict in society from the Renaissance to the Nuclear Age.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**HY 310 Amer Environmental Hy-W 3 cr**

A textual and discussion-based analysis of the role of the environment in America's history from the Pre-Columbian era through the present, this course considers the interactions between human society and its surroundings across North America. In particular, this course explores the ideas, activities, technologies and institutions that have influenced our national interaction with the natural world. Conversely, we consider the degree to which the environment has shaped our national institutions and identity.

**Prerequisite:** (EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**HY 312 America in the 1960s 3 cr**

This course covers American history during the 1960's. It will offer an overview of one of the most tumultuous periods in modern American history.

**HY 321 The Caribbean 3 cr**

Explores the history of the island Caribbean from the onset of European rule to the present.

**HY 332 Great Britain 1603 to 1815 3 cr**

Great Britain from the accession of James I to the defeat of Napoleon.

**HY 333 Great Britain Since 1815 3 cr**

The British at home and abroad; Constitution and culture, identity and empire, since Waterloo.

**HY 335 History of Modern France 3 cr**

France since the Revolution.

**HY 336 Central European History 3 cr**

Addresses Central European History, in the lands of the Holy Roman Empire and its successor states, from the middle of the 15th Century until the middle of the 19th Century. Particular emphasis on major religious and political events during events during this period, along with discussion of Jewish history during these centuries.

**HY 337 History of Eastern Europe 3 cr**

History of Eastern Europe since 1914.

**HY 338 History of Russia 3 cr**

History of Russia from Kievan Rus to Present.

**HY 346 The Second World War 3 cr**

A history of the Second World War, its background and its aftermath.

**HY 347 The Holocaust 3 cr**

The history of the systematic mass murder of Europe's Jews and other groups by Nazi Germany during World War II. Cross-listed with REL 347. Credit cannot be received for both HY 347 and REL 347.

**Cross-Listed:** REL 347

**HY 348 Hitler and Nazi Germany 3 cr**

The rise of Adolf Hitler and the Nazi Party to power in Germany and the history of National Socialist Germany from 1933 to 1945.

**HY 355 French Revolution 3 cr**

Political, cultural and social revolution of the late eighteenth and early nineteenth centuries, emphasizing the French Revolution.

**HY 356 European Civ 1815-1918-W 3 cr**

History of European Civilization from 1815-1918.

**Prerequisite:** EH 102 Minimum Grade of C or EH 105 Minimum Grade of C

**HY 357 Europe Since 1945 3 cr**

The history of Europe from the end of the Second World War to the present.

**HY 362 History of Africa since 1500 3 cr**

A survey of the last five centuries of Africa's history moving from before European contact to the slave trade, colonial experience, and independence movements. Africans cultural patterns and its peoples' distinctive historical experience will be the focus of the course.

**HY 364 Islamic Civilization to 1453 3 cr**

This course will cover the political, economic, social, and cultural history of Islamic Civilization from its beginnings in the Arabian Peninsula in the sixth century to the Ottoman conquest of Constantinople in 1453. Cross-listed with REL 364. Credit cannot be received for both HY 364 and REL 364.

**Cross-Listed:** REL 364

**HY 365 Islamic Civilization 1453 - W 3 cr**

This course will examine the political, economic, social, and cultural history of Islamic Civilization from the Ottoman conquest of Constantinople in 1453 to the present. Cross-listed with REL 365. Credit cannot be received for both HY 365 and REL 365.

**Cross-Listed:** REL 365

**HY 366 Traditional China 3 cr**

Historical development of China from prehistoric times to arrival of Western influences in the 1800s.

**HY 367 Modern China 3 cr**

A study of Modern China from the arrival of Western influence in the 1800s to the present.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**HY 368 Japan 3 cr**

Japanese history from antiquity to the present and the emergence of Japan as major world political and economic power.

**HY 369 Modern Japan 3 cr**

Japanese History from the late Tokugawa period to the present and the emergence of Japan as a major world political and economic power.

**HY 371 Soc History of Early America 3 cr**

Patterns of frontier, agrarian, and urban society to 1865.

**HY 375 Divided We Stand: Recent U.S. History 3 cr**

Americans in the second decade of the twenty-first century are divided politically, socially, culturally, and economically. This class will trace the roots of those divides by examining the very recent history of the United States. Topics include, but are not limited to, the social, cultural, political, and the foreign policy history of the United States since the 1970s.

**HY 377 African American Experiences 3 cr**

Examines the role of African Americans in United States history with an emphasis on social, political, economic, intellectual and cultural developments.

**HY 382 Jews & Modern Amer Culture-W 3 cr**

This course will look at the cultural history of Jews' contributions to United States culture during the late 19th and 20th century. From Broadway to comedy (and beyond), American Jews have used their positionality as both insiders and outsiders to create lasting artifacts of cultural brilliance that helped to define the "American century"-and continue to do so today.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**HY 384 Japanese Film 3 cr**

This course will introduce students to major themes in recent Japanese history, including samurai culture and other issues pertaining to social class, Westernization, the postwar family, sixties radicalism, and recent popular culture. Students will explore these themes through Japanese film and literature, and will thus become familiar with major directors, including Akira Kurosawa, Yasujiro Ozu and Juzo Itami, and novelists such as Junichiro Tanizaki and Yukio Mishima.

**Cross-Listed:** CA 284, HY 284, LG 284, LG 384

**HY 388 History of Mass Media 3 cr**

The role of journalism in American society from the Revolution to the present. This course is also listed as CA 388.

**HY 390 Special Topics - 1-3 cr**

Special topics and their development, illustrating historical methodology. May be repeated twice for credit when content varies for a maximum of nine hours.

**HY 401 Coll in History- 3 cr**

A course which discusses various issues in history. May be repeated when content varies for a total of six hours. Prerequisite: Junior or Senior standing.

**HY 405 War and Soc 20th Century 3 cr**

A seminar which studies major themes in the interaction of warfare and society in the 20th century.

**HY 415 Studies in Military History 3 cr**

This course will deal with different topics in Military History. May be repeated for twice for credit when content varies for a maximum of nine hours. Prerequisite: Junior or Senior standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**HY 429 Studies Latin Amer History-W 3 cr**

A seminar devoted to the exploration of a specific topic in Latin American history. May be repeated twice when content varies for a maximum of nine hours. Prerequisite: Junior or Senior standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**HY 431 Studies in U.S. History - 3 cr**

This course will deal with different topics in U.S. History. May be repeated twice for credit when content varies for a maximum of nine hours.

Prerequisite: Junior or Senior standing

**HY 432 Colonial America 3 cr**

Colonial period to the revolution.

**HY 433 The American Revolution 3 cr**

This course emphasizes changes occurring in American society ca.1750-1800.

**Cross-Listed:** HY 533

**HY 434 The Early Republic - W 3 cr**

The early Republic from 1789 to 1840.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**HY 435 Civil War and Reconstruction 3 cr**

The United States from 1840-1877.

**HY 436 Modern US I 1877-1945 3 cr**

History of urban industrialization, war, peace, prosperity, and depression.

**Prerequisite:** (EH 102 (may be taken concurrently) Minimum Grade of C or EH 105 (may be taken concurrently) Minimum Grade of C)

**HY 437 Modern US II Since 1945 - W 3 cr**

History of US in global perspective.

**Prerequisite:** (EH 102 (may be taken concurrently) Minimum Grade of C or EH 105 (may be taken concurrently) Minimum Grade of C)

**HY 441 Research Seminar-U.S. History 3 cr**

Research in topics in U.S. History. Limited to 15 students. Prerequisites: History major, Junior or Senior standing, permission from the Department Chair.

**HY 442 Research Seminar European Hy 3 cr**

Research in topics in European History. Limited to 15 students.

Prerequisites: History major, Junior or Senior standing, permission from the Department Chair.

**HY 443 Research Seminar-World HY 3 cr**

Research topics in Asian, African or Latin American History, or in the History of Islamic Civilization. Prerequisites: History major, Junior or Senior standing, permission from the Department Chair.

**HY 444 Research Seminar-Digital Hist 3 cr**

Research in topics in Digital History.

**HY 454 The British Empire 3 cr**

This course examines the rise, fall, and legacy of the British Empire.

**HY 455 History of Travel and Tourism 3 cr**

This course examines the history of British and American travel and tourism from the eighteenth century to the present.

**HY 456 Body, Medicine, Society Europe 3 cr**

This course examines the social and cultural history of medicine, health, and the human body in Western Europe from 1500 to 1900.

**HY 457 Studies in European History - 3 cr**

This course will deal with different topics in European history. May be repeated twice for credit when content varies for a maximum of nine hours. Prerequisite: Junior or Senior standing.

**HY 458 Sex,Celibacy Christian West 3 cr**

This course examines the history of attitudes towards sexuality, marriage and celibacy in the Western World. It focuses on the question of how Christianity has shaped sexual norms and gender relations from ancient times to the present.

**HY 461 Studies in Asian History - 3 cr**

This course will deal with different topics in Asian history. May be repeated twice for credit when the content varies for a maximum of nine hours. Prerequisite: Junior or Senior standing.

**HY 465 Studies in HY of Islamic Civ - 3 cr**

This course will cover specific topics in the history of Islamic civilization. May be repeated for credit when content varies. Prerequisite: Junior or Senior status. Cross-listed with REL 465. Credit cannot be received for both HY 465 and REL 465.

**Cross-Listed:** REL 465

**HY 471 Atlantic World - W 3 cr**

Examines the interactions among Europeans, Native American, and Africans in the Americas. This course is a "W" course.

**Prerequisite:** (EH 102 (may be taken concurrently) Minimum Grade of C or EH 105 (may be taken concurrently) Minimum Grade of C)

**HY 477 The Old South 3 cr**

This course examines the settlement and evolution of the American South from settlement of Jamestown to the Civil War. Of particular concern will be the degree to which the development of economic, social and political institutions in the South, especially the institution of slavery, increasingly isolated the region from the rest of the country.

**Cross-Listed:** HY 577

**HY 478 The New South 3 cr**

History of the South from Reconstruction to the 1920's.

**HY 494 Directed Studies - 1-3 cr**

Directed Individual Study. Requires approval of department chair.

**HY 496 Public History 3 cr**

This course will introduce students to the field of public history as an academic field and a possible career. Students cannot receive credit for both this course and HY 495.

**HY 498 Internship in History 3-6 cr**

Directed individual field research at the undergraduate level. Occupational and professional experiences under faculty direction in a defined field of interest, primarily for but not limited to archival, museum, library, or other public history projects. Written reports required. Special permission of departmental chair required. Maximum hours 6.

**HY 499 Senior Honors Paper - H 1-6 cr**

The researching and writing of a major historical paper. Requires permission of department chair.

**HY 501 Colloquium of History 3 cr**

A course which discusses various issues in history. May be repeated when content varies. Students cannot receive credit for both this course and HY 401.

**Cross-Listed:** HY 401

**HY 505 Warfare and Society 20th Cent 3 cr**

A seminar which studies major themes in the interaction of warfare and society in the 20th century. Students cannot receive credit for both this course and HY 405.

**Cross-Listed:** HY 405

**HY 515 Studies in Military History - 3 cr**

This course will deal with different topics in military history. May be repeated for credit when content varies. Students cannot receive credit for both this course and HY 415.

**Cross-Listed:** HY 415

**HY 529 Studies in Latin Am. History - 3 cr**

A seminar devoted to the exploration of a specific topic in Latin American History. May be repeated for credit when content varies. Students cannot receive credit for both this course and HY 429.

**Cross-Listed:** HY 429

**HY 530 American Historiography 3 cr**

Examination of major American historians; study of techniques, styles, ideas, interpretations, and critical evaluations.

**HY 531 Studies in U.S. History - 3 cr**

A seminar devoted to different topics in U.S. History. May be repeated for credit when content varies. Students cannot receive credit for both this course and HY 431.

**Cross-Listed:** HY 431

**HY 532 Colonial America 3 cr**

Colonial period to the Revolution.

**HY 533 American Revolution 3 cr**

This course emphasizes changes occurring in American society ca. 1750-1800.

**Cross-Listed:** HY 433

**HY 534 The Early Republic 3 cr**

The early Republic from 1789-1849. Students cannot receive credit for both this course and HY 434.

**Cross-Listed:** HY 434

**HY 535 Civil War and Reconstruction 3 cr**

The United States from 1840-1877. Students cannot receive credit for both this course and HY 435.

**Cross-Listed:** HY 435

**HY 536 Modern U.S. I 1877-1945 3 cr**

History of urban industrialization, war, peace, prosperity, and depression. Students cannot receive credit for both this course and HY 436.

**Cross-Listed:** HY 436

**HY 537 Modern U.S. II Since 1945 3 cr**

History of U.S. in a global perspective. Students cannot receive credit for both this course and HY 437.

**Cross-Listed:** HY 437

**HY 538 20th Century U.S. History 3 cr**

This course emphasizes interpretations of twentieth-century United States history.

**HY 540 Modern European Historiography 3 cr**

A study of the development of European historical literature and its theoretical and methodological bases.

**HY 541 Major European Thinkers 3 cr**

Seminar devoted to the writings of leading European thinkers of the last five hundred years, including such figures as Luther, Rousseau, Darwin, Marx, Freud and de Beauvoir.

**HY 542 World Historiography 3 cr**

Study of the development of World historical literature and its theoretical and methodological bases.

**HY 544 Digital History 3 cr**

Students will learn about an historical subject while gaining experience in digital methodologies and research. The goal is to conduct original primary research that will be published collaboratively on the web. Each class meeting will be equally divided between the topic of focus, and workshops. Simultaneously, students will learn the theory, research methods, and tools associated with digital humanities. Projects meeting certain criteria will be published on-line if the students elect to do so.

**Cross-Listed:** HY 444

**HY 546 Research in Soviet Soc History 3 cr**

A study of the relationship between political and social developments in Soviet Russia from 1917 to 1941.

**HY 548 The Making of Modern France 3 cr**

This seminar examines the history of France from the eighteenth century to the present. It investigates the political, cultural, and social forces that have shaped modern French society and the state.

**HY 551 Medieval Europe 3 cr**

Seminar that explores the history of Western Europe between 950 and 1500, with emphasis on changes in government, economy, society, religion, thought, war and diplomacy.

**HY 552 Renaissance Europe 3 cr**

Seminar that explores intellectual and cultural developments in Western Europe between 1350 and 1600.

**HY 553 Religious Reform in Europe 3 cr**

Seminar that considers religious reform movements within the Catholic Church before the beginning of Protestantism, the development of the major Protestant tendencies, and the continuing development of reform within the Catholic Church after the Protestant break.

**HY 554 The British Empire 3 cr**

The history and legacy of the British Empire from the 17th century to the present.

**HY 555 History of Travel and Tourism 3 cr**

The history of Travel and Tourism: The British and American Experience from the Eighteenth Century to the present.

**HY 556 Body, Medicine, Society Europe 3 cr**

This course examines the social and cultural history of medicine, health, healing, and the human body in Western Europe from 1500 to 1900.

**HY 557 Studies in European History - 3 cr**

A seminar devoted to different topics in European History. May be repeated for credit when the content varies. Students cannot receive credit for both this course and HY 457.

**Cross-Listed:** HY 457, HY 558

**HY 558 Sex, Celibacy Christian West 3 cr**

This course examines the history of attitudes towards sexuality, marriage, and celibacy in the Western world. It focuses on the question of how Christianity has shaped sexual norms and gender relations from ancient times to the present.

**HY 559 Modern European History 3 cr**

Problems in historical interpretation and method from 1740 to present. May be repeated when topic varies.

**HY 561 Studies in Asian History - 3 cr**

A seminar devoted to different topics in Asian History. May be repeated for credit when the content varies. Students cannot receive credit for both this course and HY 461.

**Cross-Listed:** HY 461

**HY 564 Classical/Medieval Islamic His 3 cr**

Seminar that examines the Classical and Medieval history of Islamic civilization from the sixth to the thirteenth centuries, with a focus on the political and cultural changes experienced by the Muslim world in this period.

**HY 565 Studies in Islamic Civil. - 3 cr**

A seminar devoted to different topics in the history of Islamic Civilization. May be repeated for credit when the content varies. Students cannot receive credit for both this course and HY 465.

**Cross-Listed:** HY 465

**HY 570 American Biography 3 cr**

A study of American biography, autobiography, and methodology.

**HY 571 Atlantic World 3 cr**

This course examines the interactions among Europeans, Native Americans, and Africans in the Americas. Students cannot receive credit for both this course and HY 471.

**Cross-Listed:** HY 471

**HY 573 19th Century American West 3 cr**

Seminar that explores the history of the American West in the nineteenth century, focusing on Manifest Destiny, imperialism, Mormonism, the environment, and the place of Native Americans in U.S. society.

**HY 577 The Old South 3 cr**

This course examines the settlement and evolution of the American South for settlement of Jamestown to the Civil War. Of particular concern will be the degree to which the development of economic, social and political institutions in the South, especially the institution of slavery, increasingly isolated the region from the rest of the country.

**Cross-Listed:** HY 477

**HY 578 The New South 3 cr**

History of the South from Reconstruction to the 1920's.

**Cross-Listed:** HY 478

**HY 580 Research in Southern History 3 cr**

History of the southern United States, from the colonial era to the present. Students will write a research paper involving interpretation of primary documents.

**HY 581 Research in American History 3 cr**

This is a variable content seminar course. Students will write a research paper involving interpretation of primary sources.

**HY 583 Research Experience 3 cr**

The theories, research methods and analytical skills, and substantive knowledge obtained through their master's curriculum provide the basis for a thesis project, either to be completed if you are on the thesis track, or some kind of professional project, like a website or museum exhibit, if you are on the non-thesis track. This seminar will guide students towards this goal by emphasizing the multiple steps required in such a serious undertaking.

**HY 586 Research in European History 3 cr**

This is a variable content seminar course. Students will write a research paper involving interpretation of primary sources.

**HY 590 Special Topics - 3 cr**

A colloquium of selected subjects and readings to be arranged by the department. Limited to fifteen students. May be repeated seven times for credit when content varies for a total of 24 semester hours.

**HY 592 The Teaching of History 3 cr**

The class is conceived as part seminar and part practicum. It is an introduction to the problems and principles of the teaching of history in secondary and higher education settings. It will combine instructor lecture, class presentations, and class discussions of assigned readings.

**HY 593 Exam and Thesis Introduction 1 cr**

This course seeks to provide M.A. students with a practical introduction to the research techniques and bibliographic knowledge that will facilitate the timely completion of a master's level program. Required of all incoming History M.A. students.

**HY 594 Directed Studies 1-3 cr**

Directed individual study. May only be used in unusual cases to build on regular graduate course work. A maximum of nine credit hours of HY 594 may count toward degree requirements. Pre-requisites: Special permission of instructor required.

**HY 595 Archival Practice 3 cr**

Introduces graduate students to archival theory and practice.

**HY 596 Public History 3 cr**

This course will introduce students to the field of public history as an academic field and a possible career. Students cannot receive credit for both this course and HY 495 or HY 496.

**HY 597 Pro Studies-Dir Field Research 3 cr**

Directed individual field research. Occupational and professional experiences under faculty direction in a defined field of interest, including but not limited to archival, museum, library, or other public history projects. Written reports required. Special permission of departmental chair required.

**HY 598 Comp and Thesis Preparation 0 cr**

This zero credit hour course will provide continuous enrollment while engaged in comprehensive exam preparation or for thesis preparation beyond thesis hours.

**HY 599 Thesis 1-3 cr**

Six hours required of student in the thesis track. May not be taken for credit toward a degree by students in the non-thesis track. Pre-requisites: Completion of nine hours of graduate level history, including one 500-level course in the field relevant to the thesis. Special permission of the department chair.

## Honors Interdiscipl Std (HON) (HON)

**HON 101 First-Year Honors Seminar 1 cr**

This course introduces first-year Honors students to the Honors College, and sets them up to get the most out of their time at the University. The course emphasizes community-building, creativity, communication, motivation, success strategies, and academic planning. Reading, writing, and project assignments relevant to the student's first year experience are required.

**Cross-Listed:** HON 111

**HON 201 Second-Year Honors Seminar 1 cr**

This course helps students refine the thinking, creative, and communication skills necessary to be successful in Honors, graduate school, professional school, and in one's career. Emphasis is on getting students started on their Honors capstone projects, along with honing their presentation, networking, and application skills. Reading, writing, and project assignments relevant to the student's second-year experience are required.

**Cross-Listed:** HON 211

**HON 290 Special Topics Honors 1-3 cr**

Topics for USA Honors Students of an interdisciplinary or multidisciplinary nature. May be repeated when topic varies. Prerequisite: USA Honors Program

**HON 301 Intro Senior Honors Project 1 cr**

This course is designed to introduce juniors in the USA Honors Program to scholarly research and creative activities in diverse disciplines. The primary graded assignment of the course is the guided development of an approved Prospectus for the Senior Honors Project.

**HON 390 Special Topics Honors 1-3 cr**

Advanced topics for USA Honors students of an interdisciplinary or multidisciplinary nature. May be repeated when topic varies. Prerequisite: USA Honors Program

**HON 499 Honors Senior Thesis 3 cr**

In this course, students undertake the process of creating knowledge and/or culture. With the guidance of their honors mentor, students in HON 499 become experts in their research, creative, or interdisciplinary project through the process of researching, writing, and disseminating their senior thesis research. This course is designed for students with projects outside of their departmental major. Approval of instructor if prerequisites are not met.

**Prerequisite:** HON 301 (may be taken concurrently) Minimum Grade of B and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

## Hospitality/Tourism Mgmt (HTM) (HTM)

**HTM 200 Intro to Hosp & Tour Ind 3 cr**

This course provides students with a comprehensive introduction to the many entities that make up the hospitality industry, such as hotels, restaurants, clubs, cruise lines, and casino hotels. Students will learn about hospitality careers, the importance of service, and how hotels and restaurants are organized, as well as an overview of today's hot issues, including ethical challenges and management concerns.

**HTM 210 Food & Bev Serv Mngt 3 cr**

This course focuses on the tools necessary for managing food service operations in today's aggressive business environment. Students learn how to position, manage, and leverage a successful food service operation - commercial and non-commercial - in a variety of venues. Using a menu-driven approach, the course examines a variety of management tools, best practices, and techniques.

**Prerequisite:** HTM 200 Minimum Grade of D

**HTM 212 Food Sanitation and Safety 3 cr**

In this course students are introduced to food safety principles and applications, the Hazard Analysis Critical Control Point System (HACCP), microbiology of food safety, infection control, and safety and environmental issues related to the foodservice and hospitality industry. Students completing the course are eligible to take the ServSafe exam offered by the National Restaurant Association.

**HTM 216 Fund. of Hosp. Financial Mgt. 3 cr**

This course is designed to provide hospitality and tourism students with a solid foundation of accounting concepts and methods of financial analysis that is required to be successful in the hospitality industry. The course provides students with a fundamental understanding of using numbers to operate various departments and analyze management reports and financial statements.

**Prerequisite:** (HTM 200 Minimum Grade of D)

**HTM 220 Mtgs., Inc., Conv., Events 3 cr**

This course will introduce students to multiple component of events management, including planning, marketing, ticketing, budgeting, operations, and evaluation. Students will engage in instruction, observation, and analysis in order to apply knowledge and theory to a specific event. The course will be delivered in a blended format.

**Prerequisite:** HTM 200 Minimum Grade of D

**HTM 250 Hospitality HR Management 3 cr**

This course is an introduction to hospitality management, including an overview of management in the hospitality industry and professional opportunities. The concepts and practices of hospitality management are examined and discussed. The scope and forms of hospitality organizations (e.g. food and lodging, resorts, tourism enterprises, conventions, events, attractions, etc.) are reviewed, as well as local and global trends within these organizations.

**Prerequisite:** HTM 200 Minimum Grade of D

**Cross-Listed:** HTM 350

**HTM 310 Global Leadership for HTM 3 cr**

This course examines principles of visionary global leadership in the hospitality industry by exploring leadership concepts, theories and fundamentals. Students begin to define their leadership paradigms, and identify leadership strategies that ameliorate personal and professional success.

**Prerequisite:** HTM 200 Minimum Grade of D

**HTM 312 Hospitality Service Culture 3 cr**

This course explores the dimensions of successful service environments, comprised of various factors, including the values, beliefs, norms, rituals and practices, within hospitality organization. In this course, students will learn the value a customer-centric approach brings to an organization through the creation of a positive consumer experience. The course focuses on hospitality service culture and methods for implementation, management and improvements within the service delivery process by making customer care part of the organization's mission, vision, values and goals to garner a competitive advantage in the marketplace.

**HTM 315 Hospitality/Tourism Marketing 3 cr**

This course is designed to provide a broad overview of essential marketing, promotion, and sales principles currently applied in the tourism and hospitality industries. It provides an introduction to marketing theories, principles, and concepts, and an exploration of the role of marketing within a globalized hospitality organization. Students will identify marketing strategies, differentiate services marketing, explain the role of customer expectation, analyze market segments, evaluate target marketing, and demonstrate the ability to effectively communicate using audio visual materials. The focus is on achieving a competitive advantage in a global market. Students will also examine the trends, issues and problems influencing tourism and hospitality marketing in a dynamic intercultural environment.

**Prerequisite:** HTM 200 Minimum Grade of D

**HTM 318 Hospitality Industry Managerial Accounting 3 cr**

The study of managerial accounting practices as they relate to the hospitality and tourism industry. Students will learn the skills to conduct analyses and make effective decisions based on a thorough understanding of financial statements. A variety of financial performance analytical models used to support decision making in the hospitality industry will be examined related to realistic budget development, forecast and plan cash flow.

**HTM 320 Destination Mgmt. & Marketing 3 cr**

The purpose of this course is to equip students with an understanding of the principles of destination management and marketing. Techniques for soliciting a variety of markets, planning presentations, and assessing economic impact of bookings, along with the role of convention bureaus as a catalyst to regional economic development will be important components of this course. The internal operations of a destination marketing organization organization, including stakeholder care, financial management, human resources management, and governance will also be explored.

**Prerequisite:** HTM 200 Minimum Grade of D

**HTM 330 Cruise Operations Management 3 cr**

The course provides an introduction to the cruise market and the reasons for its significant growth. The principles, practices, and philosophies of cruising, along with cruise line employee roles and responsibilities are examined. Strategies for management and marketing are explored.

**HTM 340 Special Events Management 3 cr**

Emphasis is placed on the special events sector consisting of private and public events, sporting events, weddings, fairs and festivals. Various categories of special events and their unique content tailored to their specific objectives are discussed. Experiential learning through professional experiences involving observation and participation in event settings is required.

**HTM 362 Hospitality Information Systems 3 cr**

Examination of information system applications used in hospitality functional areas such as operation, marketing and sales, human resources, and accounting and finance.

**HTM 382 Digital Marketing in Hospitality and Tourism 3 cr**

Understand the role of digital marketing in the hospitality and tourism industry by examining the fundamentals, frameworks, tools and strategies for successful digital marketing and consumer engagement. Students will learn how to apply technology and social media to leverage success across wide areas of the hospitality and tourism sectors that incorporate digital technologies. Topics include marketing mix, relationship marketing, campaign planning, and marketing communications.

**HTM 396 HTM Career Planning 3 cr**

This course teaches students to perform a good-fit analysis by aligning career and employer choices with self-assessment, determine competencies gaps, and develop a strategic professional development plan. Three credit hours. Offered in web-enhanced and web-blended formats.

**Prerequisite:** HTM 200 Minimum Grade of D

**HTM 397 Study Abroad - Culinary 3 cr**

This course is designed to engage students in active learning related to international culture, cuisine, and culinary practice in settings outside the United States. Through participation in the course, students will explore the culture of the host country, cuisine as it is related to the culture, and common food preparation and service practices. Activities include readings, lectures, discussions, reflective journaling, tours, observations, and active engagement in food preparation and service.

**HTM 398 Study Abroad - Intl Hosp Mgt 3 cr**

This course is designed to engage students in active learning related to international hospitality management in settings outside the United States. Through participation in the course, students will explore the culture, management practices, and service standards in the host country related to the hospitality industry. Activities include readings, lectures, discussions, reflective journaling, tours, and observations.

**HTM 400 Legal Issues in HTM 3 cr**

This course will provide a comprehensive study of the legal aspects of the hospitality industry with an emphasis on compliance and prevention of liabilities. The course is not intended to replace the legal services of an attorney, but rather provide an overview of common legal issues in the field of hospitality and tourism management. 3 credit hours. Blended or online.

**Prerequisite:** HTM 200 Minimum Grade of D

**HTM 410 Sustainable and Eco-Tourism 4 cr**

Examine the interaction of ecotourism with social, natural and cultural environments as well as the impacts of ecotourism on the environment and global societies.

**Prerequisite:** HTM 200 (may be taken concurrently) Minimum Grade of D

**HTM 435 Quality Service Management - W 3 cr**

This course is designed to prepare students to understand, challenge, and refine the principles of guest-services management in an organization. Theories and concepts of service will be explored with emphasis on identifying customer preferences and a systematic process for organizations to design service delivery systems and implement a successful quality service environment that consistently meets and exceeds customer expectations. This course is a designated writing intensive course (W) and all major writing assignments must be satisfactorily completed in order to receive credit for the course.

**Prerequisites:** EH 102 or EH 105, or placement; HTM 200 Introduction to Hospitality and Tourism Management.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and HTM 200 Minimum Grade of D

**HTM 440 Lodging Management 3 cr**

This course is an exploration of issues facing the hotel and lodging industry. The goal of the course is to prepare students for the hospitality industry with a specific focus on the hotel industry. It will introduce students to multiple components of lodging management, including: sales and marketing; front office, housekeeping, maintenance and accounting departments; food and beverage operations for full-and limited-service hotels; safety and securing; careers in the lodging industry. Students will engage in instruction, observation, and analysis in order to apply knowledge and theory to specific hospitality lodging situations. The course will be delivered in a blended format or online format.

**Prerequisite:** HTM 200 Minimum Grade of D

**HTM 445 HTM Financial Reporting 3 cr**

This course is designed to provide hospitality and tourism students with a solid foundation of accounting concepts and methods of financial analysis that is required to be successful in the hospitality industry. The course provides students with a fundamental understanding of using numbers to operate various departments and analyze management reports and financial statements.

**Prerequisite:** HTM 200 Minimum Grade of D

**HTM 450 Non-Traditional Lodging 3 cr**

This course will provide students with an in-depth study into the unique world of "non-traditional" lodging, the condominium resort and vacation ownership industry and other forms of non-traditional lodging. The course focuses on the hospitality aspects of the condominium resort, vacation ownership industry, and recreation and park lodging, and specifically on how non-traditional lodging operations differ from traditional lodging operations such as hotels, motels, and resorts.

**Prerequisite:** HTM 200 Minimum Grade of D

**HTM 455 Advanced Meetings, Incentives, Conventions, Events 3 cr**

An advanced course that builds upon and expands the foundational concepts introduced in HTM 220. This project-centered course offers a hands-on learning experience, enabling students to plan and execute events by integrating the knowledge acquired from their previous Hospitality and Tourism courses. The course is designed to empower students to further enhance their management and leadership skills, equipping them for future careers in the events industry.

**Prerequisite:** HTM 220 Minimum Grade of D

**HTM 490 Special Topics 1-4 cr**

This course is designed as an educational tool for college students to develop a theoretical understanding of the concept of servant leadership as it applies to the hospitality and tourism management industry, and to acquire and apply fundamental hospitality and tourism workplace competencies through "real-world" experiential learning activities that include "earning the right to lead" through engagement and visible leadership. Students will complete online learning modules related to theory and practice while also engaging in experiential learning activities in a hospitality organization.

**HTM 494 Directed Studies 1-4 cr**

Directed study on a topic of special interest or significance in the field of hospitality and tourism management. Course requirements can be met through research, reading, writing, or lab activities, as approved by the department chair and supervising instructor. May be taken for 1-4 credit hours. May be repeated, if content varies, for up to six hours of credit. Prerequisites: Junior or Senior standing and approval of department chair and supervising instructor.

**HTM 496 Internship I Capstone Exp - W 3 cr**

This pre-internship course examines the impact of business environments on personal and career effectiveness in the Hospitality field. Topics include effective business communication, ethical decision making, and leadership development.

**Prerequisite:** EH 102 Minimum Grade of C or EH 105 Minimum Grade of C and HTM 200 (may be taken concurrently) Minimum Grade of D

**Corequisite:** HTM 498

**HTM 498 Internship II 3 cr**

This Internship II course provides students an opportunity to receive supervised, relevant, and practical experience in work that is related to the objectives of the Hospitality and Tourism Management (HTM) program.

**Prerequisite:** EH 102 Minimum Grade of C or EH 105 Minimum Grade of C and HTM 200 Minimum Grade of D

**Corequisite:** HTM 496

## Infect Disease and Host Def-MD (IHD)

**IHD 120 Infectious Disease & Host Defe 8 cr**

The Infectious Disease and Host Defense Module covers the basic concepts involved in infectious disease and the immune system that defends the body against infection. The module will focus on fundamental knowledge regarding the normal development, structure and function of the immune system, how this system interfaces with infectious agents and how defects in this system cause health problems such as immunodeficiency, allergy, autoimmunity and infection. Thus, the module will equip students to understand the cellular and molecular mechanisms underlying each disorder and will develop their ability to deliver appropriate patient care through proper diagnosis, treatment, management and prevention of these diseases. Throughout the module, students will engage in lectures, active learning sessions, independent study and clinical experiences. These activities will provide students with opportunities to strengthen communication skills, observe and participate in systems-based practice and exercise practice-based learning techniques in a variety of settings that require and foster professional behavior and personal integrity.

**IHD 140 Infectious Disease & Immunolog 8 cr**

The Infectious Disease & Immunology Module covers the immune system that defends the body against infection. Both of these systems affect all organ systems and are critical for human health. The module will focus on fundamental knowledge regarding the normal development, structure and function of the hematologic and immune systems, how these systems interface with infectious agents and how defects in these systems cause health problems such as cancer, immunodeficiency, allergy, autoimmunity and infection. Thus, the module will equip students to understand the cellular and molecular mechanisms underlying each disorder and will develop their ability to deliver appropriate patient care through proper diagnosis, treatment, management and prevention of these diseases. Throughout the module, students will engage in lectures, small-group learning sessions, independent study and clinical experiences. These activities will provide students with opportunities to strengthen communication skills, observe and participate in systems-based practice and exercise practice-based learning techniques in a variety of settings that require and foster professional behavior and personal integrity.

## Information Systems (ISC) (ISC)

**ISC 190 IS Special Topics 1 cr**

Selected topics in information systems. Prerequisite: Permission of the ISC coordinator.

**ISC 245 Info Systems in Organizations 3 cr**

An overview of information systems topics from an organizational and managerial perspective. Topics include current information technology and systems, such as the Internet and its organizational impacts; the emergence of global economy and digital firms; and the ethical and social impacts of information systems, such as privacy, intellectual property rights, and liability. Issues and strategies regarding information systems planning, systems development, decision making, and using IT for competitive advantage are discussed. Throughout the course, students will investigate the strategic uses of information technology in current industry-specific situations.

**ISC 272 Systems Architecture 3 cr**

This course introduces students to Information Technology hardware and systems software concepts. Topics include: computer hardware, operating systems, system software, hardware and software integration, operating procedures, system performance, security/safety, and compatibility. Student labs and hands-on activities will include: Windows, Unix, and Linux systems, system utilities and software tools. Credit cannot be received for both ITE 272 and ISC 272.

**Prerequisite:** CIS 115 Minimum Grade of C

**Cross-Listed:** ITE 272

**ISC 285 Intermediate Programming 4 cr**

A second course in programming (using a visual, event-driven programming language) that builds on CIS 115. Topics include: transition to visual language, processing data, decisions, loops, methods, arrays and lists, text processing, structured data types. Programming projects are required. Credit cannot be received for both ISC 285 and ITE 285.

**Prerequisite:** CIS 115 Minimum Grade of C

**Cross-Listed:** ITE 285

**ISC 300 Health Informatics Clin Env 3 cr**

This course provides an overview of concepts, terms, organization, and processes associated with patient care and clinical environments as they pertain to health informatics. The entire process of how a person accesses, moves within, and exits the system both as an inpatient and outpatient to obtain care. Students will observe and report on a variety of clinical settings and healthcare specializations throughout the semester. This course is designed for students with no prior clinical experience.

**ISC 305 Info Systems-Technology 3 cr**

The analysis, design, and implementation of information systems. Analysis of the functional areas of business and integration of computer tools to satisfy information requirements. Current development in business computer systems, including surveys of current systems and the Internet. Computer classrooms are utilized to provide students with "hands on" experience.

**Prerequisite:** CIS 250 Minimum Grade of C

**ISC 310 Health Informatics 3 cr**

This course provides an overview of the concepts, terms, tools, and architectures associated with health informatics as applied to healthcare delivery. Topics include: electronic record systems, computerized physician order entry, health system standards, terminologies, workflow modeling, security and privacy of clinical data, clinical reporting, and the impact of information technology use on the quality and efficiency of health care delivery and outcomes. ISC 300 is a corequisite for students with no prior clinical experience.

**ISC 353 Info Sys Appl Development 3 cr**

This course provides an accelerated approach to programming in a high-level, object-oriented language, especially for information systems. Coverage includes algorithmic problem solving, fundamentals of programming, procedures, decisions, repetition, arrays, files, exception handling, and object-oriented programming. The format for this course is lecture/lab. The instructor will demonstrate in class, and students will learn by doing homework problems and programming assignments. This course does not count towards a graduate degree in CIS. Some prior programming experience is desired and permission of Coordinator. Prerequisites: Math placement score of 65 or higher.

**Prerequisite:** UTM 65 or DS 090 Minimum Grade of C or (MA 112 Minimum Grade of C or MA 171 Minimum Grade of C)

**ISC 360 Info Sys Analysis and Design-W 3 cr**

A thorough examination of the analysis and design of computer information systems from the systems analysts view. The course will use an established software development methodology. At each step in the software development life cycle, both the methodologies used and the documentation required will be examined.

**Prerequisite:** ISC 245 Minimum Grade of C and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**ISC 361 Advanced Application Development 3 cr**

This course explores advanced topics in applications development by connecting web applications written in a modern programming language with databases. Other topics: integrating programming components and libraries, application development and testing methodologies, and using an object oriented approach for multi-tiered applications. Programming projects are required. Credit cannot be received for both ITE 370 and ISC 361

**Prerequisite:** CIS 324 Minimum Grade of C and (ISC 285 Minimum Grade of C or ITE 285 Minimum Grade of C)

**Cross-Listed:** ITE 370

**ISC 362 IS Object-Oriented Analy-Des 3 cr**

This course provides an introduction to an object-oriented analysis and design (OOAD) methodology as well as the tools and techniques for supplementing this methodology. The course will also cover the use of notational metalanguages such as Unified Modeling Language (UML) and OOAD computer-assisted software engineering (CASE) tools.

**Prerequisite:** ISC 245 Minimum Grade of C

**ISC 410 Health Informatics 3 cr**

This course provides an overview of the concepts, terms, tools, and architectures associated with health informatics as applied to healthcare delivery. Topics include: electronic record systems, computerized physician order entry, health system standards, terminologies, workflow modeling, security and privacy of clinical data, clinical reporting, and the impact of information technology use on the quality and efficiency of health care delivery and outcomes.

**ISC 450 Health Sys Analysis and Design 3 cr**

This course provides an overview of the concepts, terms, tools, and architectures associated with health informatics as applied to healthcare delivery. Topics include: electronic record systems, computerized physician order entry, health system standards, terminologies, workflow modeling, security and privacy of clinical data, clinical reporting, and the impact of information technology use on the quality and efficiency of health care delivery and outcomes.

**Prerequisite:** ISC 410 Minimum Grade of C

**ISC 455 Health Data Mgt Decision 3 cr**

This course focuses on the design and management of electronic medical record systems and clinical decision support systems. Course content related to electronic medical record systems includes architectural components, technical design issues, and management; and, content related to clinical decision support systems includes decision support roles, extracting useful information from data, and legal and regulatory restrictions. Laboratory assignments will provide students with opportunities to interact with these systems.

**Prerequisite:** ISC 410 Minimum Grade of C

**ISC 457 Data Ware-Decision Support 3 cr**

This course examines the analysis and design issues as well as the architectural infrastructures associated with enterprise data warehouses for decision support. Prerequisites: CIS 324.

**Prerequisite:** CIS 324 Minimum Grade of C

**ISC 459 IS Appl Design-Implementation 3 cr**

Analysis and design of information systems to support multiple locations via Intranet/Internet access. Additional and supporting topics, such as corporate privacy and security are also covered.

**Prerequisite:** CIS 324 Minimum Grade of C

**ISC 462 IS Strategy and Policy 3 cr**

This course provides the top management, strategic perspective for aligning competitive strategy with information systems. Issues include the development and implementation of policies and plans to achieve organizational goals, including security policy.

**Prerequisite:** CIS 324 Minimum Grade of C

**ISC 463 IS Database Admn and Security 3 cr**

An examination of the issues and activities associated with the administrator function for databases. This course will cover installation, implementation, user management, backup, and security.

**Prerequisite:** CIS 324 Minimum Grade of C

**ISC 464 IS Security and Risk Mgmt 3 cr**

This course provides an introduction to the fundamental principles and topics of information systems security and risk management at the organizational level. This course views information security as a management issue that incorporates technical and management solutions. Topics include risk management, security policy, disaster planning, security law and ethics, and security education, training and awareness.

**Prerequisite:** (MGT 300 Minimum Grade of C or MGT 322 Minimum Grade of C) and (CIS 321 Minimum Grade of C or CIS 221 Minimum Grade of C)

**ISC 467 Enterprise Information Systems 3 cr**

This course provides an introduction to enterprise information systems and to business process modeling. Key concepts and techniques for identifying, designing, and documenting business processes will be presented. The way information technology can be used to manage, transform business processes is discussed. Successful organizational change strategies will be reviewed.

**Prerequisite:** (MGT 300 Minimum Grade of C or MGT 322 Minimum Grade of C) and CIS 324 Minimum Grade of C

**ISC 472 Advanced Data Management 3 cr**

This course provides an introduction to the concepts and technologies of big data. Key concepts and techniques allow organizations to analyze structured and unstructured data/information collected from transaction processing systems, data warehouses, and distributed systems. The ultimate purpose of descriptive, predictive, and prescriptive analytics is to support high quality decision support for executives and managers. Concepts of data mining, data storage, non-relational platforms, and considerations for new and emerging technologies are described in detail.

**Prerequisite:** (CIS 324 Minimum Grade of C or CSC 324 Minimum Grade of C) and (ISC 285 Minimum Grade of C or ITE 285 Minimum Grade of C or CSC 231 Minimum Grade of C)

**ISC 475 Info Systems Proj Management 3 cr**

This course examines the principles and techniques of project management from an information systems perspective. Major topics covered include project context, project selection, and project planning. Students work in collaborative teams and are instructed in the use of a project software tool. Credit cannot be received for both ITE 475 and ISC 475.

**Prerequisite:** CIS 324 Minimum Grade of C

**Cross-Listed:** ITE 475

**ISC 490 Special Topics 3 cr**

Advanced selected topics in information systems. Prerequisite: Permission of the ISC Coordinator.

**ISC 501 Programming for IS 3 cr**

This course covers programming concepts required by Information Systems professionals to provide a solid foundation for building applications. Coverage includes: data types, decision structures, repetition structures, graphical user interfaces (GUI), methods, arrays, files, and object oriented programming (OOP) concepts.

**ISC 507 IS Database Processing 3 cr**

Analysis, design and implementation of database systems for IS professionals. Coverage includes DBMS models, E-R modeling, normalization concepts, and the use of queries for processing data.

**ISC 510 Health Informatics 3 cr**

This course provides an overview of the concepts, terms, tools, and architectures associated with health informatics as applied to healthcare delivery. Selected research topics are introduced and independently studied. Topics include: electronic record systems, computerized physician order entry, health system standards, terminologies, workflow modeling, security and privacy of clinical data, clinical reporting, and the impact of information technology use on the quality and efficiency of health care delivery and outcomes. Prerequisite: Permission of the Director of CI Graduate Studies.

**Prerequisite:** CSGR P

**ISC 516 AI Theory and Programming 3 cr**

Introduction to basic concepts, implementation techniques, and philosophies of artificial intelligence and intelligent systems. Introduction to expert systems, fuzzy logic systems, neural networks, and techniques for artificial intelligence programming. The fundamentals of an AI programming language (LISP or PROLOG) will be presented. The language will then be used to solve problems in typical AI applications. Prerequisite: Graduate Professional Component Standing.

**Prerequisite:** CSGD 030

**ISC 545 Management Information Systems 3 cr**

This course provides an overview of information systems from an organizational, managerial, and technical perspective. The topics covered will focus on the strategic role of information systems and information technology in business processes, change and knowledge management, group and individual decision-making, and electronic commerce. Specific topics include current hardware, infrastructure and connectivity technologies, software and systems development methodologies. Internet-based applications, management challenges and opportunities created by information systems and global connectivity such as privacy, data and systems security and control, intellectual property, ethical and social consequences of information technology, and the impact of digital integration on an organization's competitiveness, products, services, procedures, and management structures. Prerequisite: Permission of the Director of CIS Graduate Studies.

**ISC 550 Health Data Security & Comp 3 cr**

This course involves a thorough examination of the security and privacy requirements of the Health Insurance Portability and Accountability Act (HIPAA) and the implementation of these requirements in the clinical environment. Students will learn how to address security development all the way through post-implementation, how to evaluate systems for vulnerabilities, and how to identify protected health information and covered entities.

**ISC 551 Human-Comp Interface Design 3 cr**

The course covers principles, guidelines, and methods in human computer interface design. Students complete a project involving the development, evaluation, and demonstration of a user interface. The interface is designed around a user and task analysis performed on a given problem. Students plan and conduct a usability study of a working prototype and report on results and recommendations. Prerequisite: Graduate Professional Component.

**Prerequisite:** (CIS 501 Minimum Grade of B and CIS 507 Minimum Grade of B)

**ISC 553 IS Web Site Management 3 cr**

This course addresses the design, development, and management of a web server. Topics include the selection, installation, and configuration of an operating system and web server software, web server security and monitoring, and website maintenance. Prerequisites: Graduate Professional Component.

**Prerequisite:** CSGR P

**ISC 555 Health Data Mgt/Decision Supp 3 cr**

This course focuses on the design and management of electronic medical record systems and clinical decision support systems. Course content related to electronic medical record systems includes architectural components, technical design issues, and management; and, content related to clinical decision support systems includes decision support roles, extracting useful information from data, and legal and regulatory restrictions. Laboratory assignments will provide students with opportunities to interact with these systems.

**Prerequisite:** CSGR P

**ISC 557 Data Ware-Dec Support Systems 3 cr**

This course examines the analysis and design issues as well as the architectural infrastructures associated with enterprise-wide data warehouses. Prerequisite: CIS Graduate Professional Component.

**Prerequisite:** CSGD 030

**ISC 559 IS App Design-Implementation 3 cr**

Analysis and design of information systems infrastructures to support multiple locations, intranet/internet access, corporate privacy, and security. Capacity analysis and planning, installation, performance monitoring, and problem solving strategies. Prerequisites: ISC 501 and ISC 507

**Prerequisite:** (ISC 501 Minimum Grade of B and ISC 507 Minimum Grade of B)

**ISC 560 Info Systems Analysis-Design 3 cr**

This course will include an introduction to the systems development life cycle as well as a survey of analysis and design techniques. Detail topics will include information systems planning and project identification and selection, requirements collection and structuring, process modeling, data modeling, design of interface and data management, system implementation and operation, system maintenance, and change management implications of systems. Globalization issues in systems will also be discussed. Students will use current methods and tools such as rapid application development, prototyping, and visual development.

**ISC 561 IS Database Management 3 cr**

An introduction to database management systems. The data environment, basic technical concepts and systems resources, database concepts, including use and management of databases. Classical and current DBMS models will be presented. Laboratory project activity will involve definition, creation, and development of a database. Prerequisites: Graduate Professional Component.

**Prerequisite:** (ISC 507 Minimum Grade of B)

**ISC 562 IS Policy and Strategy 3 cr**

This course provides the top management, strategic perspective for aligning competitive strategy, core competencies, and information systems. Issues include the development and implementation of policies and plans to achieve organizational goals, including defining systems that support the operational, administrative, and strategic needs of the organization, its business units, and individual employees. Prerequisites: Professional Component

**Prerequisite:** CSGR P

**ISC 563 IS Database Administration 3 cr**

This course will examine the issues and activities associated with the administrator function for organizational databases. Topics include storage and indexing, query evaluation, physical database design, crash recovery, and security. Prerequisite: CIS Graduate Professional Component.

**Prerequisite:** CSGR P

**ISC 565 IS Project-Change Management 3 cr**

A study of the concepts and techniques of project management from an information systems perspective. The course provides an overview of project lifecycle activities, and a focus on managerial, behavioral, and process issues that surround the dynamic context of systems development. The issue of managing the change brought about by the introduction or modification of information systems in organizations will be discussed. Students will be instructed in the use of software tools for project management.

**ISC 567 IS Function Integration 3 cr**

The tactical/operational responsibilities and roles of the CIO. Governance considerations that link the IS-business organizations. Current/emerging issues in creating and coordinating the key activities necessary to manage the day-to-day operations of the IS function. Coordinating skills and organizational IS infrastructure.

**Prerequisite:** (ISC 501 Minimum Grade of B and ISC 561 Minimum Grade of B)

**ISC 568 IS Enterprise Integration 3 cr**

Information systems role in transforming organizations and industries. An integrated view of the organization from an external and internal perspective. IS' internal role in integrating the enterprise through a cohesive set of business processes and functional applications to meet business needs. Enterprise resource planning and enterprise functionality. Collaborative systems. Consideration of external relations with suppliers, outsourcers, and customers. Prerequisite: ISC 559.

**Prerequisite:** ISC 559 Minimum Grade of B

**ISC 572 Advanced Data Management 3 cr**

The focus here is on the management of data and the technologies which specifically targets mass data storage with a view to online and after-the-fact examination of data to acquire new insights. The major topics include: data warehouse planning, data warehouse models, and supporting software, data mining concepts and tools, creation of data mining models for the tools and matching the tool to the task. Prerequisite: CIS Graduate Professional Component

**Prerequisite:** CSGR P

**ISC 590 IS Sp Top - 3 cr**

Advanced selected topics in information systems. Prerequisite: Permission of ISC coordinator.

**Prerequisite:** CSGR P

**ISC 595 IS Project Proposal Develop 1-3 cr**

Development of the project proposal for the Information Systems specialization master's project. Prerequisites: CIS 518, Graduate Professional Component, Permission of Director of CIS Graduate Studies.

**Prerequisite:** CIS 518 Minimum Grade of S

**ISC 598 Information Systems Project 1-3 cr**

This course may be repeated for a maximum of six (6) credits. A CIS project committee will provide direction during the project. Prerequisite: Approval of project proposal by the student's project committee, and permission by Director of CIS Graduate Studies.

**Prerequisite:** (ISC 595 Minimum Grade of B and CSIP P)

**ISC 629 Comp Ecosystems 3 cr**

This course focuses on developing expertise and preparation for independent research in computing ecosystems through an in-depth review of the computing literature. The course will explore concepts and issues associated with large scale parallel data processing, virtualized storage, application, and infrastructure architectures and the attendant security, privacy and legal issues.

**ISC 673 Digital Investigations 3 cr**

This course focuses on developing expertise and preparation for independent research in Digital Forensics Investigations through an in-depth review of the Digital Forensics literature. The student will be conversant in broad issues and trends in Digital Forensics as defined by skill sets and occupations.

**ISC 675 Information Systems 3 cr**

This course focuses on developing expertise and preparation for independent research in information systems through an in-depth review of the information systems literature. The course will explore the current major streams of theory, research, and methodologies in information systems.

**ISC 686 Risk Analysis 3 cr**

This course focuses on developing expertise and preparation for independent research in risk analysis through an in-depth review of the risk assessment and information assurance literature. The student will be conversant in broad issues and trends in risk analysis as defined by techniques, methodologies, policies, frameworks, and skill sets.

## Information Technology (ITE) (ITE)

**ITE 190 ITE Special Topics 1 cr**

Selected topics in information technology. Prerequisite: Permission of the ITE coordinator.

**ITE 271 Info Techn in Organizations 3 cr**

This course introduces students to the Information Technology (IT) concepts and the software that facilitates IT solutions. Topics include: data, information, and knowledge concepts, productivity software tools, role of networking and communication, the "digital phenomena", and the benefits of IT. Also included are IT program concepts such as: ethics, the importance of effective written and oral communication, continuous learning, and technology monitoring-evaluation.

**ITE 272 Systems Architecture 3 cr**

This course introduces students to the Information Technology (IT) hardware and systems software concepts. Topics include: computer hardware, operating systems, system software, hardware and software integration, operating procedures, system performance, security/safety, and compatibility. Student labs and hands-on activities will include: Windows, Unix, and Linux systems, system utilities and software tools.

**Prerequisite:** CIS 115 Minimum Grade of C

**Cross-Listed:** ISC 272

**ITE 285 Intermediate Programming 4 cr**

A second course in programming (using a visual, event-driven programming language) that builds on CIS 115. Topics include: transition to visual language, processing data, decisions, loops, methods, arrays and lists, text processing, structured data types. Programming projects are required. Credit cannot be received for both ISC 285 and ITE 285.

**Prerequisite:** CIS 115 Minimum Grade of C

**Cross-Listed:** ISC 285

**ITE 370 Adv Application Development 3 cr**

This course explores advanced topics in applications development by connecting web applications written in a modern programming language with databases. Other topics: integrating programming components and libraries, application development and testing methodologies, and using an object oriented approach for multi-tiered applications. Programming projects are required. Credit cannot be received for both ITE 370 and ISC 361.

**Prerequisite:** (ITE 285 Minimum Grade of C or ISC 285 Minimum Grade of C) and CIS 324 Minimum Grade of C

**Cross-Listed:** ISC 361

**ITE 372 Advanced Operating Systems 3 cr**

This course introduces students to advanced Operating Systems techniques and related system architecture concepts. Students will examine how Operating Systems retain parameters set during installation and customization as well as the basic strategies used in Operating System security. Students will use advanced command-line tools to discover and modify settings within the Operating System and will use advanced scripting techniques to parse data within Operating System's files.

**Prerequisite:** (ISC 272 Minimum Grade of C or ITE 272 Minimum Grade of C) and (ISC 285 Minimum Grade of C or ITE 285 Minimum Grade of C)

**ITE 373 File Sys for Digital Forensics 3 cr**

This course introduces students to advanced file system techniques used in Forensic Analysis. Students will examine the current principles in drive storage hardware and file systems, including Windows and Linux-based systems and evaluate possible data hiding techniques which can be employed within these systems. Students will be required to perform imaging of hard drives for analysis of possible hidden data using techniques covered in this course.

**Prerequisite:** (ISC 272 Minimum Grade of C or ITE 272 Minimum Grade of C)

**ITE 375 Publishing for the WWW 3 cr**

This course is an introduction to the models and tools used to develop documents for the World Wide Web. Course topics include website planning and design, markup and styling languages, graphics, multimedia utilization, typography, and scripting. Website design issues such as ethics, copyright and intellectual property rights are also covered. Prerequisites: CIS 321 and either ISC 272 or ITE 272 and either ISC 285 or ITE 285.

**Prerequisite:** CIS 321 Minimum Grade of C and (ISC 272 Minimum Grade of C or ITE 272 Minimum Grade of C) and (ISC 285 Minimum Grade of C or ITE 285 Minimum Grade of C)

**ITE 380 Multimedia Production 3 cr**

This course covers the models and tools of multimedia development and production. Development models include: message analysis, audience analysis, and media formats. Technical issues include: data formats, data interoperability, and hardware concepts. From a practical perspective, students will develop a multimedia project.

**Prerequisite:** (ISC 272 Minimum Grade of C or ITE 272 Minimum Grade of C)

**ITE 382 Network Administration 3 cr**

This course examines the network and database administrator functions in an organization. Students study the functions required of an administrator to facilitate the usage of the environment while securing the resources. Various methods and software products will demonstrate the areas of access and security.

**Prerequisite:** CIS 321 Minimum Grade of C and (ISC 272 Minimum Grade of C or ITE 272 Minimum Grade of C)

**ITE 384 Network Infrastructure Systems 3 cr**

This course focuses upon the concepts of network hardware systems that provide interconnection of communication devices. Topics include: network architectures and technologies, concepts such as routing, addressing, and network protocols (TCP/IP and others). Students will be required to setup, configure, and manage wired and wireless network equipment such as switches, routers, access points, and gateways

**Prerequisite:** CIS 321 Minimum Grade of C and (ISC 272 Minimum Grade of C or ITE 272 Minimum Grade of C)

**ITE 453 Web Site Management 3 cr**

This course addresses the design, establishment and implementation of a World Wide Web site. Issues addressed are: definition of the site, establishment of a physical site, choice of a Web server, determination of software requirements, implementation details, security, management, and monitoring of the site.

**Prerequisite:** CIS 321 Minimum Grade of C and (ISC 272 Minimum Grade of C or ITE 272 Minimum Grade of C)

**ITE 473 Digital Forensic Analysis 3 cr**

This course introduces students to acceptable methodologies of securing, collecting, analyzing and reporting data of a computer forensics investigation. Topics include: Ethics, introduction to computer investigations, evidence control, forensics tools, data acquisition, data recovery, data analysis and presenting the results. Students will be required to perform several forensics analyses in a controlled lab environment.

**Prerequisite:** ITE 372 Minimum Grade of C and ITE 373 Minimum Grade of C

**ITE 474 Human Computer Interface 3 cr**

Students will study the concepts of human-computer interaction and interface design. Topics include: detailed human-computer interaction concepts, modern graphical user interface models, and interface usability testing. Students will use rapid-prototyping tools to develop and test a typical user interface. Credit cannot be received for both ITE 474 and ISC 474.

**Prerequisite:** (ISC 285 Minimum Grade of C or ITE 285 Minimum Grade of C)

**Cross-Listed:** ISC 474

**ITE 475 IT Project Management 3 cr**

This course examines the principles and techniques of project management from an information technology perspective. Major topics include project context, project selection, and project planning. Students work in collaborative teams and are instructed in the use of a project software tool. Credit cannot be received for both ITE 475 and ISC 475.

**Prerequisite:** CIS 324 Minimum Grade of C

**Cross-Listed:** ISC 475

**ITE 476 Network Security Management 3 cr**

This course examines network and web security issues including: risks and threats, system access points, hardware and software defense methods, and organizational security policies. Labs will require students to analyze systems for potential threats, implement security procedures, monitor systems for security breaches, and institute recovery or repairs.

**Prerequisite:** ITE 382 Minimum Grade of C and ITE 384 Minimum Grade of C

**ITE 480 Needs Assess-Tech Eval - W 3 cr**

This course presents methodologies for assessing technological needs in support of organizational information requirements. Students learn the next logical step is a formal means of evaluating a given technology. Major topics of the course are specifying organizational needs, identifying potential technologies, evaluating potential benefits, assessing the organization's ability to utilize the technology. Students will examine planning for technological change and strategic implementation of the change.

**Prerequisite:** EH 102 Minimum Grade of C and ITE 271 Minimum Grade of C and ITE 285 Minimum Grade of C

**ITE 482 Adv Web Development 3 cr**

This is an advanced course in web programming and development. This course provides a hands-on approach using high-level development tools to learning advanced web programming concepts including server-side and database processing. Students will implement usability and security features into the development of modern web applications.

**Prerequisite:** CIS 324 Minimum Grade of C and ITE 375 Minimum Grade of C

**ITE 484 Advanced Network Management 3 cr**

This course explores advanced network management issues including: developing/designing network implementation strategies, managing users and data, providing operational support and help-desk, developing network use policies, developing network recovery procedures. Labs will require that students manage an operational network that provides typical network services and experience the day-to-day problems that network administrators encounter.

**Prerequisite:** ITE 382 Minimum Grade of C and ITE 384 Minimum Grade of C

**ITE 485 ITE Senior Demo Project 3 cr**

A senior capstone individual project course working from problem requirements and specifications to produce a solution. This requires exploration of suitable information technologies to produce a solution that improves the problem situation. Students will analyze, plan, and report on the project and implement a prototype. Prerequisites: ITE 370 Minimum Grade of C, ITE 480 Minimum Grade of C, and permission of the ITE coordinator.

**Prerequisite:** ITE 370 Minimum Grade of C and ITE 480 Minimum Grade of C

**ITE 490 Special Topics 3 cr**

Advanced selected topics in information technology. Prerequisite: Permission of the ITE coordinator.

**Prerequisite:** CSPC 30 or CSGD 030

## Instructional Sys Design (ISD) (ISD)

**ISD 301 Trends & Issues in IDPI-W 3 cr**

This is an introductory course that provides an overview of current trends, technology and issues in instructional design and performance improvement.

**Prerequisite:** EH 101 Minimum Grade of C and EH 102 Minimum Grade of C

**ISD 310 Instructional Design 3 cr**

Instructional Design is a project-based course that includes step-by-step strategies to create instruction using the design models, instructional strategies, and technology applications. Students will explore the processes of analysis, design, development, implementation, and evaluation in order to apply real-world training solutions to actual instructional problems.

**ISD 320 Training Interventions 3 cr**

This course will provide students with experience in designing and developing facilitator-lead training interventions focused on improving performance in various contexts. Students will interact with a client in a professional manner and create a professional training session incorporating motivational strategies, instructional delivery methods, and appropriate assessment measures from initial contact needs assessment to final session evaluations.

**ISD 340 Analysis, Assessment & Eval 3 cr**

Students will learn how to make assessments of human attitudes, knowledge, and performance, analyze empirical data, and evaluate training and human performance programs.

**ISD 350 Emerg Learning Technologies 3 cr**

This course provides students with the skills and knowledge necessary to develop technology-based modules using different delivery methods for application in non-instructional and instructional training solutions.

**Prerequisite:** ISD 310 Minimum Grade of C

**ISD 360 Communication Skills in Org 3 cr**

This course is designed to utilize theory and practice of communication in the processes of analysis, design, development, implementation and evaluation of instruction. Communication skills will be developed and applied in a practical setting.

**ISD 370 Distance and Mobile Learning 3 cr**

This course will identify and utilize innovative technologies related to distance and mobile learning in various job sectors and learning environments.

**Prerequisite:** ISD 310 Minimum Grade of C

**ISD 400 Portfolio Development 1 cr**

Students will create an online portfolio to showcase projects, assignments, and collaborations related to instructional design and performance improvement.

**Prerequisite:** ISD 310 Minimum Grade of C

**ISD 410 Org/Coordination Training 3 cr**

This course is designed to develop knowledge and competencies in the coordination of large-scale, comprehensive training programs.

**Prerequisite:** ISD 320 Minimum Grade of C and ISD 340 Minimum Grade of C

**ISD 420 Cultural Factors in IDD & HPI 3 cr**

This course will focus on the interaction of multicultural aspects of learning and teaching. Students will enhance their cognitive and affective awareness and understanding, as well as their personal acceptance of differences associated with the learning/teaching process. The ultimate goal is to prepare multiculturally competent designers of instruction for a global society.

**ISD 430 Psych of Learning in Organ-W 3 cr**

The course covers major theoretical perspectives in organizational psychology based on empirical research and case studies. Students will explore learning theory, group dynamics, and change in different types of learning organizations.

**ISD 440 Human Develop. Interventions 3 cr**

Students will learn and apply various human development theories and interpersonal skills related to the effective design of training interventions to improve learning and performance. A special area of emphasis will focus on students' own development experiences.

**ISD 450 Human Performance Tech 3 cr**

This course includes conducting various types of analysis in order to solve human performance problems by design on non-instructional interventions.

**Prerequisite:** ISD 340 Minimum Grade of C

**ISD 480 Learn Train & Perf Project 3 cr**

Students will complete a supervised field project on a topic related to instructional design and/or performance improvement.

**ISD 490 Special Topics 3 cr**

This course will allow faculty to work with students to explore current topics related to instructional design and performance improvement. Scholarly articles and current trends will be the basis for the designated learning outcome and end product.

**Prerequisite:** ISD 310 Minimum Grade of C and ISD 350 Minimum Grade of C and ISD 360 Minimum Grade of C

**ISD 495 Internship 3 cr**

The internship is a supervised learning experience in an actual or similar setting in which instructional design or performance improvement related professionals are employed.

**Prerequisite:** EH 102 Minimum Grade of C

**ISD 581 Digital Media Tools 3 cr**

This course helps students learn to use computers to design instruction.

**ISD 582 Evaluation of Digital Media 3 cr**

An advanced course in the development, use and evaluation of multimedia instruction.

**ISD 583 Interactive Video 3 cr**

This course involves digital editing and includes basic instruction in shooting, lighting and composing video sequences.

**ISD 584 Animation 3 cr**

An introductory course that provides students with an opportunity to acquire the skills necessary to develop animated interactive modules for use in instruction.

**ISD 585 Integr Tech in Teaching 3 cr**

The purpose of this course is to enable students with some technology background in computers to focus the use of a variety of technologies onto a specific content area of instruction. Students will demonstrate cognitive competency of curriculum integration, instructional design, and production techniques. Specific attention will be given to videodisc technology, AV and computer technology.

**ISD 590 Sp Top - 3 cr**

Topics of contemporary interest in the area of Educational Media will be presented, discussed and investigated.

**ISD 594 Dir St and Research 1-3 cr**

Students explore problems and issues of special interest or significance in Instructional Design and Development. Not more than three semester hours may be accepted toward degree programs

**ISD 595 Internship - Masters 1-6 cr**

The internship is a supervised learning experience in an actual or similar setting to that in which instructional designers or media administrators are employed

**ISD 598 Research and Dev Project 1-6 cr**

A supervised field project, study or investigation on a topic related to Instructional Design and Development. Students will conduct an investigation which applies skills learned during the Instructional Design and Development Masters program.

**ISD 599 Thesis 1-3 cr**

A student selects a project, study or investigation related to the area of specialization in Instructional Design and Development. The project forms a basis for the thesis. A thesis committee provides direction during the investigation and during the writing of the thesis.

**ISD 600 Learning Tools 1 cr**

This one-credit-hour course is designed to introduce students to some of the basic media tools that will help them with their coursework and in the work place. The course will typically be a series of two-hour class periods scheduled at somewhat regular intervals.

**ISD 601 Sem Instruct Design-Dev 3 cr**

Discussion and investigation of particular topics related to Instructional Design and Development.

**ISD 602 Writing For Instruction 3 cr**

Course serves as an overview and review of essential written communication skills needed by instructional design professionals.

**ISD 610 Trends and Issues in IDD 3 cr**

Discussion and investigation of history, current trends, and issues in instructional design and their implications for education and training.

**ISD 611 Macro Lvl Trning & Perform Sys 3 cr**

Course provides an overview of concepts and current issues related to the design and development of training and performance systems at the macro-level. Rather than focusing on specific, small-scale instructional or non-instructional interventions, students in this course will study learning and performance from a broad organizational perspective.

**Prerequisite:** ISD 621 Minimum Grade of B and ISD 641 Minimum Grade of B

**ISD 612 Alternate Instructional Models 3 cr**

A comprehensive course detailing conventional and alternative instructional-design models. It is intended for advanced IDD students to further develop their skills and knowledge about ID models and to formulate their own epistemological beliefs as to how ID should occur.

**Prerequisite:** ISD 622 Minimum Grade of B

**ISD 613 Instructional Strategies 3 cr**

In this course, students explore the use of an assortment of instructional strategies to meet diverse learning needs.

**ISD 614 Human Cognition for IDD 3 cr**

A survey course of the cognitive science literature that is especially relevant for instructional designers and human performance technologists. The course covers major theoretical perspectives in cognitive science and has students read original empirical research. The goal is to enable IDD students to utilize the cognitive science literature in their careers.

**Prerequisite:** EPY 502 Minimum Grade of B

**ISD 620 Research in Instr Tech 3 cr**

Students collaborate with a graduate faculty member who is conducting research in the area of instructional design and development. May be repeated for credit.

**ISD 621 Instructional Design 3 cr**

Introductory course that focuses on a recognized model of instructional design. Includes emphasis on instructional analysis, instructional objectives, performance assessment, instructional strategies and sequences, and formative evaluation.

**ISD 622 Adv Instructional Design 3 cr**

Application of advanced instructional design models and procedures for needs assessment, instructional development, and evaluation in various instructional and learning environments using current learning tools.

**Prerequisite:** ISD 621 Minimum Grade of B

**ISD 623 Adv Research Methodology 3 cr**

A comprehensive course detailing advanced research methods and research. This course is specifically geared toward advanced IDD students who wish to develop the skills to properly design, propose, carry out, and critique scholarly research. The course covers the specifics of advanced research design and methods through a thorough analysis of empirical research. The goal is to equip IDD students with the research design skills to become successful scholars and researchers in their field.

**Prerequisite:** IDE 510 Minimum Grade of B or IDE 620 Minimum Grade of B

**ISD 640 Needs Assessment 3 cr**

The course focus is on conceptualization of needs analysis related to instructional and performance improvement issues in selected settings. Students collaboratively apply a needs assessment model to determine needs, causes, and solutions and report findings and recommendations.

**ISD 641 Performance Systems Tech 3 cr**

This course provides students with practical methods of analyzing and solving human performance problems. Emphasis is placed on development of both non-instructional and instructional interventions.

**ISD 642 Project Coordination 3 cr**

This course will develop knowledge and competencies in the coordination of large instructional projects. It is designed to enhance skills in the basic functions of instructional project coordination: planning, organizing, controlling, and directing.

**ISD 650 Computer-Based Training 3 cr**

A course for persons interested in the use of the computer to present instructional materials to students. Current learning theory as it pertains to authoring will be discussed.

**ISD 651 Learning Theory and Technology 3 cr**

This course will present techniques for the integration of instructional design theory and practice into the newer delivery systems including those using video and digitized media.

**ISD 652 Technology-Based Instruction 3 cr**

This course is a continuation of ISD 651. It concentrates on the additional skills and software necessary to develop and produce an original interactive instructional product.

**ISD 653 Developing Online Instruction 3 cr**

Developing online instruction using course management tools, multi-media technologies, and instructional design principles.

**Prerequisite:** ISD 621 Minimum Grade of B

**Cross-Listed:** IDE 640

**ISD 655 Print and Screen Courseware 3 cr**

Designing, producing and applying print and screen courseware. An analysis of graphic and instructional design principles and technologies, alternatives to conventional prose, learned capabilities, readability, formulate, and resource constraint analysis. Students design, develop, and apply print and screen courseware in instructional modules.

**ISD 656 Training Interventions 3 cr**

Practical experience in designing and implementing facilitator-led training in various large-scale organizations.

**ISD 657 Teaching in Higher Education 3 cr**

Theory and practice of pedagogy in higher education. Principles of the analysis, design, development, implementation, and evaluation of instruction will be addressed and then applied in a practical setting with a mentor instructor.

**ISD 680 Emerging Technologies 3 cr**

Course introduces students to emerging technological breakthroughs in education and training settings especially emphasizing the effects of future technologies.

**ISD 682 Impact Emerging Technologies 3 cr**

This course examines the impact of new digital technologies in education and training and prepares educators to use digital approaches in their institution.

**ISD 694 Dir St and Research - 3 cr**

Students explore problems and issues of special interest or significance in Instructional Design. Not more than three semester hours may be accepted toward degree program.

**ISD 695 Internship - Doctoral 1-6 cr**

The internship is a supervised learning experience in an actual or similar setting to that which instructional designers or media administrators are employed.

## Interdepartmental Educ (IDE) (IDE)

**IDE 010 Reading Exam 0 cr**

IDE 010 is a one hour reading exam that tests students' current proficiency in communication skills. Failure to complete the exam as scheduled, with a passing score, will require the students to re-register for IDE 010.

**IDE 101 Freshman Seminar in Education 2 cr**

Assists freshman with maximizing the student's potential to achieve success and to respond responsibly to the individual and interpersonal challenges presented by college life. Emphasis will be placed on study skills, time management, and writing skills. The course also provides information on the functions and resources of the University that support student academic success. Special emphasis is placed on orienting the student to the special roles and responsibilities of being an educator in today's society.

**IDE 400 Positive Classroom Mgt 3 cr**

Emphasis is placed on ways to create a class and school environment that encourages responsible student behavior. William Glasser's concept of Reality Therapy as a process for successful teacher-student involvement is examined.

**IDE 510 Educ Research and Evaluation 3 cr**

Course will examine research and evaluation methodology, its application to questions in education, and the application of research findings to problems in education. The students will read and evaluate research in education.

**IDE 525 Fnds Teach Eng Sec Lang 3 cr**

A comprehensive survey of current research, methodology and materials in the field of English as a Second Language.

**IDE 540 Found of Career Education 3 cr**

The underlying philosophies behind the career education movement and various approaches to career education are discussed. Ways to increase the career options available to individuals and to facilitate more rational and valid career planning and preparation, are explored through the career education phases: career awareness, career exploration, and career preparation.

**IDE 590 Sp Top - 1-3 cr**

Current topics of special concern to educators. Not more than 6 hours may be earned in Special Topics courses.

**IDE 594 Dir St and Research 1-3 cr**

Exploration of problems and issues of special interest or significance in education. Not more than 3 hours can be accepted for a degree.

**IDE 597 Student Teaching - 3-6 cr**

Observation and supervised teaching in selected schools with opportunity for study and discussion of problems and issues encountered. Prerequisite: Permission of advisor.

**IDE 615 Assess & Eval for Leaders 3 cr**

This course will focus on the assessment and evaluation skills needed by educational leaders. The course will provide students with the knowledge and skills to carry out, and utilize effectively, the evaluations of programs, organizations, personnel, and students. The course will also cover how to create, interpret, and evaluate the reliability and validity of assessments.

**IDE 620 Quantitative Methods I 3 cr**

Basic quantitative methods for decision making in the educational environment. Computer application of basic descriptive and inferential statistics.

**Prerequisite:** IDE 510 Minimum Grade of B or KIN 505 Minimum Grade of B

**IDE 621 Quantitative Methods II 3 cr**

Basic research designs, with appropriate statistical analysis. The course will consider strategies needed for, but not limited to, the following: N-of-One research surveys and needs assessments; ex-post-facto designs, and true experimental designs.

**Prerequisite:** IDE 620 Minimum Grade of B

**IDE 630 Quantitative Methods III 3 cr**

An extensive examination of the nature and character of experimental design in educational research. Includes the development of appropriate analytical techniques.

**Prerequisite:** IDE 620 Minimum Grade of B and IDE 621 Minimum Grade of B

**IDE 631 Intro Qual/Mixed Methods Res 3 cr**

Introduces students to the major kinds of qualitative research and mixed methods research. Attention is given to underlying philosophies, methods of data collection, theoretical perspectives, research design, sampling, data analysis and interpretation, validity types and strategies, and writing research reports.

**Prerequisite:** IDE 510 Minimum Grade of B or IDE 692 Minimum Grade of B

**IDE 635 Adv Measurement and Eval 3 cr**

Nature and function of measurement in instructional design and development environments. Approaches to reducing test error, including establishing validity and reliability estimates. Item analysis and discrimination. Test development for norm-based and criterion-referenced tests. Knowledge of descriptive statistics required.

**Prerequisite:** IDE 620 Minimum Grade of B

**IDE 640 Instructional Development 3 cr**

Preparation of a modular program of instruction which incorporates all elements of the instructional-design process.

**Cross-Listed:** EDU 640

**IDE 645 Adv Human Perform Improvement 3 cr**

This course provides students with knowledge and skills related to human performance improvement in relation to instructional design profession. It provides an overview of foundational theories of industrial-organizational psychology, organizational behavior, and organizational development and change in relation to instructional design and performance improvement practices.

**IDE 650 Instructional Techniques 3 cr**

This course assists teachers in becoming more professional in instructional skills through the use of micro-teaching techniques and analysis of research in teaching.

**Cross-Listed:** EDU 650

**IDE 660 Program Research and Eval 3 cr**

Course strives to increase the effectiveness of instructional personnel in their use of research and evaluative techniques in instructional environments. Three major areas of focus are: the conceptualization of research and evaluative models appropriate for the population; the application of basic assessment concepts to the teaching-learning environment; and the analysis of basic applied research in evaluation.

**Prerequisite:** IDE 510 (may be taken concurrently) Minimum Grade of B

**IDE 665 Inter Techniques Instr Envrmts 3 cr**

This courses concentrates on developing three major areas: the examination of psychological underpinning of various communicative models and concepts; the practicing of interactional skills, such as active listening, congruent sending, and conflict resolution; the building of a communication model for the student's instructional environment.

**IDE 685 Ed Simulation and Games 3 cr**

Teaches the role and function of simulation and games as effective instructional and learning devices.

**IDE 690 Special Topics - 1-3 cr**

Current topics of special concern to educators. Not more than 6 semester hours may be earned in Special Topics courses.

**IDE 692 Research Project Seminar 3 cr**

Survey of both current and classic research in education. Students will identify a research problem of significance in their area of specialization and develop a strategy or research design to solve this problem.

**Prerequisite:** IDE 510 Minimum Grade of B

**Cross-Listed:** EDU 692

**IDE 694 Dir St and Research 1-3 cr**

Exploration of problems and issues of special interest or significance in education. Not more than 3 semester hours can be accepted for a degree.

**IDE 696 Internship-Masters/Doctoral- 0 cr**

The internship is a supervised learning experience in an actual or similar setting to that in which instructional designers or medial administrators are employed. **Prerequisite:** Approval of internship coordinator.

**IDE 700 AU-USA Doctoral Program 1 cr**

Provides an opportunity for advanced graduate students and professors to pursue cooperatively selected concepts and theoretical formulations. May be repeated as necessary.

**IDE 710 Research Seminar I 1-6 cr**

This course provides an introduction to doctoral study in IDD. Topics include graduate student socialization, nature of scholarship and scholarly writing, epistemology, sociology of knowledge, and systems theory as a meta-theory. Admission to doctoral program is required. 3 credit hours.

**IDE 711 Research Seminar II 1 cr**

This course is designed to help doctoral students think about their dissertation research, understand the process of reviewing the literature, and organizing and writing a dissertation-level research proposal. **Prerequisite:** Approval of student's dissertation advisor. 1 credit hour per semester for 3 semesters.

**Prerequisite:** IDE 710 Minimum Grade of S

**IDE 790 Sp Top - 1-3 cr**

Current topics of special concern to educators. Not more than 6 semester hours may be earned in Special Topics courses.

**IDE 792 Research Proj Seminar 3 cr**

Survey of both current and classic research in education. Students will identify a research problem of significance in their area of specialization and develop a strategy or research design to solve this problem.

**Prerequisite:** IDE 510 Minimum Grade of B

**IDE 794 Dir St and Research 1-3 cr**

Exploration of problems and issues of special interest or significance in education. Not more than 3 hours can be accepted for a degree.

**IDE 799 Research-Dissertation 1-9 cr**

Independent research by the student under the sponsorship of the graduate faculty. Students are required to achieve doctoral candidacy before enrolling in the course. Requires faculty advisor approval.

## Interdepartmental Stds (IDL) (IDL)

**IDL 560 Cancer Biology 3 cr**

This course provides a comprehensive coverage of molecular and cellular aspects of carcinogenesis as well as clinical issues related to human cancer. This course will specifically cover areas of histology, pathology, epidemiology, genetics, viruses, oncogenes and tumor suppressor genes. Additionally, topics to be covered include cellular and molecular basis of chemotherapy, pharmacology of anticancer drugs, molecular and cellular basis of radiotherapy, and biological therapy of cancer and clinical trial design.

**IDL 566 Topics in Cancer Biology 1 cr**

Students and faculty participate in a supervised reading of current literature and meet once a week to interact in a discussion of the selected article. The goal of this course is to maintain the student's level of information at a "state of the art" in both methods and theory in the discipline and to develop critical skills in reviewing the literature.

**IDL 567 Dir Studies in Cancer Biology 1-6 cr**

Students participate in research under the direction of a graduate faculty member. The student may pursue independent research or participate in a literature project.

**IDL 570 Medical Pathology 7 cr**

The course is taught as an introduction to the study of the diseases of man by developing working definitions and classifications of disease on the basis of known causes and effects. After surveying the structural changes characterizing disease, the mechanisms involved in clinical and lab manifestations are analyzed for human diseases.

**IDL 571 Mouse Models Biomed Research 3 cr**

This course utilizes the primary scientific literature to provide students with in-depth knowledge regarding the development and utilization of mouse models in biomedical research. Students are required to actively participate in class discussions, present scientific papers, and develop a research project that utilizes mouse models.

**IDL 576 Interdisciplinary Lit Reports 1 cr**

Students and faculty participate in a supervised reading of the current literature and meet periodically (usually once a week) to interact in a discussion of the selected article or topic. The goal of this course is to maintain the faculty's and students' level of information at a "state of the art" in both methods and theory in the discipline and to develop critical skills in reviewing the literature.

**IDL 577 Intro to Research Methods 3 cr**

Theoretical and practical training in basic skills utilized in basic medical science research laboratories, for students entering the first year interdisciplinary curriculum. Discussion of regulatory issues in biomedical research will be interwoven with hands-on laboratory exercises. Offered concurrently with IDL 580.

**IDL 580 Fund Basic Medical Sciences I 8 cr**

First of a two-semester sequence designed for students in the first year interdisciplinary curriculum. In-depth exploration of the fundamentals of biochemistry, cell biology, and molecular biology prerequisite to advanced study of basic medical sciences. Didactic lectures will be complemented with discussions of the literature.

**IDL 581 Fund Basic Medical Sciences II 8 cr**

Second of a two-semester sequence designed for students in the first year interdisciplinary curriculum. Detailed exploration of the fundamentals of microbiology and immunology, developmental biology, integrative systems physiology, and mechanisms of drug action prerequisite to advanced study of basic medical sciences. Didactic lectures will be complemented with discussions of the literature.

**Prerequisite:** IDL 580 Minimum Grade of C

**IDL 590 Sp Top - 1-3 cr**

In-depth tutorial exposure to interdisciplinary topics in Basic Medical Sciences.

**IDL 593 IDL Dir Study Co-Op/Internship 6 cr**

Directed research study under the direction of a member of the graduate faculty.

**IDL 594 Interdisciplinary Dir Studies 1-6 cr**

Directed research study under the direction of a member of the graduate faculty. This course should be taken by students who have not yet identified a major professor in Basic Medical Sciences.

**IDL 595 Distinguished Scientist Sem 0 cr**

A seminar course in which outside speakers are brought in to discuss their research. Students will attend the seminar and have an opportunity to meet informally with the speaker. Attendance will be required, and the material will be testable during each student's qualifying exam.

**IDL 620 Biomedical Engineering I 4 cr**

Fundamental concepts of medical instrumentation, biomedical imaging and biological systems modeling as used in biomedical engineering. Course is cross-listed with EG 620.

**Cross-Listed:** EG 620

**IDL 621 Biomedical Engineering II 4 cr**

Fundamental concepts of transport phenomena, cellular and tissue mechanics, and materials as used in biomedical engineering. Course is cross-listed with EG 621.

**Cross-Listed:** EG 621

**IDL 630 Lung Biology 4 cr**

This course introduces an advanced level of lung physiology. An understanding of fundamental lung development, anatomy, and cell and organ physiology is emphasized. The course consists of lectures and written assignments and essay exams. Reading assignments are from the primary literature.

**Prerequisite:** IDL 580 Minimum Grade of C and IDL 581 Minimum Grade of C

**IDL 631 Lung Pathobiology 4 cr**

This course builds on an in-depth understanding of normal lung biochemistry, cell biology, pharmacology, and physiology to examine lung disease. Emphasis is given on understanding mechanism(s) underlying the genetic, cell biology, anatomy and physiology of disease development and progression. Current therapeutic interventions are discussed. Clinical correlations are utilized to track signs and symptoms of specified diseases, and provide a framework for treatment options. The course consists of lectures and written assignments and essay exams. Reading assignments are exclusively from the primary literature.

**Prerequisite:** IDL 630 Minimum Grade of C

**IDL 635 Advanced Signal Transduction 4 cr**

This course builds on signal transduction topics discussed in the Fundamentals course (IDL 580, 581). The mechanisms of more generalized signaling pathways (e.g., G-protein couples pathways) to specific signaling pathways (e.g., TGF/BMP family) will be discussed. Signal transduction pathways will be examined using classic literature references, from the molecular details of pathway components to the effects on the organ-system. The course consists of lectures, student presentations, and essay/problem solving examinations.

**Prerequisite:** IDL 580 Minimum Grade of C and IDL 581 Minimum Grade of C

**IDL 640 Stat Exp Design in Biomed Res 2 cr**

This course covers statistical analysis, logic and hypothesis-driven experimental design in biomedical research, utilizing a combination of lectures, weekly practical data sets or written assignments, and student presentation.

**IDL 641 Effective Scientific Writing 1 cr**

This course provides strategies to improve communication skills via construction of logical scientific arguments and effective writing. Course format will include lecture/discussion, in class practical exercises, and writing assignments. In addition, participants will be introduced to the Turnitin software, reference databases, and other electronic resources useful in preparation of proposals and manuscripts.

**Prerequisite:** IDL 580 Minimum Grade of C and IDL 581 Minimum Grade of C

**IDL 645 Res Prog Smth Musc/Vasc Blgy 1 cr**

Students meet on alternate weeks for 2 hr with faculty and other research professionals to discuss on-going research projects in the field of smooth muscle and vascular biology. Signal transduction pathways, pathophysiological mechanisms in vascular disorders associated with smooth muscle, and other topics of interest will be discussed. Emphasis will be on up-to-date research results from laboratories as well as newly published literature findings. Students will be expected to present the results of their own laboratory research at least once a year to the group.

**IDL 650 Topics in Lung Biology 1 cr**

In-depth exposure to selected topics in lung biology or pathobiology. Course may be repeated for credit when course content varies.

**Prerequisite:** IDL 630 Minimum Grade of B and IDL 631 Minimum Grade of B

**IDL 656 Research Sem Lung Biology 1 cr**

Students and faculty present a research topic for discussion before members of the Center for Lung Biology. The presentations are usually scheduled on a rotational basis. The student may present research data for critique by the faculty.

**IDL 667 Cancer Biology Research Sem 1 cr**

Students and faculty present a research topic for discussion before members of the department. The presentations are usually scheduled on a rotational basis. The student may present research data for critique by the faculty.

**IDL 676 Literature Report Lung Biology 1 cr**

Students and faculty participate in a supervised reading of the current literature and meet once a week to discuss the selected article or topic and its relation to ongoing research. The goal of this course is to maintain the faculty's and students' level of information at a "state of the art" in both methods and theory in the discipline and to develop critical skills in reviewing the literature of lung biology.

**IDL 780 Applications Biomed Statistics 3 cr**

The course treats the conception, construction, criticism, and deployment of statistical models of biomedical data. Models of dose-response, identification, and survival are developed and applied to lab, clinical and epidemiological data. Course covers linear, generalized linear, and non-linear models of continuous, discrete, and censored data, and includes topics in experimental design, regression diagnostics, salvage of weak parameter estimates, and meta-analysis. Course is organized, for the greater part, on a case-study format.

**IDL 799 Research-Dissertation 1-6 cr**

Independent research by the student under the sponsorship of the graduate faculty in individual departments in the Basic Medical Sciences. Prerequisite: Approved formal research proposal

## Interdisciplinary - MD (IDY)

**IDY 101 Clinical Skills I 0 cr**

An Objectively Structured Clinical Examination (OSCE) is an examination designed to test clinical skill performance and competence in skills such as communication, clinical examination, and interpretation of results. Students rotate through the stations, completing all the stations on their circuit. In this way, all candidates take the same stations. The stations are standardized enabling fairer peer comparison and complex procedures can be assessed without endangering patients' health.

**IDY 102 OSCE M1 - Spring 0 cr**

An Objectively Structured Clinical Examination (OSCE) is an examination designed to test clinical skill performance and competence in skills such as communication, clinical examination, and interpretation of results. Students rotate through the stations, completing all the stations on their circuit. In this way, all candidates take the same stations. The stations are standardized enabling fairer peer comparison and complex procedures can be assessed without endangering patients' health.

**IDY 115 Introduction to the Profession 2 cr**

This module will introduce students to the basic concepts of biostatistics that later will be reinforced in other modules. Throughout the module, students will engage in lectures, active learning sessions, and independent study.

**IDY 122 Fundamentals of Doctoring 2 cr**

The course consists of lecture/discussion around topics pertinent to ambulatory medicine and the ethics of patient care. These discussions are interspersed with patient care experiences in various sites in Mobile and the adjacent area.

**IDY 123 Fundamentals of Doctoring 2 cr**

The course consists of lecture/discussion around topics pertinent to medical ethics, professionalism, cultural competence, communication, and biopsychosocial elements of patient care. Human development and substance abuse are covered. The course includes required community service. It is a longitudinal course that will run until the end of the Sophomore year. Discussions and reading are interspersed with patient care experiences.

**IDY 160 Module Remediation 4 cr****IDY 201 OSCE M2 - Fall 0 cr**

An Objectively Structured Clinical Examination (OSCE) is an examination designed to test clinical skill performance and competence in skills such as communication, clinical examination, and interpretation of results. Students rotate through the stations, completing all the stations on their circuit. In this way, all candidates take the same stations. The stations are standardized enabling fairer peer comparison and complex procedures can be assessed without endangering patients' health.

**IDY 202 OSCE M2 - Spring 0 cr**

An Objectively Structured Clinical Examination (OSCE) is an examination designed to test clinical skill performance and competence in skills such as communication, clinical examination, and interpretation of results. Students rotate through the stations, completing all the stations on their circuit. In this way, all candidates take the same stations. The stations are standardized enabling fairer peer comparison and complex procedures can be assessed without endangering patients' health.

**IDY 210 Integrated Case Study 2 cr**

The Integrated Clinical Science course is a two-week course at the end of the second semester of the second year taught by teams of basic science faculty and clinical faculty. The format incorporates predominately student-based presentations on prevalent medical conditions and ? clicker? quizzes are administered the day after on the material presented by the students. During student presentations, both basic science and clinical faculty are present to help reinforce material and ask appropriate questions. The objective of the two-week course is to reinforce the integration of the basic science material with the newly introduced clinical concepts.

**IDY 222 Doctoring II 2 cr**

The course consists of lecture/discussion around topics pertinent to ambulatory medicine and the ethics of patient care. These discussions are interspersed with patient care experiences in various sites in Mobile and the adjacent area.

**IDY 223 Doctoring II 2 cr**

The course is a continuation of the first year course but incorporates Medical Decision Making and Behavioral Sciences. Community Service is required. The final exam is a mini-board from the National Board of Medical Examiners; students are charged a fee to purchase this exam.

**IDY 310 OSCE M3 0 cr**

An Objectively Structured Clinical Examination (OSCE) is an examination designed to test clinical skill performance and competence in skills such as communication, clinical examination, and interpretation of results. Students rotate through the stations, completing all the stations on their circuit. In this way, all candidates take the same stations. The stations are standardized enabling fairer peer comparison and complex procedures can be assessed without endangering patients' health.

**IDY 311 Research Selective 4 cr**

**IDY 399 OSCE M3 - End of Year 0 cr**

An Objectively Structured Clinical Examination (OSCE) is an examination designed to test clinical skill performance and competence in skills such as communication, clinical examination, and interpretation of results. Students rotate through the stations, completing all the stations on their circuit. In this way, all candidates take the same stations. The stations are standardized enabling fairer peer comparison and complex procedures can be assessed without endangering patients' health.

**IDY 460 Women's Health 4 cr**

The students will be assigned to a 4 week schedule rotating through gynecology clinics, internal medicine clinics, mammography, cytology, and the Evaluation Center at Children's and Women's Hospital. They will also be exposed to clinical nutrition, medical ethics, student health issues, and gender-specific psycho-social issues.

**IDY 470 Health and Wellness 4 cr**

To develop a health and wellness lifestyle plan based on personal goals developed from the scientific literature presented. Based on the scientific literature review, the student will assess how various lifestyle choices prevent against obesity, cardiovascular disease, diabetes and depression.

**IDY 471 App of Health & Wellness Strag 4 cr**

Completion of this elective should promote greater appreciation of self-management of personal health and wellness, and increase awareness of strategies/challenges associated with promoting healthy lifestyles in future patients.

**IDY 480 Wilderness Medicine 4 cr****IDY 481 Transition to Residency 4 cr**

The will includes lectures and workshops on topics such as Graduate Medical Education, Medical Ethics, Medical Jurisprudence, Malpractice: A Physicians Experience, Cultural Competence in Patient Care, End of Life Issues, Breaking Bad News to Patients, Handling Inappropriate Patients, Reviewing Professional Journal Articles & Pertinent Biostatistics, Financial Planning and Investment Professional Liability Insurance, Time Management for Residents and Physician Mental Hygiene.

**IDY 482 Law and Medicine 4 cr**

Law and Medicine elective will introduce legal issues likely to be encountered by physicians in clinical medical practice and focus on preparing medical students to identify and manage such situations in an effective manner. An additional, integral component of the elective will be to provide contract negotiation training to the students, including learning the framework and fundamental terms and provisions of agreements typically presented to physicians following residency (in hospital, academic and private practice settings). Students will also learn the basics of medical malpractice litigation from the inception of a claim through resolution.

## Interdisciplinary Progs (IDS) (IDS)

**IDS 290 Special Topics 1-3 cr**

A study of selected topics of an interdisciplinary nature. May be repeated for credit when content varies. Requires permission of instructor.

**IDS 490 Special Topics 1-3 cr**

Advanced study of selected topics of an interdisciplinary nature. May be repeated for credit when content varies. Requires permission of instructor.

**IDS 590 Sp Top 1-9 cr**

Specialized topics not generally listed in the course offerings. Requires consent of Graduate Director.

## Interdisciplinary Stds (IST) (IST)

**IST 020 International Student First Year Experience 0 cr**

Designed for Global Jags or new international students in their first semester at USA. Emphasis is placed on preparing the student in making a successful transition to college life in the United States & being successful in one's chosen academic program of study. Topics include: immigration regulations, academic success strategies & integrity, the American Education System, and campus resources.

**IST 050 International Student First Year Experience - Graduate 0 cr**

Designed for Global Jags or new international students in their first semester at USA. Emphasis is placed on preparing the student in making a successful transition to college life in the United States & being successful in one's chosen academic program of study. Topics include: immigration regulations, academic success strategies & integrity, the American Education System, and campus resources.

**IST 100 Freshman Seminar 2 cr**

A course for first-time students that assists with maximizing the student's potential to achieve academic success and to adjust responsibly to the individual and interpersonal challenges presented by college life. The course provides an introduction to the nature of higher education and a general orientation to the functions and resources of the University. Extensive reading and writing assignments relevant to the student's first year experience are required.

**IST 101 Foundations of Inter Studies 3 cr**

This course will assist students with clarifying educational goals, understanding effective learning methods, and becoming acquainted with university resources, diversity, and culture. It introduces students to basic theories and principles of education and development, with emphasis on liberal education. The focus is to develop written and oral skills to enhance students' critical thinking and problem solving abilities. Assists students in defining competencies needed for success in academic study, professional leadership, and career opportunities. Students will develop a working knowledge of Sakai, Skype and WebEx.

**Cross-Listed:** AIS 101

**IST 125 Professional Conduct 3 cr**

Introduces students to primary sources in ethical theory and includes readings and discussions of theories of human nature. Provides a basis for understanding one's rationale for personal moral decisions and offers a foundation for an approach to the ethics of business.

**Cross-Listed:** AIS 125

**IST 200 Clinical Observation 1 cr**

Clinical Observations (Medicine, Dentistry, Optometry, and Veterinary Medicine). This course gives the student clinical exposure to various health-care services. It is designed to help students make informed decisions when selecting a career in the health professions. A written report on the clinical experience or a scenario dealing with medical ethics is required. May be repeated for a maximum of six hours credit. Prereq: Permission of Chair of Preprofessional Advisory Committee.

**IST 201 Seasons of Life 3 cr**

An interdisciplinary media-assisted course in which students study human development from the biosocial, cognitive, and psychosocial perspectives with special emphasis on the adult years. Through readings, audio, written exercises, and class discussions, students explore the theories and research findings of life span development which enable them to reflect on their own lives as well as the lives of others.

**Cross-Listed:** AIS 201

**IST 210 Introduction to Disability 3 cr**

This course will provide students from any discipline the opportunity to develop the knowledge and skills needed to effectively work with people with disabilities in a variety of settings. Disability is examined as a type of diversity. Topics include: the history and sociological context of disability; the impact of disability on the individual and family; advocacy and civil rights; current trends in services and supports for children and adults with disabilities; and respectful language and interaction. Students will actively engage in readings, discussions, and writing on disability issues.

**Prerequisite:** EH 102 Minimum Grade of C or EH 105 Minimum Grade of C

**Cross-Listed:** AIS 210

**IST 250 Career Planning and Develop 3 cr**

Principles, methods, and practice in career planning and development with an emphasis on career information, self-analysis, exploration of careers, career opportunities, and guidelines for goal achievement.

**Cross-Listed:** CP 250

**IST 290 Special Topics - 1-3 cr**

A variable topics course treating special themes. May be repeated for credit when course content varies.

**Cross-Listed:** AIS 290

**IST 300 Global Orientn-Ed Abroad 1 cr**

Study Abroad applicants will prepare for their study abroad experience through an examination of selected country-specific reading as well as cross-cultural orientation materials. Travel safety, University of South Alabama policies and procedures for study abroad, and advice for cultural adjustment will be covered during the course. IST 300 satisfies the requirements of LG 394.

**Cross-Listed:** AIS 300, LG 394

**IST 302 Interdis and Critical Thinking 3 cr**

Provides students an introduction to the field of interdisciplinary studies and an opportunity to critically reflect on the experience of self, education, and career and the relationship among these three phenomena.

**Cross-Listed:** AIS 302

**IST 305 Issues in Human Services 3 cr**

An interdisciplinary course for students who plan to work in the helping professions (counseling, social work, nursing etc.). Guest speakers from various disciplines present information about their fields. Discussion topics include: similarities and differences in the helping professions, the helping relationship, empathic communication, multicultural and legal issues, and stress and burnout management.

**Cross-Listed:** AIS 305

**IST 310 Global Leadership 3 cr**

This course helps prepare students to assume global leadership roles in their careers and the community at large. Students explore leadership theories and principles as well as investigate leadership qualities among historical and contemporary individuals. In addition, students confront present-day global issues and argue viewpoints orally, as well as through persuasive and technical papers. Students are expected to complete an interdisciplinary project based on global issues.

**Prerequisite:** (A01 27 or S01 610 or USEH P or EH 101 Minimum Grade of C or EH 110 Minimum Grade of C or EH 190 Minimum Grade of C or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** AIS 310

**IST 315 Women's Issues in Wrkpl-Comm 3 cr**

This course will examine contemporary issues faced by women in the workplace and the community from an interdisciplinary perspective. Some of the topics to be covered are gender communication issues, developing a leadership plan, playing the game, power talk, conflict management from a woman's point of view, international development, and women, sexuality and labor.

**Cross-Listed:** AIS 315

**IST 320 Cultural Competency 3 cr**

An interdisciplinary exploration of issues related to interactions between diverse groups in teams, communities, and organizations. Reviews research from a variety of disciplines, introduces the history and law of equal opportunity in the U.S., and examines the costs and benefits of diversity. Topics include prejudice, stereotyping, affirmative action, barriers to mobility, discrimination, marginalization, mentoring, cooperative teamwork, and international issues.

**Cross-Listed:** AIS 320

**IST 330 Analytical & Info Lit.-W 3 cr**

This course examines principles of qualitative and quantitative research methods and their application to interdisciplinary studies in the social sciences. Emphasis is on the development of functional literacy for information expressed quantitatively and thoughtful integration of such information into academic and practical research.

**Prerequisite:** (IST 350 Minimum Grade of C or AIS 350 Minimum Grade of C)

**Cross-Listed:** AIS 330

**IST 350 Adv Verbal & Written Comm - W 3 cr**

This course builds on the foundation laid in freshman composition, stressing critical thinking, analysis, and research. It aims to prepare students oral presentations, research and writing papers.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** AIS 350

**IST 401 Adults in Society 3 cr**

Adults in Society is a media-assisted course that uses print material, videos, written assignments, and class discussions to explore issues which relate to adult development. Using an interdisciplinary approach, students will examine the relationship of adults to their families, work and communities.

**Cross-Listed:** AIS 401

**IST 420 Comm. Dev and Leadership 3 cr**

Presents the conceptual foundations of community development and leadership, including basic concepts, methods and literature. Students will study theories of leadership, community development and human capital, investigate public relationships, examine community decision-making and responsible civic action. The course lays foundations for further study and practice in the field. Students will experience the interdisciplinary approaches to community development, leadership, politics, civic responsibility and teamwork.

**Cross-Listed:** AIS 420

**IST 425 Workplace Learning & Dev 3 cr**

This project-based course explores workplace learning and development. It will introduce students to interdisciplinary learning and motivational theories necessary to prepare them to be effective in today's changing workplace, and provide them with the skills to problem-solve, lead and work as part of a team.

**Cross-Listed:** AIS 425

**IST 430 Senior Research Thesis - W 3 cr**

An in-depth research project in the student's concentration. Provides an opportunity for the student to design a comprehensive research project, analyze and synthesize research data, and develop expertise in a particular subject.

**Prerequisite:** (IST 302 Minimum Grade of D and IST 330 Minimum Grade of D and IST 350 Minimum Grade of C)

**Cross-Listed:** AIS 430

**IST 450 The Job Campaign 3 cr**

Practical approach to career development designed to help students develop strategies for obtaining suitable employment and making career choices. Emphasis is on the principles, methods, and practice in achieving career goals through the study of careers, preparing resumes, writing letters of application, practicing job interview techniques, and identifying prospective employers.

**Cross-Listed:** CP 450

**IST 490 Special Topics - 1-6 cr**

A variable topics course treating special themes. May be repeated for credit when course content varies.

**IST 494 Directed Studies 1-6 cr**

Directed Study of a topic consistent with the student's individualized program under the supervision of a member of the university faculty.

**Cross-Listed:** AIS 494

**IST 495 Prof Leadership & Teamwork 3 cr**

Students will examine their skills, abilities, personality, attitudes, values, interests, and behaviors within the context of current scholarship on leadership to increase awareness of their leadership competencies.

**Prerequisite:** IST 302 Minimum Grade of D

**Cross-Listed:** AIS 495

**IST 498 Internship I-Capstone Exp 3-9 cr**

This internship course provides the student an opportunity to have an internship field experience and to reflect on and critically evaluate that internship experience, particularly as it relates to the interdisciplinary course of study. Students will prepare reports, write papers, make presentations, and engage in group discussion that critically considers their internship experience.

**Prerequisite:** (IST 350 Minimum Grade of C or AIS 350 Minimum Grade of C) and (IST 302 Minimum Grade of D and IST 330 Minimum Grade of D)

**Cross-Listed:** AIS 498

**IST 499 Honors Senior Thesis - H-W 3-6 cr**

A substantial research project reflecting a commitment to genuine scholarship in the student's field of study. Provides an opportunity for the student to design a comprehensive research project, analyze and synthesize research data, and develop expertise in a particular subject. Fulfills the senior project requirement for the honors program.

**Cross-Listed:** AIS 499

**IST 500 Global Orientn-Ed Abroad-Grad 1 cr**

This is a pre-departure academic and orientation process course for all graduate students who plan on studying abroad in terms following their participating in this course. This course will facilitate the application, academic advising, pre-departure advising, and activities related to getting students ready for participation in their actual program abroad.

## Internal Medicine - MD (MED)

**MED 096 Int Med-Hospital Teach Round 2 cr**

The student will attend and participate in Internal Medicine hospital teaching rounds at USAMC with a ward team. The student will participate in discussions of pertinent medical literature, patient presentations, and bedside teaching sessions.

**MED 097 Internal Medicine Morning Rprt 1-3 cr**

The student will attend and participate in Internal Medicine Morning Report, an interactive didactic conference designed to guide internal medicine house staff and medical students in developing differential diagnosis and plan of treatment for hospitalized patients.

**MED 098 Internal Medicine Grand Rounds 1 cr**

The students will attend the Department of Medicine's weekly lecture series intended for students, house staff, and faculty. The students may discuss the presentation with faculty as time permits after the lecture.

**MED 099 General Internal Medicine Clin 3 cr**

The students will assist the attending physician and medical house staff in the evaluation and treatment of outpatients presenting to the Stanton Road Clinic outpatient facility.

**MED 122 Intro to Clinical Medicine I 2 cr**

This course teaches the basic skills of physical diagnosis and interviewing. The skills are acquired by both didactic instruction and by practice under supervision of preceptors. The course incorporates a longitudinal clinical experience in the office of a community physician. This experience begins in January of the freshman year and continues through the sophomore year.

**MED 214 Intro to Clinical Medicine II 6 cr**

The course provides further development in the skills of medical interviewing and physical diagnosis begun in the first year. It is taught throughout the second year by the clinical faculty. The format incorporates lectures, small group instruction, and interviews and examinations of patients. The approach to, and the method of, examination is emphasized rather than the demonstration of disease processes. Upon completion of this course, the student should be sufficiently competent in obtaining, organizing, and communicating clinical data to enter the clinical clerkships.

**MED 311 Internal Medicine 12 cr**

In this clerkship, the student is taught basic disease mechanisms and general principles of diagnosis and patient management. The student will utilize current medical literature in addition to standard texts for the acquisition of information. Habits and techniques will be developed that will allow continuation of medical education beyond the traditional, more formal training period. The student is responsible for the diagnostic evaluation and care of three to six patients per week under the supervision of the attending physician and the ward resident. Rounds are made daily with the house staff and with the attending physician. The average team consists of one attending physician, one resident, two interns, and three students. Noon conferences and student lectures are provided several times each week on topics relating to common problems in medical diagnosis and patient management. The student will also be assigned to an ambulatory rotation of 2 - 4 weeks.

**MED 400 Medicine Externship 4 cr**

To be determined.

**MED 401 History of Medicine 4 cr**

Material to be covered may consist of the art and practice of medicine from the earliest historic times through the area for study. Investigation that is historic, romantic, or scientific will relate to some area of human illness in the evolution of medical practice. Study of the lives of leading personalities, the role of disease in shaping history, and the unfolding of medical memorabilia stored within our community will afford four weeks of provocative effort.

**MED 444 Spec Elec-Medicine 4 cr**

To be prepared by the student in conjunction with the Course Director and approved by the Vice Dean before course can be added to schedule. This course is designed to offer students and faculty/clinical faculty an opportunity to develop electives which are not offered in the Elective Manual. Such an elective may be made permanent and printed in the next edition of the Elective Manual at the request of the Course Director and with the approval of the Curriculum Committee. At the discretion of the Vice Dean, this elective may count as the required "in-house" elective.

**MED 450 Acting Intern - Internal Med 4 cr**

This is a four week general medicine rotation during which the senior student will serve as an acting intern on one of four general medical ward services at the University of South Alabama Medical Center. The acting intern will function side by side with regularly assigned interns and assume similar responsibilities under the supervision of the ward resident and attending physician.

**MED 451 Acting Intern - Internal Med 4 cr**

This is a four week general medicine rotation during which the senior student will serve as an acting intern on one of two general medical ward services at Mobile Infirmary. The acting intern will function side by side with regularly assigned residents and assume similar responsibilities under the supervision of the ward resident and attending physician. Because the rotation is held at the Mobile Infirmary, students will not be allowed to drop or add this rotation within one month of the scheduled beginning date.

**MED 452 Acting Intern Critical Care Me 4 cr**

The senior student will work with second and third year Medical Residents, Pulmonary Medicine Fellows and Attendings in the assessment and management of intensive care medical patients. The translation of basic sciences to clinical practice will be emphasized. The student will learn the principles of invasive monitoring, ventilator management, inotropic and vasoactive drugs and the assessment and management of acute organ failure including the interpretation of blood gases and other laboratory values. The student will gain experience in invasive procedures such as placement of central venous and arterial cannulae.

**MED 460 Pulmonary Medicine 4 cr**

To improve the student's ability to evaluate and manage patients with pulmonary problems, to provide a basic ability to interpret pulmonary function tests and chest radiographs, and to introduce fundamentals of pulmonary pathophysiology.

**MED 461 Endocrinology & Metabolism 4 cr**

The student will interview and examine patients with pituitary, thyroid, parathyroid, adrenal, gonadal, and other metabolic disorders, including diabetes mellitus. After presentation of the patient to the faculty attending and discussion of diagnosis and management, it will be the student's responsibility to follow the patient's progress during hospitalization.

**MED 462 Renal Medicine 4 cr**

Patient Care - Students examine, evaluate and follow all patients seen for renal consultation in conjunction with the renal resident and under the supervision of the attending nephrologist. Teaching - Daily directed teaching by the attending nephrologist is an integral part of patient rounds. In addition, formal presentations will be provided by both attending and resident on selected topics of renal, acid-base, fluid and electrolyte, and hypertensive pathophysiology. Self-learning is expected through a provided reading list.

**MED 463 Cardiology Consult Service 4 cr**

Students will evaluate patients referred for consultation. Students will perform a cardiac directed history and physical on assigned consultive patients under the direction of the medicine housestaff, cardiology fellow and cardiology attending. The student will be urged to observe a defined number of cardiac diagnostic tests and documenting their involvement. The student will be required to interpret 50 electrocardiograms in a 4 week period with direct oversight by a cardiology fellow or faculty member.

**MED 464 Infectious Diseases 1-4 cr**

The elective in Infectious Diseases is designed around the consultation service and the outpatient clinics. Consultations are seen from the medical and surgical services, burn center, medical and surgical intensive care units, pediatric service and from the obstetrical and gynecologic services. A wide ranging spectrum of disease is seen including infectious endocarditis, bacterial meningitis, pneumonia, complications of Acquired Immunodeficiency Syndrome, ICU associated infections, etc. Students also spend 1/2 day per week at the Mobile County HIV clinic supervised by the ID faculty.

**MED 465 Gastroenterology 1-4 cr**

The clinical elective is a highly structured program designed to provide the student exposure to digestive disorders and physiology. The rotation has patient case experience at USA Medical Center, Infirmary West and ambulatory clinics. There are didactic lectures, conferences and case-based syllabus teaching and interactive sessions, with electronic media as well as some formal training in nutrition. Students spend time with private gastroenterologists in their practices.

**MED 466 Rheumatology 1-4 cr**

There are three major objectives of this elective: (1) to give the student experience in approaching the evaluation and management of patients with various forms of arthritis and systemic rheumatic diseases, including the common local rheumatic syndromes; (2) to give the student proficiency in a musculoskeletal, particularly joint, physical examination and (3) to help orient the student in dealing with chronic disease in general.

**MED 467 Critical Care Medicine 1-4 cr**

The senior student will work with second and third year Medical Residents, Pulmonary Medicine Fellows and Attendings in the assessment and management of intensive care medical patients. The translation of basic sciences to clinical practice will be emphasized. The student will learn the principles of invasive monitoring, ventilator management, inotropic and vasoactive drugs and the assessment and management of acute organ failure including the interpretation of blood gases and other laboratory values. The student will gain experience in invasive procedures such as central and arterial cannulae.

**MED 468 Cardiology Inpatient Service 1-4 cr**

The objective of this course is to acquaint the student with the principles of diagnosis and management of common cardiovascular disorders that require hospitalization for acute management. These disorders include, for example, acute coronary syndrome, ST elevation myocardial infarction, primary cardiac arrhythmias and exacerbation of congestive heart failure. The students will receive ample exposure to patients with hypertension, diabetes mellitus and valvular heart disease.

**MED 469 Allergy and Immunology 1-4 cr**

The course is designed around the outpatient clinic and inpatient consults. Outpatient clinic focuses on management of a wide variety allergic disease (including asthma, allergic rhinitis, food allergy, urticaria, and eczema) and immunodeficiency. Students will have an opportunity to participate in diagnostic/therapeutic procedures such as skin testing, food challenges and spirometry. The consult service covers USAMC, USACW, and MIMC.

**MED 470 MercyLIFE/Geriatrics 1-4 cr****MED 472 Pulmonary Medicine 1-4 cr**

The clinical elective in pulmonary medicine may be taken at any time following the junior year. The student will be responsible for the initial evaluations of patients assigned. The student will be responsible for presentation of such patients to the resident and attending on the pulmonary service and should follow the patients throughout their hospital course. General hours are from 8:00 a.m. to 5:00 p.m., Monday - Friday. Occasional circumstances will dictate that patients must be seen at hours outside of this schedule, and some patients may need to be seen on weekends on routine rounds. The student may also choose to spend part of the rotation at the USAKPH campus, including the Sleep Disorders Center, by special arrangement.

**MED 473 Endocrinology and Metabolism 1-4 cr**

The student will interview and examine patients with pituitary, thyroid, parathyroid, adrenal, gonadal, and other metabolic disorders, including diabetes mellitus. After presentation of the patient to the faculty attending and discussion of diagnosis and management, it will be the student's responsibility to follow the patient's progress during hospitalization.

**MED 474 Primary Care-Pub Health Precep 1-4 cr**

The student will work under the supervision of the Mobile County Health Officer or his designee in one or more of the following primary care clinics of the Mobile County Health Department: Pediatrics, Adult Care, Family Planning, Maternity, and Chronic Disease. The student may also be exposed to Community Epidemiology and Environmental Health. Special attention will be given to assisting the student in meeting his or her specific learning objectives based on the individual student's interests, capabilities, or needs.

**MED 475 Renal Medicine 1-4 cr**

Patient care - students examine, evaluate, and follow all patients seen for renal consultation in conjunction with the renal resident and under the supervision of the attending nephrologist. Teaching - daily directed teaching by the attending nephrologist is an integral part of patient rounds. In addition, formal presentations will be provided by both attending and resident on selected topics of renal, acid-base, fluid and electrolyte, and hypertensive pathophysiology. Self-learning is expected through a provided reading list.

**MED 477 Cardiology Consultation Serv 1-4 cr**

The objective of this course is to acquaint the student with the principles of diagnosis and management of common cardiovascular disorders including acute and chronic forms of ischemic, hypertensive, valvular, pericardial, and cardiomyopathic heart disease as well as congenital heart disease in the adult. The student will also receive ample exposure to patients with hypertension, congestive heart failure and cardiac arrhythmias, become familiar with the principles of cardiovascular pharmacotherapy, learn to interpret electrocardiograms and learn to appropriately utilize the various cardiac diagnostic tests.

**MED 479 Acting Internship-Medicine 1-4 cr**

This is a four week general medicine rotation during which the senior student will serve as an acting intern on one of four general medical ward services at the University of South Alabama Medical Center. The acting intern will function side by side with regularly assigned interns and assume similar responsibilities under the supervision of the ward resident and attending physician.

**MED 480 Primary Care/Public Health 1-4 cr**

The objective of this course is to acquaint the student with the principles and management of acute cardiovascular disease including definite or suspected acute myocardial infarction and its complications, unstable angina pectoris, life threatening cardiac arrhythmias and conduction disturbances, severe congestive heart failure, hypotension, and shock. In addition, the student will become familiar with procedures used in the coronary care unit setting such as pulmonary artery catheterization, arterial pressure monitoring, and temporary transvenous pacemaker insertion.

**MED 481 Infectious Diseases 1-4 cr**

The elective in Infectious Diseases is designed around the consultation service and the outpatient clinics. Consultations are seen from the medical and surgical services, burn center, medical and surgical intensive care units, pediatric service and from the obstetrical and gynecological services. A wide ranging spectrum of disease is seen including infectious endocarditis, bacterial meningitis, pneumonia, complications of Acquired Immunodeficiency Syndrome, ICU associated infections, etc. Students also spend 1/2 day per week at the Mobile County HIV clinic supervised by the ID faculty.

**MED 484 Gastroenterology 1-4 cr**

The clinical elective is a highly structured program designed to provide the student exposure to digestive disorders and physiology. The rotation has patient case experience at USA Medical Center, USA Knollwood Park Hospital, and ambulatory clinics. There are didactic lectures, conferences, case-based syllabus teaching, and interactive sessions, with electronic media as well as some formal training in nutrition. Students spend time with private gastroenterologists in their practices.

**MED 492 Rheumatology 1-4 cr**

Responsibilities of the student will include evaluation of all inpatient consults, and the initial or follow-up evaluation of a number of patients seen in the Health Services Foundation outpatient facilities. Following the initial evaluation by the student the entire history and physical (for new patients) or a follow-up evaluation for old patients will be presented to the attending. Therefore, the major student responsibilities will be clinical evaluation and presentation. In addition, the student is expected to read the Primer on the Rheumatic Diseases provided for them and additional recommended literature. Dr. Hardin or a rheumatology attending will spend 1-2 hours a day in pure teaching activities. In addition, all patients evaluated by the student will be seen with an attending.

## International Medicine - MD (INT)

### INT 400 International Medicine 1-4 cr

To be determined.

### INT 410 International Elective/Rwanda 4 cr

This will be an experienced supervised by two U.S. trained and board certified physician (orthopedics and pediatrics/neonatology), one of whom is a full time professor of pediatrics/neonatology in the University. The students will be engaged in patient care in a hospital with 250+ beds which has its foundational history in the U.S. tradition of care. There will be local government physician attending from the Congo and Rwanda, as well as the possibility of other visiting U.S. and European physicians during the 4 weeks. The hospital origins date to the late 1940's and has been in continuous operation as a hospital for over 50 years.

## International Studies (IS) (IS)

### IS 100 Global Issues 3 cr

This course introduces students to the basic structural components of the global system, including the nation-state system and the world economy, and explores the major schools of thought in such areas as security, economic prosperity and development, international law, gender and environmental studies. The course helps students understand the complex and interlinked issues facing global society, and current problems, and view the U.S. within a broader global context.

### IS 193 Study Abroad 1-6 cr

This course is an introductory International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

### IS 200 People-Nations - 3 cr

Variable content course focusing on particular nation or region of the world. Course offers a multi-disciplinary introduction to the people, society and politics. May be repeated for credit when content varies up to a total of 6 hours.

### IS 210 Global Engagement Orientation 1 cr

This course introduces students to international global issues, allows students to identify opportunities for active engagement in these issues, and provides the framework for successful completion of the Global Engagement Certificate.

### IS 290 Special Topics - 3 cr

Study of selected topics within a particular Area Studies Concentration.

May be repeated for credit when content varies.

**Prerequisite:** IS 100 Minimum Grade of D

### IS 293 Study Abroad 1-6 cr

This course is an introductory International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

### IS 363 Crime and Politics in LatinAm 3 cr

An examination of the violent crime epidemic affecting many parts of Latin America, with specific focus on the themes of democratic transition, political economy, and foreign relations with the United States. Same as PSC 363 and CJ 363.

**Prerequisite:** (PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or IS 100 Minimum Grade of C)

**Cross-Listed:** CJ 363, PSC 363

### IS 371 Studies in Russia 3-6 cr

This course will cover specific topics in the history, politics, and culture of modern Russian civilization. May be repeated for credit when content varies.

### IS 372 Studies in E. Europe & C. Asia 3-6 cr

This course will cover specific topics in the history, politics, and culture of modern Eastern European and Central Asian civilizations. May be repeated for credit when content varies.

### IS 390 Sp Top- 1-3 cr

Advanced study of selected topics within a particular concentration. May be repeated for credit when content varies.

### IS 391 Study Abroad - 18 cr

Study of selected topics within a particular Area Studies Concentration.

May be repeated.

### IS 393 Study Abroad 1-6 cr

This course is an advanced International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

### IS 410 Global Engagement Capstone 1 cr

Global Engagement Capstone is required for students completing the Global Engagement Certificate (GEC), and is a one hour course designed to help students reflect on the 16 hours of coursework and nine hours of globally engaged activities they have completed. Students will create a portfolio during the course, which will be presented to students and affiliated faculty at its conclusion.

**Prerequisite:** IS 210 Minimum Grade of P

### IS 473 International Law 3 cr

This course covers major issues, cases and topics in public and private international law. Course coverage includes individuals and corporations, diplomatic relations, jurisdiction, human rights, economic relations, treaties, environmental law, and more.

**Prerequisite:** (IS 100 Minimum Grade of C or PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C)

**Cross-Listed:** CJ 473, PSC 473

### IS 489 Leadership and World Leaders 3 cr

An overview of the definitions, characteristics, and typologies of leadership, with a focus on lives and legacies of global influential political leaders over the past century.

**Prerequisite:** PSC 130 Minimum Grade of D or PSC 250 Minimum Grade of D or IS 100 Minimum Grade of D

**Cross-Listed:** PSC 251, PSC 489

### IS 490 Special Topics 3 cr

Advanced study of selected topics within a particular Area Studies Concentration. May be repeated for credit when content varies.

**Prerequisite:** IS 100 Minimum Grade of D

### IS 491 Seminar on Terrorism 3 cr

Study of a terrorism from a sociopolitical perspective with an emphasis on causes, policy, tactics and operational characteristics and counter-terrorism operations. Cross-listed with CJ 491 and PSC 491.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or PSC 130 Minimum Grade of C or IS 100 Minimum Grade of C

**Cross-Listed:** CJ 491, PSC 491

### IS 492 Seminar - 3 cr

Advanced study of selected topics in international studies from a comparative perspective. May be repeated for credit when content varies.

**Prerequisite:** IS 100 Minimum Grade of D

**IS 493 Study Abroad 1-6 cr**

This course is an advanced International Studies course taught as part of a faculty-led study abroad program. Topics and credit hours vary based on availability.

**IS 494 Directed Studies 1-3 cr**

Directed research in the field of international studies. May be repeated or credit up to a total of 9 hours. Prerequisite: permission of IS Director

**IS 495 Senior Seminar - W 3 cr**

The course seeks to provide an interdisciplinary and cross-regional overview of the fields and research opportunities within international studies.

**Prerequisite:** EH 102 Minimum Grade of C

**IS 496 Prof St Internship - 3-9 cr**

Practical learning experiences through occupational or professional work with an approved international organization, governmental agency, or international business Prerequisite: Permission of IS Director

**IS 499 Senior Honors Thesis 3 cr**

The course covers major theoretical perspectives in organizational psychology based on empirical research and case studies. Students will explore learning theory, group dynamics, and change in different types of learning organizations.

**Prerequisite:** (EH 102 Minimum Grade of D or EH 105 Minimum Grade of D)

**IS 591 Study Abroad 12 cr**

Graduate level international exchange programs for University of South Alabama students.

## Jewish & Holocaust Stds (JHS) (JHS)

**JHS 101 Intro to Jewish Studies 3 cr**

This course is a requirement for all Jewish & Holocaust Studies minors and will introduce students to methods, questions, and concerns within these fields. Students will be provided with an overview of Jewish history as well as how Jewish history first came to be an historical field of inquiry. Students will also be given an overview of the Holocaust, other genocides, and genocidal violence. Students will then be introduced to various approaches in Jewish and Holocaust Studies. This course will help students formulate ideas for research topics related to the class and will show them how and why a Jewish & Holocaust Studies minor may be able to help them in future endeavors.

**JHS 390 Special Topics - 3-9 cr**

Special topics and their development, illustration appropriate methodologies in Jewish studies. May be repeated twice for credit when content varies for a maximum of nine hours.

**JHS 494 Directed Studies 1-3 cr**

Directed Individual Study. Requires approval of department chair.

## Journalism (JOU)

**JOU 250 Radio and TV Performance 3 cr**

Course focuses on the unique aspects of radio and television as communication media. Different styles of delivery for various media projects will be studied - broadcast news, advertising, and entertainment. Course also focuses on restraints and requirements of the individual medium on the practice of broadcast delivery.

**Prerequisite:** CA 110 Minimum Grade of D

**JOU 252 Media Literacy Digital Age 3 cr**

Prepares students to actively and critically evaluate online information sources including news sites and social media platforms. Students develop usable skills to authenticate, fact-check, and evaluate bias in written and visual communication.

**JOU 270 Sports Journalism 3 cr**

This is a traditional lecture and writing course that will provide students with an overview of sports journalism and hone writing, reporting and editing skills. Students will learn how to write a game story, advance/follow-up story, sports column and feature story during the semester. As in the journalism industry, students will adhere to strict deadlines. Computer

**Prerequisite:** EH 102 Minimum Grade of C and EH 105 Minimum Grade of C

**JOU 281 Editing and Layout 3 cr**

Principles and practices of selection and preparation of written and pictorial materials for newspapers, magazines, and related media. Layout and design, production planning, and related topics. Computer fee.

**Prerequisite:** CA 220 Minimum Grade of C

**JOU 288 History of the Mass Media 3 cr**

The role of journalism in American society from the Revolution to the present. This course is equivalent on HY 288.

**JOU 301 Skepticism in Media-Philosophy 3 cr**

This course examines some of the most fundamental questions about human knowledge, belief and rationality and compares the treatment of such issues in philosophical discussions and contemporary media, especially film. Identical with PHL 301. Credit cannot be received for both CA 301 and PHL 301.

**Prerequisite:** EH 102 Minimum Grade of D or EH 105 Minimum Grade of D

**JOU 327 International Media 3 cr**

This course examines the international media systems and the rights and responsibilities of journalists in covering issues in the new and developing social media landscape. In this course, we will explore both the theoretical foundations and practical implications of the international medial systems.

**JOU 350 Broadcast News 3 cr**

Course includes both writing in the broadcast media and exploring broadcast news operations. Assignments include writing broadcast news stories and evaluating broadcast news operations. Lectures cover the characteristics of broadcast news, news styles, news policy, and ethics and responsibility in broadcast news. Fee

**Prerequisite:** CA 220 Minimum Grade of C

**Corequisite:** JOU 353

**JOU 353 Broadcast News Editing 3 cr**

This course focuses on the post-production for television news. Students will edit footage they shot for CA 350, learning to weave together b-roll, interview, natural sound, and voice-over to create a compelling narrative.

**Prerequisite:** CA 220 Minimum Grade of C

**Corequisite:** JOU 350

**JOU 354 Media and Politics 3 cr**

Examining the role and influence of mass media in politics, exploring how and why the media contribute to and shape democracy.

**Prerequisite:** (PSC 130 Minimum Grade of C or CA 100 Minimum Grade of C or CA 101 Minimum Grade of C)

**Cross-Listed:** PSC 354

**JOU 370 Interm Reporting-Writing-W 3 cr**

Study of intermediate skills needed for reporting, evaluating, and writing news stories, with particular attention given to the reporting of public affairs issues. Vanguard practicum. Fee

**Prerequisite:** CA 220 Minimum Grade of C and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**JOU 382 Photojournalism 3 cr**

The study of basic photography and the principles of still photography journalism, with particular emphasis on camera use, photo processing, visual aesthetics, and journalistic story-telling. Computer fee.

**JOU 383 Digital Photography 3 cr**

Through this course students will develop a general understanding of the ability of photographic images to communicate concepts, ideas and emotion through creative photography. It will be a hands-on course, in which students will use digital cameras to produce photographs that achieve the desired message. Computer

**JOU 387 Magazine & Feature Writing-W 3 cr**

A writing and reporting course focusing on advanced skills, including alternative structures for news stories. Designed to give students a broad overview of the magazine industry and its current trends with emphasis on newspaper and magazine feature writing.

**Prerequisite:** CA 220 Minimum Grade of C

**JOU 450 Adv Broadcast News 3 cr**

This is an advanced course in broadcast news reporting and production. Students will have hands-on practice in a newsroom situation.

**Prerequisite:** (JOU 350 Minimum Grade of C or CA 350 Minimum Grade of C)

**JOU 452 The News Documentary 3 cr**

This course gives students experience in producing short documentaries for the media. Students will produce their own documentary with the intent of entering the finished product in student competitions. Culminating experience for broadcast journalism students.

**Prerequisite:** (JOU 450 Minimum Grade of C or CA 450 Minimum Grade of C)

**JOU 454 Newscast Practicum 3 cr**

This course is designed to give upper level Broadcast Journalism students hands-on experience creating a weekly television news program. Students will gain additional experience in news production and TV news programming. Students will report, produce and announce the news on the Jag-TV station.

**Prerequisite:** (JOU 350 Minimum Grade of C or CA 350 Minimum Grade of C) and (JOU 450 (may be taken concurrently) Minimum Grade of C or CA 450 Minimum Grade of C)

**JOU 472 Enterprise Reporting 3 cr**

Advanced study of news reporting and presentation techniques including investigative reporting. Students concentrating in print will produce a professional-quality print project. Culminating experience for print journalism students who take this course. Computer fee.

**Prerequisite:** (JOU 370 (may be taken concurrently) Minimum Grade of D or CA 370 Minimum Grade of D)

**JOU 481 Opinion Writing - W 3 cr**

An examination of the editorial and other opinion and persuasive communications used by the print and electronic media. Computer fee.

**Prerequisite:** CA 220 Minimum Grade of C

**JOU 482 Multi-Media Story Telling 3 cr**

This course will teach the basics of creating a professional-quality journalism story for the Web using multimedia techniques. We also explore how multimedia and interactivity are changing the communication experience for communication practitioners as well as for their audiences. Culminating experience for print journalism students who take this course. Technology

**Prerequisite:** CA 260 (may be taken concurrently) Minimum Grade of D and (JOU 350 (may be taken concurrently) Minimum Grade of D or CA 350 Minimum Grade of D) and (JOU 382 (may be taken concurrently) Minimum Grade of D or CA 382 Minimum Grade of D)

## Kinesiology (KIN) (KIN)

**KIN 100 Concepts of Health and Fitness 3 cr**

An introductory course designed to show students to contributions of physical activity, nutrition, weight control, stress control, environmental conditions, and injury prevention to preventive health. Students learn how to evaluate themselves, their physical and nutritional needs and how to design individual programs for healthy living.

**Cross-Listed:** PE 100

**KIN 166 Movement-Rhythms and Dev Act 3 cr**

Movement exploration experiences, developmental games, rhythmic and dance activities are explained, developed and practiced. Clinical or field experience required.

**Cross-Listed:** PE 166

**KIN 201 Orientation to Kinesiology 3 cr**

An overview of the field of Health, Physical Education, and Exercise Science. An introduction to the Department of HKS followed by survey of philosophical and historical aspects, and professional preparations standards of the specific fields.

**Cross-Listed:** PE 201

**KIN 231 ARC Lifeguard Training 3 cr**

Prepares the student for American Red Cross Lifeguard, CPR for the professional rescuer, and first aid certification. Emphasis is placed on emergency action plans, lifeguarding techniques and all forms of victim rescue. Prerequisites: Strong swimmers ONLY.

**Cross-Listed:** PE 231

**KIN 263 Intro to Nutrition 3 cr**

The study of human nutrition and nutrients in food and of their ingestion, digestion, absorption, transport, metabolism, interaction, and storage. emphasis is placed on energy balance, weight control, nutrition across the life span, food safety, food insecurity, and the links between food, nutrition and health.

**KIN 278 Sport, Performance, & Exercise Psychology 3 cr**

A study of the psychological and sociological aspects of sport and the relationship to human behavior.

**Cross-Listed:** PE 278

**KIN 282 Intro to Athletic Training 3 cr**

Survey of the basic techniques and practices of athletics training. Study includes prevention, recognition, care, and treatment of athletic injuries. Development of basic athletic training skills in the use of preventive and protective techniques of adhesive tape applications.

**Cross-Listed:** PE 282

**KIN 351 Sports Skills 3 cr**

The development of skills and the understanding of fundamentals and strategies in selected individual, dual, and team sports. Field experiences required. Proof of background check, fingerprinting and liability insurance is required. PE (P-12) majors only. Instructor permission is required.

**Cross-Listed:** PE 351

**KIN 363 Sports Nutrition - W 3 cr**

Basic nutritional principles are covered. Includes assessment of individual and/or group diets. The course is designed to optimize sport performance and/or body composition.

**Prerequisite:** (HS 263 Minimum Grade of D or KIN 263 Minimum Grade of D) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**KIN 370 Basic Motor Learning 3 cr**

Study of the psychological, experimental, and social aspects of learning in the psychomotor domain.

**Cross-Listed:** PE 370

**KIN 372 Coaching Gymnastics 3 cr**

History, theory, and fundamentals of coaching and officiating gymnastics.

**Cross-Listed:** PE 372

**KIN 373 Coaching Volleyball 3 cr**

History, theory, and fundamentals of coaching and officiating volleyball.

**Cross-Listed:** PE 373

**KIN 374 Coaching Soccer 3 cr**

History, theory, and fundamentals of coaching and officiating soccer.

**Cross-Listed:** PE 374

**KIN 375 Coaching Football 3 cr**

History, theory, and fundamentals of coaching and officiating football.

**Cross-Listed:** PE 375

**KIN 376 Coaching Basketball 3 cr**

History, theory, and fundamentals of coaching and officiating basketball.

**Cross-Listed:** PE 376

**KIN 377 Coaching Baseball 3 cr**

History, theory, and fundamentals of coaching and officiating baseball.

**Cross-Listed:** PE 377

**KIN 378 Coaching Track and Field 3 cr**

History, theory, and fundamentals of coaching and officiating track and field.

**Cross-Listed:** PE 378

**KIN 380 Kinesiology 3 cr**

Theory and application of the mechanical and anatomical principles of human movement.

**Prerequisite:** BMD 114 Minimum Grade of D or BMD 110 Minimum Grade of C or BMD 251 Minimum Grade of C

**Cross-Listed:** PE 380

**KIN 381 Eval and Measurement in HPE 3 cr**

Statistical procedures, evaluation, and interpretation, and use of tests and other measurement devices in health and physical education.

**Cross-Listed:** PE 381

**KIN 429 School Lab Experience-PE 3 cr**

Professional laboratory experiences involving observation and participation at local public schools. Admission to teacher candidacy required.

**Corequisite:** KIN 452

**Cross-Listed:** PE 429

**KIN 450 Student Teaching-Hlth and PE 9 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the 6-12 Health Education and P-12 Physical Education programs. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Admission to teacher candidacy and completion of program and college prerequisites required.

**Prerequisite:** 5551 154 and 5091 149 and KIN 351 Minimum Grade of C and KIN 452 Minimum Grade of C and KIN 429 Minimum Grade of S and HS 460 Minimum Grade of C and HS 429 Minimum Grade of S and HS 340 Minimum Grade of C and HS 430 Minimum Grade of S

**Cross-Listed:** PE 450

**KIN 452 Methods of Teaching PE-W 3 cr**

Organizing materials and developing methods of teaching physical education in elementary, middle, and high schools. Field experiences required. Practical mini-teaching experiences in peer labs and local schools. Prerequisite: Admission to teacher candidacy. Co-requisite: KIN 429.

**Corequisite:** KIN 429

**Cross-Listed:** PE 452

**KIN 460 Student Teaching Secondary 1-9 cr**

Observation and supervised teaching with opportunity for study and discussion of problems encountered in secondary schools. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Admission to teacher candidacy and completion of program and college prerequisites required.

**Prerequisite:** 5551 154 and HS 460 Minimum Grade of C and HS 340 Minimum Grade of C and HS 430 Minimum Grade of S

**Cross-Listed:** PE 460

**KIN 461 PE for Atypical Child-Youth 3 cr**

Principles and techniques for adapting physical education activities for children with special needs. Field experience required.

**Cross-Listed:** PE 461

**KIN 462 Biochemical and Molecular Exer 3 cr**

An advanced study of the biochemical and molecular aspects of exercise involving the bioenergetic pathways responsible for energy production. Concepts of cellular signaling pathways and gene expression associated with adaptations of skeletal muscle to exercise training are studied.

**Prerequisite:** KIN 476 Minimum Grade of D

**KIN 463 Nutrition 3 cr**

An in-depth study of educational concepts related to digestion, absorption, transportation and utilization of nutrients.

**Prerequisite:** KIN 263 Minimum Grade of D

**Cross-Listed:** KIN 563

**KIN 470 Student Teaching P-12 Program 1-12 cr**

Observation and supervised teaching with opportunity for study and discussion of problems encountered in the P-12 program. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Admission to teacher candidacy and completion of program and college prerequisites required.

**Prerequisite:** 5091 149 and KIN 351 Minimum Grade of C and KIN 452 Minimum Grade of C and HS 460 Minimum Grade of C

**Cross-Listed:** PE 470

**KIN 471 Exercise Management for Chronic Diseases & Disabilities 3 cr**

This course is designed to provide a problem-oriented approach to exercise testing and prescription/programming for populations with chronic diseases or related disabilities.

**Prerequisite:** (KIN 476 Minimum Grade of D and KIN 476L Minimum Grade of D)

**KIN 473 Problems in Health and PE 3 cr**

Special problems in health and physical education are assigned to individuals and to groups of students.

**Prerequisite:** 5091 149 and KIN 351 Minimum Grade of C and KIN 452 Minimum Grade of C and KIN 460 Minimum Grade of C

**Cross-Listed:** PE 473

**KIN 474 Sport and Fitness Conditioning 3 cr**

Study of the theory, principles, methods, and techniques in the development, implementation, and evaluation of various strength and conditioning programs designed to enhance athletic performance and improve physical fitness. The conditioning needs of various populations with disease and degenerative conditions will be examined.

**Prerequisite:** (PE 102 (may be taken concurrently) Minimum Grade of D and KIN 380 (may be taken concurrently) Minimum Grade of D) and (BMD 110 Minimum Grade of C or BMD 114 Minimum Grade of D or BMD 251 Minimum Grade of C)

**Cross-Listed:** PE 474

**KIN 475 Org-Admin Hlth and PE-W 3 cr**

Planning, policies, administrative/management functions and duties in health and physical education programs.

**Cross-Listed:** PE 475

**KIN 476 Exercise Physiology 3 cr**

The study of the body's physiological responses and adaptations to exercise and training.

**Prerequisite:** (KIN 100 Minimum Grade of C and HS 170 Minimum Grade of C and BMD 251 Minimum Grade of C and BMD 252 Minimum Grade of C)

**Cross-Listed:** PE 476

**KIN 476L Exercise Physiology Lab 1 cr**

Laboratory component associated with KIN 476 that must be taken concurrently. Hands-on, practical experiences involving basic laboratory techniques and procedures used in exercise physiology are utilized in this course. It will emphasize the importance of following laboratory protocols and appropriately evaluating and interpreting results from health and fitness assessments.

**Prerequisite:** (KIN 100 Minimum Grade of C and HS 170 Minimum Grade of C and BMD 251 Minimum Grade of C and BMD 252 Minimum Grade of C)

**Corequisite:** KIN 476

**KIN 477 Water Safety Instructor 3 cr**

Trains prospective candidates for American Red Cross Water Safety Instructor certification. Candidates will learn how to teach all levels of swimming and basic diving to students of all ages. How to organize classes, use lesson plans and practice teaching skills. Prerequisite: Proficient swimmer in all seven strokes. See Instructor for specific skill requirements.

**Cross-Listed:** PE 477

**KIN 478 Coaching Theory 3 cr**

Introduction to profession of coaching. Topics include: physical, mental and organizational preparation, teaching strategies (individual and team aspects), legal liability, officiating, and national guidelines.

**Cross-Listed:** PE 478

**KIN 479 Fit Assess-Exercise Prescript 3 cr**

Through didactic study and laboratory participation, the student will develop to knowledge base and clinical skills to assess physical fitness and plan exercise prescriptions for apparently healthy individuals.

**Prerequisite:** KIN 476 Minimum Grade of D or PE 476 Minimum Grade of D

**Cross-Listed:** PE 479

**KIN 479L Fit Assess-Exc Prescript Lab 1 cr**

Laboratory component associated with KIN 479 that must be taken concurrently. Hands-on, practical experiences involving techniques and procedures used in selecting and administering exercise and fitness assessments, evaluating and interpreting results, and drafting exercise prescriptions for apparently healthy populations are provided.

**Prerequisite:** (KIN 476 Minimum Grade of D and KIN 476L Minimum Grade of D)

**Corequisite:** KIN 479

**KIN 480 Therapeutic Exercise 3 cr**

Theory, current research, principles, application and techniques of rehabilitation used to treat injuries to athletes and the physically active across the life span are studied. Psychological and physical parameters of rehabilitation and exercise conditioning are presented.

**Cross-Listed:** PE 480

**KIN 482 Advanced Athletic Training 3 cr**

Advanced and contemporary topics, issues, and applications in athletic training. Admission to candidacy required.

**Prerequisite:** KIN 380 Minimum Grade of D

**Cross-Listed:** PE 482

**KIN 483 Clinical Exercise Testing and Prescription 3 cr**

The development of competencies necessary to administer graded exercise tests and prescribe appropriate exercise programs for various populations, based upon clinical observations and physiological data.

**Prerequisite:** (KIN 479 Minimum Grade of D and KIN 479L Minimum Grade of D)

**KIN 484 Apps in Sports Conditioning 3 cr**

Through didactic study and physical activity participation, the student will develop the knowledge base and skills in fundamental and advanced exercise theory and techniques in sport and fitness conditioning with application to program design and periodization of training.

**Prerequisite:** (KIN 474 Minimum Grade of D or PE 474 Minimum Grade of D) and (KIN 380 Minimum Grade of D or PE 380 Minimum Grade of D)

**Cross-Listed:** PE 484

**KIN 486 Advanced Exercise Physiology 3 cr**

Detailed analysis of the underlying principles of the physiological and biochemical responses of the human body to exercise and adaptations to exercise training.

**Prerequisite:** PE 476 Minimum Grade of C or KIN 476 Minimum Grade of D

**KIN 490 Special Topics 3 cr**

A varying content course treating different aspects of health, kinesiology, and sport. May be repeated for credit when courses content varies.

**Cross-Listed:** PE 490

**KIN 494 Directed Studies 1-3 cr**

Directed research and/or project. No more than two directed studies can be counted towards the bachelor's degree, HKS advisor approval required.

**Cross-Listed:** PE 494

**KIN 495 Internship 1-12 cr**

Observation and supervised practicum experiences in a professional setting. May be repeated for credit not to exceed 12 hours. HKS advisor approval required.

**Prerequisite:** (KIN 476 Minimum Grade of D)

**Cross-Listed:** PE 495

**KIN 499 Senior Honors Thesis-H 3-6 cr**

Experiences in planning, conducting, and reporting a research project relevant to the fields of Health, Kinesiology, and Sport. The project, mentored by HKS faculty, is required for Honors recognition and may be repeated for up to six credit hours. Prerequisites: Participant in Honors Program and approval of Department and Project Chairs required.

**Cross-Listed:** PE 498

**KIN 500 Admin of Hlth & Phys Ed & Sprt 3 cr**

A study of the principles, techniques, and methods used in management and supervision of health and physical education and sport in schools and colleges.

**Cross-Listed:** HPE 500

**KIN 503 Evaluation of Teach and Learn 3 cr**

Measurement and evaluation of student progress and teaching effectiveness in the psychomotor domain.

**Cross-Listed:** HPE 503

**KIN 505 Research Methods - HKS 3 cr**

This course provides opportunities for critical interdisciplinary evaluation of current research trends and controversies, research methodology and evaluation with emphasis on the elements of the research process, and the examination of landmark research studies in the fields of Health, Kinesiology, and Sport.

**Cross-Listed:** HPE 505

**KIN 506 Physical Education Curriculum 3 cr**

An overview of the physical education curriculum, its foundations, critical issues, and modern trends. It explores curriculum content areas of scheduling administration, teaching methods, and various standards and procedures for evaluation.

**Cross-Listed:** HPE 506

**KIN 516 Exercise Physiology 3 cr**

Advanced study of the theories, current research, and under-lying principles of the physiological responses and adaptations of the human body to exercise and training.

**Cross-Listed:** HPE 516

**KIN 521 Motor Learning 3 cr**

Theories and applications of the foundations of learning motor skills and presented .

**Cross-Listed:** HPE 521

**KIN 530 Seminar in Health and Phys Ed 3 cr**

Professional growth through in-depth experiences in the presentation of problems and formal papers, with emphasis on guided discussions and research criticism.

**Cross-Listed:** HPE 530

**KIN 540 Cardiovas Resps Adapt Excerc 3 cr**

Concentrated study of cardiovascular and respiratory systems including their structure, regulation, and integration with emphasis on physiological responses and adaptations to exercise and training, optimization of performance, overtraining and environmental influences, and aerobic exercise program design.

**Cross-Listed:** HPE 540

**KIN 550 Perceptual-Motor Dev Children 3 cr**

Designed to give the classroom teacher, special educator and physical educator a background in perceptual-motor development and training in infants and children.

**Cross-Listed:** HPE 550

**KIN 552 Methods of Teaching PE 3 cr**

Organizing materials and developing methods of teaching physical education in elementary, middle, and high schools. Field experience required. Practical mini-teaching experiences in peer labs and local schools.

**KIN 562 Biochem & Molec Exer & Nutr 3 cr**

This graduate level course is designed to provide study of the oxidative and non-oxidative pathways which provide energy during acute exercise within skeletal muscle. Emphasis will be placed on how these biochemical pathways utilize major fuel molecules (fat, carbohydrate, protein) to produce energy for work; how these pathways adapt to exercise training; and how the pathways are affected by exercise intensity, duration, and feeding state. The course will also include topics regarding lactate formation and utilization, whole-body metabolism, lipolysis within adipose cells, and blood glucose maintenance. Further, an overview of molecular biology concepts of gene transcription and protein synthesis in relation to exercise adaptation will be integrated into the course.

**KIN 563 Nutrition 3 cr**

An in-depth study of educational concepts related to digestion, absorption, transportation and utilization of nutrients.

**KIN 571 Exer Mgt Chronic Disease/Disab 3 cr**

This course is designed to provide a problem-oriented approach to exercise testing and prescription/programming for special needs populations.

**Cross-Listed:** HPE 571

**KIN 572 Neuromuscular & Biomechanical Principles in Exercise 3 cr**

An examination of the relationship of fundamental neuromuscular and mechanical principles of human movement as applied to sport performance, fitness, and injury prevention through observation of common activities.

**Cross-Listed:** HPE 572

**KIN 574 Sport and Fitness Conditioning 3 cr**

Advanced study of the scientific theory, principles, methods, and techniques in the development, implementation, and evaluation of various strength and conditioning programs designed to enhance athletic performance. Instructor permission is required.

**KIN 579 Fitness Assessment-Exer Presc 3 cr**

Fitness Assessment and Exercise Prescription reviews the advanced principles of exercise testing and prescription for at risk and health adult populations including health appraisal, risk assessment, and interpretation of data. Assessment results are utilized in designing training programs and recommending lifestyle changes for enhancing health, fitness, and performance. The ACSM Exercise Guidelines are emphasized. This course is dually listed with an equivalent 400 level course (KIN 479). Instructor permission is required.

**Cross-Listed:** HPE 579

**KIN 583 Clinical Ex Test & Prescript 3 cr**

The development of competencies necessary to administer graded exercise tests and prescribe appropriate exercise programs for various populations, based upon clinical observations and physiological data.

**Cross-Listed:** HPE 570, KIN 570

**KIN 590 Special Topics- 3-6 cr**

A varying-content course treating various aspects of health, kinesiology, and sport. May be repeated for credit when course content varies.

**Cross-Listed:** HPE 595

**KIN 594 Directed Study and Research 1-3 cr**

Students explore, through directed study and research, problems and issues of special interest or significance in Health, Kinesiology, and Sport. Not more than three semester hours of any departmental 594 courses can be accepted toward a degree program.

**Cross-Listed:** HPE 594

**KIN 595 Internship 3-6 cr**

A supervised learning experience in a health, kinesiology, or sport setting. Provides the student an opportunity to apply theories and concepts learned during the graduate program. No more than six semester hours may be taken. HKS advisor approval required.

**Cross-Listed:** HPE 595

**KIN 599 Thesis 1-9 cr**

A student selects a project, study, or investigation in health and/or kinesiology. Such project forms the basis for the thesis. A committee will give guidance during the investigation and the writing of the thesis.

**Cross-Listed:** HPE 599

**KIN 601 Biomech Found Human Movement 3 cr**

This course is designed to provide students with an understanding of how to use various technologies in a biomechanics lab for measuring kinematics. Along with making measurements, students will also learn how to perform the calculations involved in analysis.

**Cross-Listed:** HPE 601

**KIN 602 Techniques of Supervision PE 3 cr**

Course is designed to familiarize the student with the principles, problems, and techniques, involved in supervision.

**Cross-Listed:** HPE 602

**KIN 603 Adv Measurement-Eval in HKS 3 cr**

Measurement and evaluation in the areas of strength, body composition, flexibility, endurance, general motor capacity, perceptual motor-functions, and anthropometrics.

**Cross-Listed:** HPE 603

**KIN 681 Current Topics in Exercise Science and Performance Nutrition 3 cr**

Advanced study of current scientific literature in the area of exercise science and performance nutrition. A significant amount of reading and critical analysis of the most current peer-reviewed publications within the field is required. Emphasis is placed on demonstrating an understanding of the rationale for each study, methods and statistical analyses employed, and the results reported along with their application within the broader field of study.

**KIN 694 Directed Study and Research 1-3 cr**

Through directed study and research, problems and issues of special interest or significance in health and/or kinesiology are explored. No more than three semester hours of any department 694 courses can be accepted toward a degree program.

**Cross-Listed:** HPE 694

**KIN 695 Internship 3-9 cr**

A supervised field study investigation in a candidate's work setting. The student will conduct an investigation, apply concepts and skills learned during the program.

**Cross-Listed:** HPE 695

**KIN 699 Research Project 1-6 cr**

A supervised research project or investigation. The student will conduct a research project or investigation applying concepts and skills applicable to Health, Kinesiology, and Sport. May be taken more than one semester; total cannot exceed six semester hours.

**Cross-Listed:** HPE 699

**KIN 799 Dissertation 1-6 cr**

With the guidance of a faculty mentor and committee, doctoral students will select and carry out a research project, study, or investigation in exercise science and/or performance nutrition. Such project forms the basis for the dissertation. The student will demonstrate the ability to become an independent researcher by successfully completing the project and formally presenting and defending a written dissertation to their committee.

## Leadership/Teacher Educ (LTE) (LTE)

**LTE 547 Instructional Coaching 3 cr**

An overview of strategies for guiding teachers and other professionals toward improving student achievement by building better learning communities.

**LTE 645 Curriculum Leadership 3 cr**

A purpose of this course will be to prepare professional educators through teaching, research and services to become committed to life-long learning and to facilitating the process of building better communities.

**LTE 646 Community Leadership 3 cr**

This course will prepare future teacher leaders to work effectively within their school community as well as with the communities in which they work and with the families of the students they teach.

**LTE 647 Instructional Coaching 3 cr**

A purpose of this course is to prepare professional educators through teaching, research, and service to become committed to life-long learning and to facilitate the process of building better communities. Students will demonstrate best educational practices and professional dispositions and will learn how to create a positive, motivational learning environment in schools while recognizing, appreciating, and including diverse learners and perspectives. Additionally, students are expected to demonstrate satisfactory skills in curriculum leadership; to engage in action research related to schools; to engage in literacy coaching; to address current family, community, regional, and national issues related to scholastic achievement, and to use tenets of instructional leadership to guide teachers and other professionals toward improving student achievement.

**LTE 699 Research Project 1-3 cr**

The Research Project, as the culminating experience in the Instructional Specialist Program, provides the candidate an opportunity to synthesize and apply program components and a timely topic in the field.

**Prerequisite:** IDE 692 Minimum Grade of B or EDU 692 Minimum Grade of B

## Linguistics (LNG) (LNG)

### LNG 300 Intro to Linguistics 3 cr

LNG 300-Introduction to Linguistics is the introductory class for the Applied Linguistics minor. It will introduce linguistics concepts to the students and give them the foundation needed for the higher level classes required as part of the minor. Required core course. Prerequisite: Sophomore standing.

**Prerequisite:** (LG 201 (may be taken concurrently) Minimum Grade of C and LG 202 (may be taken concurrently) Minimum Grade of C) or (LG 211 (may be taken concurrently) Minimum Grade of C and LG 212 (may be taken concurrently) Minimum Grade of C) or (LG 231 (may be taken concurrently) Minimum Grade of C and LG 232 (may be taken concurrently) Minimum Grade of C) or (LG 241 (may be taken concurrently) Minimum Grade of C and LG 242 (may be taken concurrently) Minimum Grade of C) or (LG 251 (may be taken concurrently) Minimum Grade of C and LG 252 (may be taken concurrently) Minimum Grade of C) or (LG 271 (may be taken concurrently) Minimum Grade of C and LG 272 (may be taken concurrently) Minimum Grade of C) or (LGS 201 (may be taken concurrently) Minimum Grade of C and LGS 202 (may be taken concurrently) Minimum Grade of C) or (LGS 206 (may be taken concurrently) Minimum Grade of C and LGS 207 (may be taken concurrently) Minimum Grade of C) or (LGS 210 (may be taken concurrently) Minimum Grade of C and LGS 211 (may be taken concurrently) Minimum Grade of C) or (LGS 221 (may be taken concurrently) Minimum Grade of C and LGS 222 (may be taken concurrently) Minimum Grade of C) or (LGS 241 (may be taken concurrently) Minimum Grade of C and LGS 242 (may be taken concurrently) Minimum Grade of C) or (LGS 261 (may be taken concurrently) Minimum Grade of C and LGS 262 (may be taken concurrently) Minimum Grade of C) or (LGS 281 (may be taken concurrently) Minimum Grade of C and LGS 282 (may be taken concurrently) Minimum Grade of C)

### LNG 305 History of Euro Languages 3 cr

LNG 305-History of European Languages is an elective class for the Applied Linguistics minor. It will introduce students to the emergence and development of the European Languages as we know them today, tracing their historical development from the beginning to the modern era. Elective course.

**Prerequisite:** LNG 300 Minimum Grade of C

### LNG 306 Contemporary Poetry and Trans 3 cr

In this course, students will broaden their knowledge of contemporary poetry in either the Chinese, French, German, Russian or Spanish language and become conversant with translation theory. They will also begin to work towards expertise in the translation of this poetry into English.

**Prerequisite:** LG 212 Minimum Grade of C or LG 232 Minimum Grade of C or LG 252 Minimum Grade of C or LG 272 Minimum Grade of C or LG 273 Minimum Grade of C

### LNG 400 Applied Linguistics 3 cr

LNG 400- Applied Linguistics is the second linguistics class for the Applied Linguistics minor. It will introduce Second Language Acquisition theory and concepts to the students and give them the theoretical foundation needed for the minor. This is the last required class of the Applied Linguistics minor. Required core course.

### LNG 465 Foreign Lang Pedagogy 3 cr

LNG 465-Foreign Language Pedagogy is an elective class for the Applied Linguistics minor. It will introduce students to the theories and methodologies of the surrounding second language instruction, tracing their historical development of these methodologies from the beginning to the modern era. Elective course. Special Permission of the Instructor required to enroll in course.

**Prerequisite:** LNG 300 Minimum Grade of C and LNG 400 Minimum Grade of C

### LNG 490 Special Topics- 3 cr

LNG 490-Special Topics is an elective class for the Applied Linguistics minor. A variety of topics can be covered in this class as determined by student interest and the discretion of the Director of Applied Linguistics Program. Elective course. LNG 300 and LNG 400 with a C or better.

**Prerequisite:** LNG 300 Minimum Grade of C and LNG 400 Minimum Grade of C

### LNG 494 Directed Studies- 3 cr

LNG 494 - Directed Studies is an elective class for the Applied Linguistics minor. A variety of topics can be covered in this class as determined by student interest and the discretion of the Director of Applied Linguistics Program. Elective courses.

**Prerequisite:** LNG 300 Minimum Grade of C and LNG 400 Minimum Grade of C

### LNG 496 Intern. Applied Ling 3 cr

LNG 496 - Internship in Applied Linguistics is an elective class for the Applied Linguistic minor. Allows Applied Linguistics students the opportunity for hands-on practice of the theories and methodologies learned as part of the Applied Linguistics minor. Elective course.

**Prerequisite:** LNG 465 Minimum Grade of C

### LNG 500 Introduction to Linguistics 3 cr

Introduction to Linguistics will introduce Linguistics concepts to the students and give them the foundation needed for studies in applied linguistics.

**Cross-Listed:** LNG 300

### LNG 510 Applied Linguistics 3 cr

Applied Linguistics will introduce second language acquisition theory and concepts to the students and give them the theoretical foundation needed for studies in applied linguistics.

**Cross-Listed:** LNG 400

## Management (MGT) (MGT)

### MGT 300 Management Theory and Practice 3 cr

Theories of organizational structures, practices, and behavior, and the effective management of organizations. Emphasis on developing patterns and strategies of organizational management in a dynamic environment as affected by the interaction of material and human resources using the technique of applied social and management sciences.

### MGT 305 Organizational Comm - W 3 cr

A study of written and oral communication of organizations. Emphasis is given to communication theory, including organization flows and barriers to organizational communication. The preparation of neutral, negative, and persuasive written messages as well as formal written reports is covered in depth. In addition, oral presentations and employment interviews are discussed.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**MGT 306 Organizational Comm Non Bus 3 cr**

A study of written and oral communication in organizations. Emphasis is given to communication theory, including organization flows and barriers to organizational communication. The preparation of neutral, negative, and persuasive written messages as well as formal written reports is covered in depth. In addition, oral presentations and employment interviews are discussed. For non-business majors.

**Prerequisite:** EH 102 Minimum Grade of C or EH 105 Minimum Grade of C

**MGT 311 Legal Environ of Bus II 3 cr**

An advanced treatment of the law of agency, commercial transactions, business organizations, property, negotiable instruments, secured transactions, professional liability, debtor-creditor relations, including applicable sections of Uniform Commercial Code.

**Prerequisite:** BUS 265 Minimum Grade of D or (MGT 310 Minimum Grade of D or MGT 332 Minimum Grade of D or MGT 422 Minimum Grade of D)

**MGT 325 Operations Management 3 cr**

Addresses concepts, problems, and managerial approaches applicable to the management of manufacturing and service operations. The course will examine the strategic and tactical considerations that are involved in creating a systematic framework that supports the creation of competitive advantages through effective operations and the production of high quality products. Topics covered include the role of operations in the overall organization, operations strategy development and implementation, product design and process selection, location and capacity planning, facilities layout, quality management, inventory management, production planning, scheduling and control, and project management. An important component of the overall course is the incorporation of computer applications for problem solving and decision making in operations.

**Prerequisite:** (MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D) and (BUS 255 Minimum Grade of D or ST 275 Minimum Grade of D)

**MGT 334 International Mgt 3 cr**

This course exposes students to the challenges that confront the managers of organizations & individuals in global settings. Special focus is on dealing with and benefitting from the diversity that exists across international cultures, markets, economics, governments, and organizations

**Prerequisite:** MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D

**MGT 340 Organizational Behavior - W 3 cr**

A study of human and group behavior in the workplace and within society. The focus is on individual characteristics and processes such as personality, perception, and motivation; interpersonal processes such as group behavior, leadership, communication, and decision making; and organizational processes such as culture, structure, power, and change. Requires Junior Standing.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D) and (MGT 305 Minimum Grade of D or MGT 324 Minimum Grade of D)

**MGT 341 Organizational Behavior 3 cr**

This course provides a basic survey of the field of Organizational Behavior. Our objective is to cover important topics such as job attitudes, work motivation, group dynamics, leadership and organizational culture. For non-business majors.

**Prerequisite:** (MGT 300 Minimum Grade of D or MGT 305 Minimum Grade of D or MGT 306 Minimum Grade of D)

**Cross-Listed:** MGT 340

**MGT 345 Creativity and Innovation 3 cr**

This course provides a broad framework for understanding the nature of entrepreneurship in multiple organizational settings. The course introduces students to the innovation and idea generation process and helps students determine the most desirable educational path for them to achieve their career goals. Sophomore standing.

**MGT 347 Franchising 3 cr**

This course is designed for students who are interested in learning about the opportunities and threats that abound in the modern world of franchising. Students will study existing franchising from both a historical and theoretical context. The logic of this course is that franchising is one of the development models that minimize risk for the "small business" focused student. Some franchising oriented people may want to start a franchise and grow it rapidly. This option is often a first step into business ownership for inexperienced owners. We discuss the applicability, opportunities, challenges, and implementation of the franchising model for expanding existing businesses. The format consists of case study and lecture discussion sequenced with extensive background readings, occasional guest lecturers, and a term case-based project culminating in a transactional plan.

**MGT 351 Human Resource Management 3 cr**

Principles, policies, and practices used to develop a sound human resource management program in the business organization. Among the topics included are job analysis, employment, organization development, employee development and evaluation, wage and salary administration and labor relations.

**Prerequisite:** (MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D) and ACC 212 Minimum Grade of D and ECO 215 Minimum Grade of D and ECO 216 Minimum Grade of D and BUS 255 Minimum Grade of D and BUS 265 Minimum Grade of D and CIS 250 Minimum Grade of D

**MGT 355 Leg & Fin Aspects of Entrepren 3 cr**

This course provides an overview of the legal and financial issues most frequently encountered by entrepreneurs and others involved in start-ups and small closely held, or family businesses. The course covers various aspects of financing and entrepreneurial venture. Major topics attracting seed and growth capital from sources such as venture capital, investment banking, government, and commercial banks; creating, protecting and leveraging intellectual property. Among the issues discussed are valuing a company, going public, selling out, acquisitions, bankruptcy, different legal forms or organizations, partnerships, and taxes.

**MGT 356 Strategic Issues in Family Bus 3 cr**

This course examines a new discipline that has developed in the last ten years and focuses on the unique aspects of family businesses. Organizational behavior, law, finance, operations, and basic small business concepts are being integrated into this course. Students will have an opportunity to consult with and develop transition plans for a family firm in a live field project.

**MGT 357 Leadership 3 cr**

This course includes a review of traditional as well as current thinking in Leadership theory. Students will complete several self-assessment exercises designed to assess one's leadership style and ability as a leader. A series of successful leaders will be studied in-depth.

**Prerequisite:** Junior or senior standing.

**MGT 390 Total Quality Management 3 cr**

Total Quality Management (TQM) is a management philosophy which emphasizes customer focus, continuous improvement, and employee involvement throughout the organization. This course is an introductory course which examines these components and their integration into a comprehensive quality management system.

**Prerequisite:** (MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D) and (MGT 325 Minimum Grade of D or MGT 396 Minimum Grade of D)

**MGT 396 DEI in Organizations 3 cr**

This course will develop students' critical thinking regarding diversity, equity, and inclusion in organizations. Topics may include age, bias, culture, discrimination, equality, equity, ethnicity, gender, identity, inclusion, power, privilege, race, and sexual orientation.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**MGT 430 Operations Research 3 cr**

Reviews selected operations research concepts; nonlinear optimization methods, linear programming; dynamic programming; model building; and simulation methods. The student is expected to understand the concepts of operations research and to be able to use computer procedure to solve problems.

**Prerequisite:** MGT 325 Minimum Grade of D or MGT 396 Minimum Grade of D

**MGT 441 Service Operations 3 cr**

This course will provide students the opportunity to learn about service operations management, including service strategies and operations considerations and imperatives for service enterprises and how service systems are structured and operated. Students will also learn about various tools and techniques for managing service operations such as how to forecast service demand, determine capacity requirements, schedule activities, coordinate operations, plan and schedule service activities, and evaluate system performance.

**Prerequisite:** (MGT 325 Minimum Grade of D or MGT 396 Minimum Grade of D)

**MGT 450 Organizational Staffing 3 cr**

A detailed study of the function of employee staffing in a modern work organization. Emphasis on job analysis, criterion development, development and use of employment tests, validation of selection techniques, and statistical methods for making fair employment decisions. Course work includes a comprehensive staffing project.

**Prerequisite:** MGT 351 Minimum Grade of D and (BUS 245 Minimum Grade of D or ST 175 Minimum Grade of D or ST 210 Minimum Grade of D)

**MGT 451 Employee Training -Development 3 cr**

An applied course which details the training and development function. Content areas of job analysis, training needs analysis, training program development and implementation, and program evaluation will be incorporated in a comprehensive training and development project.

**Prerequisite:** MGT 340 Minimum Grade of D and MGT 351 Minimum Grade of D

**MGT 452 Employment Law 3 cr**

Analysis of significant workplace torts and laws regulating the employment relationship including: Title VII, FMLA, AOA, ADEA, FLSA, OSHA and related state laws. Emphasis on federal legislation and developing case law.

**Prerequisite:** MGT 351 Minimum Grade of D and (BUS 265 Minimum Grade of D or MGT 310 Minimum Grade of D or MGT 332 Minimum Grade of D or MGT 422 Minimum Grade of D)

**MGT 454 Compensation Administration 3 cr**

A study of the fundamentals of compensation administration in organizations. Topics include job analysis, KSA determination, job evaluation, wage structure development, incentive pay systems, legal aspects of compensation and new developments in compensation. Comprehensive course project required.

**Prerequisite:** MGT 351 Minimum Grade of D

**MGT 455 Labor - Management Relations 3 cr**

An examination of the organizing, negotiation, and contract administration phases of union-management relations. Case analyses, federal legislation and case law in labor relations, significant current issues, and a collective bargaining simulation are featured.

**Prerequisite:** MGT 351 Minimum Grade of D

**MGT 456 Strategic Issues on Family Bus 3 cr**

This course examines a new discipline that has developed in the last ten years and focuses on the unique aspects of family businesses. Organizational behavior, law, finance, operations, and basic small business concepts are being integrated into this course. Students will have an opportunity to consult with and develop transition plans for a family firm in a live field project.

**Prerequisite:** MGT 345 Minimum Grade of C

**MGT 460 Organiz Development and Change 3 cr**

Provides insight into the theory and practice of organization change and development. It bridges the gap between theory and practice and emphasizes the process of improving both organizations and individuals. Topics covered encompass understanding organizations and how they change, intervention strategies and methods for improving organizations, quality of work-life approaches and strategic considerations in system-wide change.

**Prerequisite:** MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D

**MGT 462 Negotiatn/Disp Resolutn in Bus 3 cr**

This course provides theoretical background and practical applications in business negotiation, conflict management, and alternative dispute resolution. Areas covered include positional and interest-based bargaining, business and employment arbitration, organizational conflict management strategies, mediation, and effective communications for negotiators and ADR participants.

**Prerequisite:** (MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D)

**MGT 465 New Venture Creation 3 cr**

How new businesses are organized and planned. Objectives are 1) understanding the knowledge, skills and abilities required of entrepreneurs, 2) creating and developing opportunities for new ventures, and 3) planning resources to convert those opportunities into businesses. Students work in teams to develop a business plan for a new venture they have chosen.

**Prerequisite:** MGT 345 Minimum Grade of C or MGT 355 Minimum Grade of C

**MGT 470 High Performance Organizations 3 cr**

Course examines the role of organization culture, leadership, employee involvement, work teams, and human resource practices in developing and sustaining high performance organizations that practice the principles of total quality management. Senior Standing.

**Prerequisite:** (MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D)

**MGT 475 Strategic HRM 3 cr**

This is a capstone course in human resource management that reviews essential human resource management topics to prepare students for the SHRM Assurance of Learning Exam. Topics covered include strategic HR, ethics, recruiting and selection, employee and organizational development, performance management, employment law, compensation administration, workplace safety, employee relations, labor relations, and general management topics including motivation, individual differences, organizational culture, and leadership. In addition, the course covers state of the art issues in human resource management, which are new and not well developed in existing texts.

**Prerequisite:** MGT 351 Minimum Grade of D and (MGT 340 Minimum Grade of D or MGT 320 Minimum Grade of D)

**MGT 483 Social Entrepreneurship 3 cr**

The course provides a broad theoretical perspective and practical framework for understanding social entrepreneurs and the social ventures they create ranging from local social organizations to large international social ventures leading global change. The course introduces students to the possibilities of social entrepreneurship and an introduction to the entire social venture creation process and life cycle. This course is a service-learning based and all students will participate in term-based community-based projects with local non-profit organizations. Extensive work outside of the normal classroom hours is required for this course.

**MGT 485 Bus Policy in Global Eco - W 3 cr**

The culmination course in business and management education. Interdisciplinary and global in nature, the course uses the case method to develop a top management perspective in which all business disciplines are integrated into the organization's effective total functioning.

**Prerequisites:** Seniors who have completed all core courses, have petitioned for graduation and are beginning the final semester.

**Prerequisite:** (BUS 305 Minimum Grade of D or MGT 350 Minimum Grade of D or ECO 453 Minimum Grade of D) and (FIN 315 Minimum Grade of D or FIN 341 Minimum Grade of D) and (MGT 305 Minimum Grade of D or MGT 324 Minimum Grade of D) and (MGT 310 Minimum Grade of D or BUS 265 Minimum Grade of D or MGT 332 Minimum Grade of D or MGT 422 Minimum Grade of D) and (MGT 325 Minimum Grade of D or MGT 396 Minimum Grade of D) and (MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D)

**Corequisite:** MGT 486

**MGT 486 Undergraduate Comp Exam 0 cr**

Comprehensive exam

**Corequisite:** MGT 485

**MGT 490 Special Topics 3 cr**

Designed to provide senior students an opportunity to study selected topics of particular interest. A student may count no more than six hours of Special Topics in the concentration. **Prerequisite:** Approval of Department Chair.

**MGT 492 Management Analysis & Consult 3 cr**

Designed to help students bridge the gap between management theory and the realities involved in the practice of management. Topics include (1) development of the human, social, and political skills of the student as an individual, (2) business ethics, (3) global management issues, and (4) current trends in society that affect business and management. Assignments include a project with a local organization to identify critical management issues, analyze alternatives, and present specific recommended solutions to company managers. Senior standing.

**Prerequisite:** (MGT 300 Minimum Grade of D or MGT 322 Minimum Grade of D) and (MGT 320 Minimum Grade of D or MGT 340 Minimum Grade of D) and MGT 351 Minimum Grade of D

**MGT 494 Dir St in Management 1-3 cr**

Primarily designed to give superior students an opportunity to study some phase of management of particular interest. Conferences, a bibliography, and a formal research report are required. Junior or senior standing, a cumulative GPA of 2.5 or better, and approval of the department chair following the evaluation of a written proposal.

**MGT 496 Management Internship 3 cr**

The internship program is designed to give students practical experience in their field of study. Students complete directed projects under the supervision of Department Chair. No more than three hours of internship credit may be counted toward a degree in the Mitchell College of Business. **Prerequisites:** Junior or Senior standing, declared major in management, overall GPA of at least 2.5, and Internship Agreement signed by department Chair.

**MGT 510 Legal Environment of Business 3 cr**

Detailed analysis of laws & regulations affecting contemporary business organizations. Emphasis on legal aspects of employment and labor relations, regulatory agencies, sales, warranties, products liability, consumer protection, anti-trust, securities, creditors' rights, and ethical considerations.

**Prerequisite:** MBA P

**MGT 521 Data Analy for Bus Decisions 3 cr**

An examination of basic statistical concepts used in business analysis. Topics include fundamental probability, sampling, statistical estimation, test of hypothesis, analysis of variance, and regression analysis. Emphasis is placed on the use of statistical techniques for business decision making.

**MGT 522 Supply Chain & Operations Mgmt 3 cr**

An integrative approach to the processes, operations, and information required to produce and transform resources into value-added outputs that maximize customer satisfaction. Particular emphasis is placed on strategic supply chain management, operations strategy, value chain analysis, demand management, process mapping, quality assurance, customer fulfillment strategies, order fulfillment processes, relationship and information management in supply networks, measuring operational performance, and analytical tools for managing operations and supply systems.

**MGT 532 Legal & Ethical Environ of Bus 3 cr**

Legal and Ethical Environment of Business is designed to develop an in-depth analytical understanding of selected legal/ethical issues and trends and their impact on management and other business functions. Students will analyze the legal and ethical implications of issues including products liability, professional regulations, corporate responsibility, workplace discrimination and harassment, privacy, workplace safety, restraints on trade, land use regulation, international law, and alternative dispute resolution.

**MGT 562 MBA Exec Lect I 0 cr**

The MBA Executive Lecture series exposes students to the thinking and analysis of distinguished visiting executives on such topics as economics and finance, strategic management, marketing, international business, and entrepreneurship. Seminars are held during fall and spring semesters.

**Prerequisite:** MGT 521 (may be taken concurrently) Minimum Grade of C or MGT 532 (may be taken concurrently) Minimum Grade of C

**MGT 564 MBA Exec Lect II 0 cr**

The MBA Executive Lecture series exposes students to the thinking and analysis of distinguished visiting executives on such topics as economics and finance, strategic management, marketing, international business, and entrepreneurship. Seminars are held during fall and spring semesters.

**Prerequisite:** ECO 506 (may be taken concurrently) Minimum Grade of C or MGT 530 (may be taken concurrently) Minimum Grade of C

**MGT 570 MBA Exec Lect III 0 cr**

The MBA Executive Lecture series exposes students to the thinking and analysis of distinguished visiting executives on such topics as economics and finance, strategic management, marketing, international business, and entrepreneurship. Seminars are held during fall and spring semesters.

**Prerequisite:** ACC 501 (may be taken concurrently) Minimum Grade of C or MKT 541 (may be taken concurrently) Minimum Grade of C

**MGT 572 MBA Exec Lect IV 0 cr**

The MBA Executive Lecture series exposes students to the thinking and analysis of distinguished visiting executives on such topics as economics and finance, strategic management, marketing, international business, and entrepreneurship. Seminars are held during fall and spring semesters.

**Prerequisite:** MGT 522 (may be taken concurrently) Minimum Grade of C or ACC 502 (may be taken concurrently) Minimum Grade of C

**MGT 590 Sp Top - 3 cr**

Designed to provide graduate students an opportunity to study selected topics. Approval of Department Chair. A student may count no more than three hours if Special Topics in the MBA degree program.

**Prerequisite:** MBA P

**MGT 594 Independent Study - Management 3 cr**

Readings and research on selected topics. Conferences and formal research report required. Prerequisites: Approval of Department Chair.

**MGT 599 MBA Comprehensive Exam 0 cr**

A corequisite course with MGT 580 with no credit hours which includes a graduate comprehensive business exam.

**MGT 701 Sem in Org Behavior 3 cr**

This seminar provides an introduction to established theories and emerging trends in the field of organizational behavior. The course explores the thoughts, emotions, and behaviors of individuals within the context of work, teams, organizations, and society. The emphasis is on organizational theory and development.

**MGT 703 Seminar in Org Theory & Change 3 cr**

This is a foundational overview seminar. The purposes of the seminar are to 1) provide an in-depth understanding of the dominant theoretical approaches used in organizational theory, 2) give a historical overview of the theories of organization change, and 3) develop student skills in evaluating, extending, and communicating ideas about organizational theory and/or change as it relates to the student's research.

**MGT 705 Leadership 3 cr**

This course includes a review of traditional as well as current thinking in leadership theory with a special emphasis on emotional and social intelligence and organizational citizenship behavior.

**MGT 707 Strategic Management 3 cr**

The course is designed to develop a thorough understanding of the primary frameworks of competitive strategy and corporate strategy. Topics covered in the course include: industry and competitive analysis, resource-based view of the firm, value chain analysis, competitive strategies, business models, scope of the firm, strategic alliances, and offensive and defensive strategies.

**MGT 709 Sem. Sp. Topics 3 cr**

This course will cover two broad areas. The first is a reprise and extension of Structural Equation Modeling (SEM). The second is an introduction to Game Theory (GT) and applications thereof.

**MGT 799 Dissertation Research 1-6 cr**

Independent Scholarship working with committee.

## Marine Sciences (MAS) (MAS)

**MAS 134 Ocean Science 3 cr**

An introduction to physical, chemical, geological and biological oceanography. Equivalent to BLY 134.

**Corequisite:** MAS 134L

**Cross-Listed:** BLY 134

**MAS 134L Ocean Science Lab 1 cr**

Laboratory experiences associated with BLY 134.

**Corequisite:** MAS 134

**Cross-Listed:** BLY 134L

**MAS 331 Marine Science I 3 cr**

This course will present the basic principles of geological and physical oceanography. Marine science is an interdisciplinary science field in which geology, physics, chemistry and biology interact in complex ways that are fundamental to the oceanic environment. This course will examine the characteristics of oceanic and coastal geomorphology and the associated marine sediments as well as the circulation of water masses that reside in these different regions of the world's oceans. Geological oceanography topics that will be covered include: Structure and evolution of ocean basins, types and properties of marine sediments, sediment transport processes and characterizing coastal regions. Physical oceanography topics that will be covered include: basic physical laws, properties of the water and the ocean, air-sea interactions, general circulation and coastal processes.

**Prerequisite:** MAS 134 Minimum Grade of C and MAS 134L Minimum Grade of C

**Corequisite:** MAS 331L

**MAS 331L Marine Sciences I Lab 1 cr**

Lab component for MAS 331.

**Corequisite:** MAS 331

**MAS 332 Marine Science II-W 3 cr**

Oceanography ("ocean"= the marine environment, and "graphy"= the study of) is literally the study of the marine environment. In practice, oceanography is an interdisciplinary science at the intersection of geology, chemistry, physics and biology. Marine Science II focuses on fundamental concepts in chemical and biological oceanography. The study of chemical oceanography will encompass dissolved components, stratification, chemical tracers, marine pollution, ocean acidification and global warming. This will lead to an introduction to biological oceanography, which will include organismal biology, marine adaptation and fisheries. In-class lectures will provide the students with the foundation to understand the principles discussed and will be supplemented with discussion of the modern ways in which these disciplines are pursued.

**Prerequisite:** (MAS 134 Minimum Grade of C and MAS 134L Minimum Grade of C)

**MAS 332L Marine Sciences II Lab 1 cr**

Lab component for MAS 332.

**MAS 334L Env Monitor & Assess Lab 1 cr****MAS 336 Marine Operations/Research-W 3 cr**

Students will conduct collaborative experiments at local field sites. This will involve collecting and analyzing samples, analyzing the subsequent data, and using primary scientific literature to write a short paper and conduct an oral presentation.

**Prerequisite:** (BLY 121 Minimum Grade of C and BLY 121L Minimum Grade of C) and (BLY 122 Minimum Grade of C and BLY 122L Minimum Grade of C) and (CH 131 Minimum Grade of C and CH 131L Minimum Grade of C) and (CH 132 Minimum Grade of C and CH 132L Minimum Grade of C) and (MAS 134 Minimum Grade of C and MAS 134L Minimum Grade of C) and (MAS 331 Minimum Grade of C and MAS 331L Minimum Grade of C) and (MAS 332 Minimum Grade of C and MAS 332L Minimum Grade of C) and (PH 114 Minimum Grade of C and PH 114L Minimum Grade of C) and MA 125 Minimum Grade of C

**MAS 367 Marine Biology 4 cr**

The relationship of marine organisms to their environment. (Usually taught in the summer semester.) Equivalent to BLY 367. Requires permission of Department Chair.

**Prerequisite:** (MAS 134 (may be taken concurrently) Minimum Grade of D and MAS 134L (may be taken concurrently) Minimum Grade of D)

**Cross-Listed:** BLY 367

**MAS 371 Shark and Ray Biology 2 cr**

This course will provide an introduction to biology of sharks and rays, with special emphasis on regional shark fauna and field techniques. Topics to be covered include chondrichthyan origin, systematics, sensory biology, trophic ecology, reproductive biology, life history, ecology, fisheries and conservation. Lectures will be supplemented with discussions of papers from the primary literature to familiarize students with current research. In addition, longline, trawl and gillnet sampling will provide students with firsthand knowledge of field techniques and local shark identification. Equivalent to BLY 371. Requires permission of Department Chair.

**Prerequisite:** (MAS 134 (may be taken concurrently) Minimum Grade of D and MAS 134L (may be taken concurrently) Minimum Grade of D)

**Cross-Listed:** BLY 371

**MAS 430 Marine Botany 4 cr**

A general survey of marine algae and vascular and non-vascular plants associated with the marine environment. Distribution, identification, structure, ecology, and reproduction will be considered. Course offered only through Marine Environmental Science Consortium, (usually taught in the summer semester). Equivalent to BLY 430. Requires permission of Department Chair.

**Prerequisite:** (MAS 134 Minimum Grade of D and MAS 134L Minimum Grade of D)

**Cross-Listed:** BLY 430

**MAS 431 Field and Laboratory Measuremn 3 cr**

Provide Marine Science majors with the opportunity to gain a thorough coverage in the many diverse measurements obtained by marine scientists in field/laboratory settings with consideration for the hypotheses, research questions, quality assurance, analysis and data management.

**Prerequisite:** (BLY 121 Minimum Grade of C and BLY 121L Minimum Grade of C) and (BLY 122 Minimum Grade of C and BLY 122L Minimum Grade of C) and (CH 131 Minimum Grade of C and CH 131L Minimum Grade of C) and (CH 132 Minimum Grade of C and CH 132L Minimum Grade of C) and (MAS 331 Minimum Grade of C and MAS 331L Minimum Grade of C) and (MAS 332 Minimum Grade of C and MAS 332L Minimum Grade of C) and MA 125 Minimum Grade of C and (MAS 134 Minimum Grade of C and MAS 134L Minimum Grade of C) and (PH 114 Minimum Grade of C and PH 114L Minimum Grade of C)

**Corequisite:** MAS 431L

**MAS 431L Field and Laboratory Measure 1 cr**

Lab component for MAS 431. Must be taken with Lecture.

**Prerequisite:** (BLY 121 Minimum Grade of C and BLY 121L Minimum Grade of C) and (BLY 122 Minimum Grade of C and BLY 122L Minimum Grade of C) and (CH 131 Minimum Grade of C and CH 131L Minimum Grade of C) and (CH 132 Minimum Grade of C and CH 132L Minimum Grade of C) and (MAS 331 Minimum Grade of C and MAS 331L Minimum Grade of C) and (MAS 332 Minimum Grade of C and MAS 332L Minimum Grade of C) and MA 125 Minimum Grade of C

**MAS 437 Marine Geology 3 cr**

Marine Geology explores our ocean basins and coasts, specifically focusing on the dynamic forces that move and shape our ocean basin through the study of marine geology.

**Prerequisite:** (BLY 121 Minimum Grade of C and BLY 121L Minimum Grade of C and BLY 122 Minimum Grade of C and BLY 122L Minimum Grade of C and CH 131 Minimum Grade of C and CH 131L Minimum Grade of C and CH 132 Minimum Grade of C and CH 132L Minimum Grade of C and MAS 134 Minimum Grade of C and MAS 134L Minimum Grade of C and MAS 331 Minimum Grade of C and MAS 331L Minimum Grade of C and MAS 332 Minimum Grade of C and MAS 332L Minimum Grade of C and MA 125 Minimum Grade of C)

**Corequisite:** MAS 437L

**Cross-Listed:** MAS 337, MAS 537

**MAS 437L Marine Geology Lab 1 cr**

Marine Geology lab.

**Prerequisite:** (BLY 121 Minimum Grade of C and BLY 121L Minimum Grade of C and BLY 122 Minimum Grade of C and BLY 122L Minimum Grade of C and CH 131 Minimum Grade of C and CH 131L Minimum Grade of C and CH 132 Minimum Grade of C and CH 132L Minimum Grade of C and MAS 134 Minimum Grade of C and MAS 134L Minimum Grade of C and MAS 331 Minimum Grade of C and MAS 331L Minimum Grade of C and MAS 332 Minimum Grade of C and MAS 332L Minimum Grade of C and MA 125 Minimum Grade of C)

**Corequisite:** MAS 437

**Cross-Listed:** MAS 337L, MAS 537L

**MAS 451 Marine Vertebrate Zoology 4 cr**

A study of marine vertebrates, with emphasis on fishes; their systematics, zoogeography, and ecology, (usually taught in the summer semester).

Equivalent to BLY 451. Requires permission of Department Chair.

**Prerequisite:** (MAS 134 (may be taken concurrently) Minimum Grade of D and MAS 134L (may be taken concurrently) Minimum Grade of D)

**Cross-Listed:** BLY 451

**MAS 471 Marine Invertebrate Zoology 4 cr**

A study of natural history, systematics, and morphology of marine invertebrates, (usually taught in the summer semester). Equivalent to BLY 471. Requires permission of Department Chair.

**Prerequisite:** (MAS 134 (may be taken concurrently) Minimum Grade of D and MAS 134L (may be taken concurrently) Minimum Grade of D)

**Cross-Listed:** BLY 471

**MAS 474 Introduction to Oceanography 4 cr**

A general introduction to the oceans, with emphasis on chemical, physical, and geological processes and their relation to biological systems. Course offered only through Marine Environmental Science Consortium (DISL). Offered during the summer term.

**Prerequisite:** (BLY 121 Minimum Grade of C or BLY 141 Minimum Grade of C) and (BLY 122 Minimum Grade of C or BLY 142 Minimum Grade of C) and (BLY 301 Minimum Grade of C or BLY 341 Minimum Grade of C) and (BLY 302 Minimum Grade of C or BLY 311 Minimum Grade of C) and (BLY 303 Minimum Grade of C or BLY 325 Minimum Grade of C)

**Cross-Listed:** BLY 474

**MAS 475 Marine Ecology 4 cr**

Marine Ecology is an advanced course open to upper level undergraduate students. The course will provide a background on marine organisms, including their interactions with each other and their environment, threats, and management. Students will be exposed to foundational concepts, ecological theories, and the experimental basis of our current knowledge. The laboratory will consist of field trips to a variety of local marine habitats, and students will be engaged in experiential learning and exposed to diverse collection methods and experimental approaches in these settings. The three main objectives of this course include: 1) gain an appreciation for the diverse local ecosystems and their complex ecology; 2) introduce students to field and laboratory techniques; and 3) demonstrate basic statistics and their applications for marine ecology. Upon completion of the course, students will be able to identify key flora and fauna found in the local area and have a basic understanding of their ecology, be familiar with typical sampling gear and methods, and demonstrate an understanding of the potential consequences of human activities and natural disturbance events on the structure and function of marine ecosystems. Equivalent to BLY 475.

**Prerequisite:** (MAS 134 Minimum Grade of C and MAS 134L Minimum Grade of C) and (MAS 331 Minimum Grade of C and MAS 331L Minimum Grade of C) and (MAS 332 Minimum Grade of C and MAS 332L Minimum Grade of C) and (BLY 121 Minimum Grade of C and BLY 121L Minimum Grade of C) and (BLY 122 Minimum Grade of C and BLY 122L Minimum Grade of C) and (CH 131 Minimum Grade of C and CH 131L Minimum Grade of C) and (CH 132 Minimum Grade of C and CH 132L Minimum Grade of C) and (PH 114 Minimum Grade of C and PH 114L Minimum Grade of C) and MA 125 Minimum Grade of C or ST 210 Minimum Grade of C

**Cross-Listed:** BLY 475

**MAS 476 Marine Technical Methods 2 cr**

This course will provide an introduction to different methods of sensing the ocean, including building and testing simple sensors, use of instruments to collect high resolution data and some background on how technology has led to key advances in marine sciences.

**MAS 477 Coral Reef Biology & Ecology 4 cr**

This course will explore the biology and ecology of coral reef and associated communities, with a view to understanding what is happening in these ecosystems today.

**Prerequisite:** (BLY 121 Minimum Grade of C) or (BLY 101 Minimum Grade of C) or (MAS 134 Minimum Grade of C)

**MAS 478 Marine Mammal Hlth/Strd Resp 2 cr**

**Prerequisite:** (BLY 368 Minimum Grade of C or MAS 490 Minimum Grade of C or BLY 452 Minimum Grade of C)

**MAS 488 Field Marine Science II 3 cr**

The course will focus on the biological and ecological characteristics of the aforementioned ecosystems, and emphasize the importance of connectivity among seascape components for maintaining ecosystem function.

**Prerequisite:** (BLY 121/L Minimum Grade of C or (MAS 134/L Minimum Grade of C)

**MAS 490 Special Topics 1-8 cr**

An in-depth tutorial exposure to specific areas in the marine sciences. Credit and title will be arranged to examine the subject matter in the area of current interest to one group of students. Specialized topics not currently listed in catalog course offerings.

**MAS 494 Directed Studies 1-4 cr**

Directed Studies in Marine Sciences provides students the opportunity to explore authentic research in marine sciences by carrying out an individual research project under the supervision and guidance of a SSoMES faculty member. Requires securing a SSoMES faculty mentor, completed Directed Studies Application (see last page), and permission of the Stokes School of Marine and Environmental Sciences (SSoMES) Program Manager prior to registering for the course (e.g. at least a month prior to registration opening).

**Prerequisite:** (BLY 121 Minimum Grade of C and BLY 121L Minimum Grade of C) and (BLY 122 Minimum Grade of C and BLY 122L Minimum Grade of C) and (CH 131 Minimum Grade of C and CH 131L Minimum Grade of C)

**MAS 510 Oceanography and Marine Bio 3 cr**

Oceanography is an interdisciplinary science at the intersection of geology, chemistry, physics and biology. This course is designed to be a survey course of these four disciplines with special emphasis on the biological aspects of ocean sciences. In-class lectures will provide the students with the foundation to understand the principles discussed, and will be supplemented with discussion of the modern ways in which these disciplines are pursued.

**MAS 511 Marine Analytical Methods 3 cr**

This course will provide an introduction to the analytical methods most commonly used in marine science: spectrometry, fluorometry, colorimetry, gas and liquid chromatography and the use of radio-isotopes. The course will consist of lectures covering the theory of each method and laboratory exercises in their use. Throughout, there will be a focus on the quality of the data being collected, as derived from quantitative assessments of accuracy, precision and repeatability; and propagation of errors. Students will be assessed on problem-sets based on data collected in the labs and on a research project using the instruments and techniques of their choice.

**MAS 512 Chlorophyll Fluorescence Tech 2 cr**

This course will provide an introduction to the scope and application of fluorescence techniques based on excitation of and emission from the ubiquitous plant pigment chlorophyll a. These include fluorometric determination of chlorophyll concentration in vitro; the use of active, single-wavelength fluorometry to assess temporal and spatial variability of chlorophyll a and microalgal biomass in natural assemblages; the use of multiple-wavelength excitation and/or hyperspectral emission to determine taxonomic distributions in vivo; and the use of modulated (pulse-amplitude modulated and fast repetition rate) fluorometry to investigate photosynthetic efficiency and model productivity.

**MAS 515 Environmental Toxicology 4 cr**

Introduction to the scientific and technical principles of toxicological processes in the context of the ecosystem. Students will understand the types of major environmental toxicants and how to properly evaluate their toxicity and factors that influence toxicity. Students will recognize and coherently formulate risk assessment and by using the tools and techniques acquired, develop and communicate proposals for remediation.

**Prerequisite:** (BLY 301 Minimum Grade of C and BLY 302 Minimum Grade of C) and (CH 201 Minimum Grade of C and CH 202 Minimum Grade of C) and (CH 540 Minimum Grade of B and CH 541 Minimum Grade of B)

**Cross-Listed:** CH 515, EXT 515

**MAS 520 Marine Resource Management 3 cr**

Designed to acquaint graduate students concerned with management of marine resources; development of legislation, evolution of policy, legal processes, impacts on human resources. The emphases will be placed on living resources.

**MAS 521 Marine Conservation Biology 3 cr**

This course will develop student's understanding of conservation biology in marine habitats. Lectures and assigned or student-selected readings will cover the widest possible range of current topics in marine conservation biology. Regular field trips will supplement and exemplify lecture topics. Each class will include an introductory lecture that presents an overview of basic ecological concepts and historical perspective for the assigned readings, followed by discussion. Students will lead discussion of student selected papers and write a topical term paper.

**MAS 522 Horseshoe Crabs- Resource Mgmt 2 cr**

The course will travel to Delaware Bay, home of the largest population of horseshoe crabs in the world. Students will gain and apply information on recent conflicts in horseshoe crab research and fishery management to explore political, ecological, and economic values of marine resources, options for management, conservation, and outreach, conflict resolution and applied ecology.

**MAS 523 Anthropogenic Impacts on Coast 3 cr**

This course will offer a state-of-the-art review of the nature and extent of anthropogenic impacts on marine coastal ecosystems, including climate change, destruction of wetlands, overfishing and nutrient pollution.

**MAS 524 Scientific Communication 3 cr**

Instruction on the principles of scientific communication and opportunities to practice different forms of written and oral communication common to marine and other sciences. Topics include: 1) the rationale for scientists to communicate effectively, 2) how to identify and share information to different audiences, 3) successful scientific date presentations, 4) writing, editing, publishing, and reviewing abstracts, scientific papers, and proposals, and 5) biases in scientific communication.

**MAS 525 Chemical Ecology 3 cr**

Chemical Ecology focuses on chemically mediated interactions within organisms in both aquatic and terrestrial environments. The topics covered include: chemoreception, chemical defense, chemical attraction, and the impact of chemical ecology on humans.

**Cross-Listed:** BLY 525

**MAS 530 Marine Microbial Ecology 3 cr**

A general survey of the types of microorganisms found in the marine environment. Emphasis will be on the interaction of microorganisms with each other and with their environment. In particular, the role of microorganisms in carbon cycling and biogeochemical processes will be stressed. Readings from current literature will expose students to the latest techniques and research.

**Cross-Listed:** BLY 530

**MAS 531 Physiol Eco Marine Microalgae 3 cr**

This course will cover the acclimative responses of marine microalgae to variability in light, nutrients, temperature and other environmental factors. Stress responses that are engendered when variability in these environmental factors exceeds the organisms' acclimative capacity will also be covered. The course will emphasize the commonality of these processes across taxa as well as considering taxon-specific responses that allow different groups to exploit their niches. Methods such as molecular biology, active fluorescence and remote sensing that can be used to investigate population dynamics and growth over a range of spatial and temporal scales will be covered.

**MAS 532 Marine Trophic Processes 3 cr**

This course will examine the nature and controls of the trophic routes followed by primary production and resulting carbon budgets in coastal ecosystems. Trophic processes in marine ecosystems such as herbivory, consumption by secondary consumers, decomposition, export/import and burial will be studied. The course will also offer a review of anthropogenic impacts, such as eutrophication and climate change, on the trophic rate of primary production and carbon budgets in coastal ecosystems. Students are expected to contribute with personal experimental projects and critical reading and discussion of seminal papers.

**MAS 533 Marine Molecular Ecology 3 cr**

The use of molecular biology in ecological studies has been increasing rapidly with the development of new techniques. These techniques can supplement the laboratory and field studies traditionally part of ecology. This course seeks to introduce the use of molecular techniques in marine ecology through lectures accompanied by computer exercises using data from public databases. Lectures will pull data from the primary literature, with emphasis on examples of applications in marine science. Computer exercises will introduce students to how data is analyzed as well as to some of the programs available to carry out this analysis.

**MAS 537 Marine Geology 3 cr**

Marine geology is an interdisciplinary subject dealing with the morphology, formation, and evolution of the ocean basin, using a broad range of theories including geochemistry, geophysics, sedimentology, mineralogy, and plate tectonics. Geology looks at some of the most important issues in society today including energy sources and sustainability, climate change, the impacts of developments on the environment, water management, mineral resources and natural hazards. By studying these issues, marine geologists can anticipate earth's future and examine any changes that may need to be made.

**Cross-Listed:** MAS 437

**MAS 537L Marine Geology Lab 1 cr**

This laboratory companion course to marine geology will focus on hands-on experience with the tools and techniques used to study the geological processes and structures of the ocean floor. This course would provide students with the opportunity to apply the theoretical concepts learned in the classroom to practical scenarios. Throughout the course, students will work with a variety of equipment, including seafloor mapping systems and sediment corers, to collect and analyze geological data. They would learn to identify different types of marine sediments, rock formations, and geological structures, and to interpret what these observations tell us about the history and dynamics of the ocean floor. In addition to the fieldwork and lab exercises, students would also be expected to develop their skills in scientific writing and data analysis. Overall, this course would provide a comprehensive introduction to the methods and techniques used in marine geology research, and would prepare students for future coursework and careers in the field.

**Corequisite:** MAS 537

**MAS 540 Sediment Biogeochemistry 3 cr**

Detailed examination of sediment biogeochemical processes and the implications thereof on nutrient cycles, plant production, and animal distribution, including discussion of early diagenesis in coastal sub-tidal and wetland sediment systems. permission of instructor.

**MAS 548 Marine Biogeochem Processes 2 cr**

The course will examine the interaction between biological, chemical and geological processes in the marine environment. This will be done by first reviewing the cycling of several of the major elements (e.g. carbon, nitrogen, phosphorus, sulfur, and iron) in the sea, and then examining how these cycles differ between various marine ecosystems (e.g. open ocean surface waters, estuaries, coral reefs, seagrass systems and tidal marshes). The focus will be on developing an understanding of how biogeochemical processes serve to regulate ecosystem function in these various habitats. Prerequisites: Organic chemistry, geology, marine ecology.

**MAS 550 Fisheries Techniques 3 cr**

Students are exposed to a detailed, semi-quantitative introduction to current biological and technological methodologies for studying fishes and aquatic habitats, with emphasis on study design and integration across sub-disciplines.

**MAS 551 Quant Methods Fish and Ecology 3 cr**

Ecological and fisheries research has progressed beyond qualitative inference and is continuing to adopt more quantitative methods. A diversity of modeling and experimental approaches exists for ecologists and fisheries scientists. This course is designed to familiarize the students with the most commonly used quantitative approaches. Requires permission of instructor.

**MAS 555 Fisheries Oceanography 2 cr**

Students examine the relationships between fish life history, recruitment dynamics and harvest potential, and local-, meso- and global scale oceanographic processes. Students are exposed to the evolution in thinking on the role of interaction between biology and physics relative to fish and fisheries.

**MAS 560 Mar Exp Ecol 4 cr**

Advances in marine ecology and oceanography are dependent on the ability of researchers to design effective and robust experiments to test hypothesis. Understanding the power, limitations and potential biological and statistical artifacts are critical to achieving this goal. The course focuses on fundamental concepts in the design and analysis of experiments in marine sciences, ecology and fisheries. Primary emphasis will be placed on design and interpretation and secondarily on techniques for analyses. Various analysis of variance models will be introduced beginning with completely randomized designs and factorial treatment structures, and proceeding through block and split-plot designs. In-class demonstrations and take-home problems will provide students with experience in performing many of these analyses.

**Prerequisite:** BLY 520 Minimum Grade of C or ST 540 Minimum Grade of C and ST 545 (may be taken concurrently) Minimum Grade of C

**MAS 570 Ocean Var and Global Change 3 cr**

This course will examine large scale, spatial and temporal variability in the Earth/ocean system as evidenced by present-day and paleo records. Variability such as the El Nino Southern Oscillation will be covered. It will critically evaluate the evidence for and the consequences of modern global change as it pertains to the marine environment. Emphasis will be placed on potential changes in climate, biogeochemical cycles, hydrologic cycles, eutrophication/species diversity, and UV light fluxes. Prerequisites: Permission of instructor.

**MAS 571 Marine Hydrodynam-Biomechanics 4 cr**

To present an introduction to the importance of small scale fluid dynamics, thermodynamics, and solid mechanics to marine science and to present techniques for measurement of important parameters.

**MAS 572 Estuarine Hydrodynamics 3 cr**

This course will address physical processes in estuarine environments. With physical processes in estuaries occurring in various time scales, discussion will proceed in terms of three different time scales: turbulent, tidal, and residual time scales. Emphasis will be placed on mass transport by physical transport processes (water movement).

**Prerequisite:** MAS 601 Minimum Grade of B

**MAS 573 Oceanology of Gulf of Mexico 3 cr**

This course provides a survey of the physics, chemistry, biology, geology and meteorology of the continental margins and deep ocean regions in the Gulf of Mexico and adjacent waters. Requires permission of instructor.

**MAS 574 Marine Ecosystem Modelling 3 cr**

An introduction to the principles, tools, and applications of marine ecosystem modelling. Emphasis will be placed on biological and physical coupling and numerical representations of these processes. Students will develop facility with numerical tools and learn how to apply coupled models to their ecosystems of interest.

**MAS 575 Marine Ecology 4 cr**

The course covers general ecological principles and how they apply to marine ecosystems. Both open ocean and nearshore waters are considered. Specific topics covered include: adaptations of marine organisms for life in the intertidal vs. subtidal zones; different modes of feeding and reproduction in marine organisms; and the importance of predation, competition, adult/larval interactions and dispersal mechanisms. The second half of the course is devoted to discussion of specific habitats including: coral reefs, mangrove swamps, kelp forests, and hydrothermal vents.

**MAS 576 Benthic Ecology 2 cr**

This course covers the evolutionary history and the ecology of marine benthic communities from the earliest fossils to present. The importance of scale and of proper design will be considered. Other topics include: predation, competition, adult/larval interactions and dispersal mechanisms. There will be discussion of productivity and materials cycling in benthic systems. Special topics of students' suggestions conclude the course.

**MAS 577 Interdisciplinary Coastal Processes 3 cr**

The coastal ocean has a physical regime that is distinct from that of the open ocean. This physical regime contributes to disproportionately high levels of ecological productivity associated with these areas. Because of the often close coupling of physical and biogeochemical processes in the coastal ocean, the solutions to the problem facing these ecosystems typically require interdisciplinary perspectives. The objective of the course is to introduce the main physical processes and fisheries in the coastal ocean. The course will provide an overview of the physics operating in the coastal ocean and link the physical forcings to biogeochemical processes and ecosystem function. The course will cover topics from shelf break-open ocean interactions to the fundamental processes operation in estuarine environments. The end goal is for graduate students to acquire a fundamental understanding of the physical mechanisms driving the circulation and the associated hydrographic properties in the coastal ocean and how those physical phenomena link to biogeochemical processes.

**Prerequisite:** MAS 601 (may be taken concurrently) Minimum Grade of C

**MAS 579 Coastal Ecosystem Dynamics 2 cr**

Coastal Ecosystem Dynamics will allow students to investigate the basic principles of ecosystem structure and function. The course is divided into 2 parts: an instructional phase for learning basics of ecosystem modeling, and a student-led investigation of the structure and function of a variety of coastal ecosystems. This approach will give the student a set of quantitative tools for modeling ecosystems. Also, students will learn to evaluate differences and similarities of energy and nutrient processing in disparate ecosystems. There will be one 2 hr class meeting each week during which students will learn to use the ecological modeling software packages 'Ecopath' and 'Ecoism'. During the initial period, students will 'dissect' published models (obtained from the Internet) as a mechanism to understand the utility of ecosystem modeling as well as the basics of this particular software. The second half of the course will be devoted to student-constructed ecosystem models. The models will be constructed from data and pathway descriptions in Alongi's 'Coastal Ecosystem Processes' (CRC Press). A synthesis of these models will be constructed and placed on the WWW.

**MAS 580 Marine Biogeo and Paleoecology 3 cr**

This graduate level course will give students a broad overview of the time course of evolutionary changes in the structure and function of marine ecosystems, and will consider the interacting roles of both historical and current factors as they influence the distribution and abundance of marine organisms. Lectures will be mixed with discussions of assigned readings from the primary literature to stimulate critical thinking about the various topics.

**MAS 581 Advanced Marine Ecology 3 cr**

This course will build on the foundations provided by introductory ecology courses to enhance understanding of the mechanisms that control the distribution and abundance of marine plants and animals. The class periods will be dominated by discussions of assigned readings from the primary literature, which will be complemented by summary lecture material.

**MAS 582 Marine Larval Ecology 2 cr**

An in depth treatment of the taxonomy, nutrition, dispersal, bio-energetics, behavior, and bio-physical coupling of larval forms of marine species.

**MAS 583 Field Marine Science I 2 cr**

The Field Marine Science course will consist of an 11 day field exercise in representative coastal sites in Maine with emphasis on rocky intertidal, kelp bed and eelgrass habitats. Two faculty members will accompany the students, participate in the pre-trip readings and evaluate the product developed by each student.

**MAS 584 Oceanographic Experience 1-3 cr**

This course provides students with practical skills involved in oceanographic research. Skills may include hydrographic, hydroacoustic, and organismic sampling, gear deployment and use of analytical instrumentation at sea. Students participate in one or more oceanographic cruises during a semester and carry out a defined project using research tools available on the ship. A final report on the project forms the major part of the course grade. Cruises are available only on an ad hoc basis so permission of the instructor is required.

**MAS 585 Marine Zooplankton 3 cr**

This course familiarizes the student with the taxonomic breadth of estuarine and marine zooplankton ranging from protists through all major phyla of metazoa. Though the focus of the course is on taxonomic familiarization, basic biology (including reproduction and feeding) of all major taxa represented in the plankton will be covered. Students will also learn basic and advanced field collection, laboratory and statistical techniques. Although not a prerequisite, it is useful for students to have a background in invertebrate zoology.

**MAS 586 Marine Restoration Ecology 3 cr**

The course examines factors in the evolution current U.S. and International marine and coastal policy related to the management of natural resources. Course includes policy components, policy information implementation, change processes and economic criteria for evaluating policy effectiveness. The course also surveys the basic approaches to economic valuation of marine resources.

**MAS 587 Seagrass Ecosystem Ecology 2 cr**

A survey of current literature on topics related to the ecology of seagrass ecosystems. Students will read assigned papers to be analyzed in faculty lead discussion format. A final research paper will be prepared by each student.

**MAS 588 Field Marine Science II 3 cr**

The Field Marine Science course will consist of an 8 - 12 day field exercise in representative coastal sites. Faculty members with diverse interests will accompany the students, participate in pre-trip discussions and evaluate the product developed by each student. The course is designed to familiarize students with habitats and research conditions on the Northern Gulf Coast. Field trip locations are selected on the basis of faculty and student interest, economics, and availability of logistic support. Students pay their room and board costs for the field exercise. The course is primarily for graduate students, but advanced undergraduates may enroll with consent of instructor. Both MAS 588 and MAS 583 may be taken for credit when each is taught in a different environment.

**MAS 589 Marine Plankton 3 cr**

The course familiarizes the student with the taxonomic breadth of phytoplankton, bacterioplankton and zooplankton in estuaries, coastal seas and open oceans. Though the focus of the course is on taxonomic familiarization, basic biology (including reproduction and feeding) of all major taxa represented in the plankton will be covered. Student will learn fundamental, as well as "cutting-edge", field laboratory and statistical techniques. Two hours of lectures each week will be accompanied by two hours of hand-on laboratory work. Prerequisites: Graduate status in one of the physical or biological sciences.

**MAS 590 Sp Top - 1-4 cr**

An in-depth tutorial exposure to specific areas in the marine sciences. Credit and title will be arranged to examine the subject matter in an area of current interest to one or group of students. Specialized topics not currently listed in catalog course offerings. MAS 590 is available to master students - MAS 690 is available to Ph.D. students.

**MAS 592 Seminar 1 cr**

Students and faculty meet weekly in an interactive discussion of current literature in marine sciences. The focus will be on "state-of-the-art" theories and methodologies as they occur in the primary marine literature. Student presentation is required to receive credit.

**MAS 594 Directed Studies 1-4 cr**

Independent research, not related to the thesis, under the direction of a member of the graduate faculty. May be used to learn new techniques or explore research questions of special interest. A maximum of 4 hours may be earned for this course toward the MS degree.

**MAS 599 Thesis 1-8 cr**

Independent research by the student under the sponsorship of a member of the department. Progress reports of the work accomplished are required every six months.

**MAS 601 Physical Oceanography 4 cr**

Physical properties and circulation of the world's oceans. Topics to be covered include: basic physical laws; properties of heat, water, and salt budgets; waves; tides; large and small scale circulations; sea-level fluctuations; interactions of the sea with the atmosphere and land masses; light and acoustics.

**MAS 602 Chemical Oceanography 4 cr**

An in-depth examination of the chemistry of sea water and its relationship with biological, geological, and physical processes in the oceans. Coverage of sea water composition, buffering capacity, redox potential, and photochemistry will form the basis for an in-depth analysis of dynamic equilibria of gases, organic materials, nutrients, and trace elements in the sea. Critical evaluation of recent primary literature in chemical oceanography will be used to illustrate state-of-the-art research approaches.

**MAS 603 Geological Oceanography 4 cr**

Geological Oceanography encompasses the historic and current consequences of both geophysical and classical geological processes. Included topics are tectonic theory and its development, sedimentary processes in coastal and oceanic provinces, stratigraphy, structural geology, micropaleontology, erosion, diagenesis and the formation of hydrocarbons.

**MAS 604 Biological Oceanography 4 cr**

A comprehensive survey of marine organisms and their interaction including pelagic and benthic communities of the oceans, coastal waters and estuaries. Primary formation of particulate material, feeding processes, kinetics of food webs, biogeochemical processes, patterns of distribution, ecology of biotic systems, human interactions and current concerns are topics to be covered.

**MAS 690 Sp Top - 1-4 cr**

An in-depth tutorial exposure to specific areas in the marine sciences. Credit and title will be arranged to examine the matter in an area of current interest to one or group of students. Specialized topics not currently listed in catalog course offerings. MAS 590 is available to master students - MAS 690 is available to Ph.D. students.

**MAS 692 Seminar 1 cr**

Students and faculty meet weekly in an interactive discussion of current literature in marine sciences. The focus will be on "state-of-the-art" theories and methodologies as they occur in the primary marine literature. Student presentation is required to receive credit.

**MAS 694 Directed Studies 1-6 cr**

Independent research, not related to the dissertation, under the direction of a member of the graduate faculty. May be used to learn new techniques or explore research questions of special interest. A maximum of 4 hours may be earned for this course toward a Ph.D. degree.

**MAS 799 Dissertation 1-8 cr**

Independent research by the student under the sponsorship of a member of the department.

# Marketing (MKT) (MKT)

## **MKT 310 Intro International Business 3 cr**

This course focuses on exploring the terminology, scope, status and evolving patterns of international business. Specifically, the course addresses the role of cultural, political, ethical, technological, and economic factors in the international business context and how businesses deal with uncertainty and risk. The course examines the impact of global forces on businesses at home and abroad, the role of governments in promoting and protecting business interests, the role of international agencies in the business environment.

## **MKT 320 Principles of Marketing 3 cr**

Study of the institutions involved in creating transactions necessary to satisfy the needs of households, businesses and government and international customers. Topics include marketing planning, market segmentation, societal and ethical obligations, strategies for product, promotion and channel decisions.

## **MKT 336 International Marketing 3 cr**

Examination of cultural, economic, and political factors that affect marketing of goods and services worldwide. Emphasis is placed on developing global marketing strategies of multinational corporations within existing trade structure and regulations. Both product and service flows between countries and regions are discussed.

**Prerequisite:** (MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D)

## **MKT 340 Marketing Analytics 3 cr**

Contemporary marketers acquire large amounts of data. Marketing Analytics explains a) the most common marketing metrics, and b) how to compute and interpret these metrics to improve decision making.

**Prerequisite:** MKT 320 Minimum Grade of D and BUS 245 Minimum Grade of D

## **MKT 345 Real Estate 3 cr**

Introduction to the tools used to make intelligent decisions regarding real estate as a wealth-building asset. Topics include legal rights, valuation, financial analysis, contracts, and brokerage with practical applications. Emphasis is given to local supply and demand conditions and property location and their impact on typical consumer decisions.

**Prerequisite:** (FIN 315 (may be taken concurrently) Minimum Grade of D or BMS 341 Minimum Grade of D or FIN 341 Minimum Grade of D)

**Cross-Listed:** FIN 346

## **MKT 346 Ala Real Estate Law and Reg 1 cr**

Course required for students planning to take the Alabama Real Estate License Examination. Topics include current Alabama Real Estate License Law, Administrative Rules and Regulations, Consumer Guides, State Court Cases and relevant readings in Real Estate Risk Management. Prerequisite: Completion or current enrollment in MKT 345 and consent of instructor.

**Prerequisite:** MKT 345 (may be taken concurrently) Minimum Grade of D

## **MKT 348 Real Estate Valuation 3 cr**

Emphasis is given to the valuation process and the analysis that leads to valid estimates of value. The cost, sales comparison, and income approaches to value are examined and illustrated within the Uniform Standards of Professional Appraisal Practice requirements. Typical valuation reports are discussed and illustrated.

**Prerequisite:** (MKT 345 Minimum Grade of D or FIN 346 Minimum Grade of D)

**Cross-Listed:** FIN 446

## **MKT 350 Digital Marketing 3 cr**

Examination of the interactive processes and transactions involved in satisfying the needs of consumers, businesses, and government. Involves the study of marketing planning, consumer research, segmentation, and implementation of marketing strategies.

**Prerequisite:** (MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D)

## **MKT 355 Customer Relationship Mgt 3 cr**

The course provides a comprehensive business model integrating customers and suppliers along the value chain. The focus is on the methodologies, tools, and techniques required for customer acquisition, retention, and profitability in competitive buyer/supplier environments.

**Prerequisite:** MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D

## **MKT 374 Consumer Behavior 3 cr**

Study of the contributions of the behavioral sciences to the interpretation of market information. Involves the use of behavioral information which pertain to the analysis of consumers and organizational buyers in both domestic and international settings.

**Prerequisite:** MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D

## **MKT 376 Business to Business Marketing 3 cr**

Study of the participants, channels, and relationships that govern the behavior of industrial buyers and marketers.

**Prerequisite:** MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D

## **MKT 377 Pricing Strategies 3 cr**

Pricing strategies encompass the design and monitoring of an integrative framework for making pricing decisions. The purpose of this course is to synthesize economic and behavioral principles with marketing, accounting, and financial information, and to analyze the various pricing options within legal, market, and corporate constraints. This course covers both theory and application of pricing strategies for national and multinational concerns organized as either a profit or non-profit entity.

**Prerequisite:** (MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D)

## **MKT 379 Retailing 3 cr**

Study of the management of retail operations. Topics include store location and layout, merchandise buying and planning, legal and ethical issues, promotion, pricing, human resource management, financial planning, information systems and customer services.

**Prerequisite:** MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D

## **MKT 380 Integrated Mkt Communications 3 cr**

Study of the fundamentals of marketing communications from a strategic perspective. Examines the roles of and relationships between a variety of marketing communication elements including advertising, direct marketing, database marketing, interactive marketing, media planning, public relations, sales promotion, and personal selling.

**Prerequisite:** (MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D)

## **MKT 381 Professional Selling & Sales Management 3 cr**

An integrative course focusing on the role of personal selling in achieving marketing success through building relationships and creating value, while highlighting the importance of sales management processes - recruiting, selecting, training, compensating, and evaluating sales professionals.

**Prerequisite:** MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D

**MKT 382 Brand Management 3 cr**

Systematic examination of strategies involved in tangible and intangible product decisions. Issues and strategies involved in identifying and implementing the development of new goods and services for both domestic and international markets are examined in-depth, as well as the management of mature products.

**Prerequisite:** (MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D)

**MKT 384 Market Research 3 cr**

Study of information gathering techniques, research methods and procedures used to solve marketing problems in consumer and organizational in both domestic and international markets.

**Prerequisite:** (BUS 255 Minimum Grade of D or ST 275 Minimum Grade of D) and (MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D)

**MKT 385 Services Marketing 3 cr**

Study of the unique features of services marketing and the service sector. Examines the strategies and activities of organizations and industries whose core product is service, such as sports, hospitality, healthcare, financial services, information technology, and event marketing.

**Prerequisite:** (MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D)

**MKT 445 Real Estate Fin and Investmnts 3 cr**

Analysis of income property debt and equity instruments, financing documents, financial analysis and risk scenarios of different property types, and relevant local, state, and federal laws and court cases.

**Prerequisite:** (MKT 345 Minimum Grade of D or FIN 346 Minimum Grade of D)

**MKT 448 Real Estate Law 3 cr**

A detailed examination of the contracts, documents, and instruments used in a transaction on one or more of the real property rights, and relevant local, state, and federal laws and court cases.

**Prerequisite:** (MKT 345 Minimum Grade of D or FIN 346 Minimum Grade of D) or MKT 346 Minimum Grade of D

**MKT 477 Export-Import Management 3 cr**

Study of exporting and importing strategies used by both domestic and multinational firms including a concentration in the areas of international pricing, governmental assistance, and channel selection. Emphasis is placed on the best practices and procedures of packing and documentation.

**Prerequisite:** (MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D) and (MKT 336 Minimum Grade of D or MKT 383 Minimum Grade of D)

**MKT 479 Marketing Policy - W 3 cr**

The capstone course for marketing majors. Integration and application of marketing concepts requiring analysis of both domestic and international marketing problems.

**Prerequisite:** (MKT 320 Minimum Grade of D or MKT 371 Minimum Grade of D) and MKT 374 Minimum Grade of D and (MKT 373 Minimum Grade of D or MKT 384 Minimum Grade of D or MKT 474 Minimum Grade of D)

**MKT 490 Special Topics 3 cr**

Designed to provide senior students an opportunity to study selected topics of particular interest. A student may count no more than six hours of Special Topics in the concentration. Prerequisite: Approval of Department Chair.

**Prerequisite:** MKT 320 Minimum Grade of D

**MKT 492 Applications in International Business 3 cr**

This course may take several formats to allow students who have achieved senior status the best method of applying concepts learned in other courses to the international business environment. The formats include a case-based course, a lecture-based course, a experiential course or mixture of those and other alternatives.

**Prerequisite:** MKT 320 Minimum Grade of D and MKT 310 Minimum Grade of D

**MKT 494 Directed Study in Marketing 1-3 cr**

Primarily designed to give superior students an opportunity to study selected topics of particular interest. Conferences, a bibliography, and a formal research report are required. Grades are awarded on a satisfactory/unsatisfactory basis. Prerequisites: Junior or senior standing, a cumulative GPA of 2.5 or better, and approval of the department chair following the evaluation of a written proposal.

**MKT 496 Marketing Internship 3 cr**

The internship program is designed to give students practical experience in their field of study. Students complete directed projects under the supervision of Department Chair. No more than three hours of internship credit may be counted toward a degree in the Mitchell College of Business. Prerequisites: Junior or Senior standing, declared major in marketing, overall GPA of at least 2.5, and Internship Agreement signed by department Chair.

**MKT 590 Special Topics - 3 cr**

Designed to provide graduate students an opportunity to study selected topics. A student may count no more than 3 hours of Special Topics in the MBA degree program. Approval of Department Chair

**MKT 594 Independent Study 3 cr**

Readings and research on selected topics. Conferences and formal research report required. Approval of Department Chair

**MKT 701 Marketing Management 3 cr**

This seminar examines the theory underpinning the study of Marketing. The seminar uses the classic research in Marketing to frame modern theoretical developments and provide students with a strong fundamental platform for their future studies.

**MKT 703 Supply Chain & Logistics 3 cr**

The course examines the theory and applied research in the field of business to business logistics and supply chain management.

**MKT 705 Sem. Marketing Communications 3 cr**

This seminar investigates the theoretical and applied research in the field of marketing communications.

**MKT 707 Seminar in Marketing Strategy 3 cr**

Study of consumption behavior with an emphasis on underlying theories and relevant literature within the framework of both marketing and psychology. Examination of the influences on behaviors and the process of consumer decision making from conceptual and managerial perspectives.

**MKT 709 Marketing: Sp Topic- 3 cr**

This seminar focuses on special applications of Marketing. The instructor will develop an in-depth analysis on several contemporary areas of study.

**MKT 799 Dissertation Research 1-6 cr**

Independent Scholarship working with committee

## Master of Bus Admin (MBA) (MBA)

### **MBA 501 Analysis using Info Sys 3 cr**

Advanced management requires the ability to analyze datasets, interpret data with datasets and calculate statistics from data. This course covers all the process of building, interpreting, calculating data and finally making decisions on the outcomes of that process. A significant part of the grade in this course comes from decision making exercises.

### **MBA 502 Managing Accounting Info 3 cr**

This course focuses on making decisions using Accounting information which includes how to generate relevant and appropriate data and how to use accounting analysis to enhance success in making decisions.

**Prerequisite:** ACC 211 Minimum Grade of C

### **MBA 503 Managing in the Bus. Env't 3 cr**

The course evaluates managerial decisions in a business environment impacted by ethical considerations, sustainability, social responsibility and stakeholder interests. The course also focuses on developing student skills in communication.

**Prerequisite:** ECO 215 Minimum Grade of C

### **MBA 504 Customers & Supply Chains 3 cr**

This MBA course focuses on the role of customers and vendors on organizations. The course uses projects and decision scenarios to address the issues that result from managing supply chains and customer relationships.

### **MBA 505 Managing People 3 cr**

This MBA course emphasizes the role of people within an organization and the issues and the decisions related to managing human assets. The course develops a number of techniques and scenarios that emphasize the importance of effective human resource management.

**Prerequisite:** MGT 300 Minimum Grade of C

### **MBA 506 Managing Finance and Capital 3 cr**

Business managers must have a strong grasp of the role of finance and capital in the organization. The course focuses on establishing a strong knowledge base and the key decisions needed to be a successful manager.

**Prerequisite:** FIN 315 Minimum Grade of C

**Cross-Listed:** FIN 509

### **MBA 507 Managing Strategic Decisions 3 cr**

The MBA Capstone course emphasizes decision making in a strategic context and builds upon all the courses taken prior to and concurrently with the course. The course includes decisions at the strategy development and strategy execution level. The evaluation exercises include an assessment of ethical, socially, responsible, and sustainability issues.

**Corequisite:** MGT 599

### **MBA 590 Special Topics 3 cr**

The MBA Program includes courses that are designed to allow students the opportunity to learn management skills and applications through non-traditional formats. This course is designed to achieve that objective. Subject to the approval of the Director of Graduate studies.

## Maternal Child Nursing (MCN) (MCN)

### **MCN 352 OB & GYN Nursing Care 2 cr**

Analysis of theories, concepts, evidence, and issues and trends in professional nursing care of the obstetric or gynecologic client and their families. Emphasis on the use of the nursing process and other systematic approaches to plan, implement, and evaluate health promotion and maintenance activities, illness care, and rehabilitation with individuals and families in various stages of pregnancy and childbirth, as well as the gynecologic care of women in a variety of acute and community settings.

**Prerequisite:** (NU 300 Minimum Grade of C and NU 301 Minimum Grade of C)

**Corequisite:** MCN 353

### **MCN 353 OB & GYN Nsg Care Clinical 2 cr**

The purpose of this course is to provide students the opportunity to engage in clinical practice with obstetric and gynecologic clients and their families. Emphasis is on the role of the professional nurse in the application of concepts and theories related to health promotion and maintenance, illness care and rehabilitation with obstetric and gynecologic clients.

**Prerequisite:** (NU 300 Minimum Grade of C and NU 301 Minimum Grade of C)

**Corequisite:** MCN 352

### **MCN 353B Obstetric & Gynecologic Nursing Care Clinical 2 cr**

The purpose of this course is to provide students the opportunity to engage in clinical practice with obstetric and gynecologic clients and their families. Emphasis is on the role of the professional nurse in the application of concepts and theories related to health promotion and maintenance, illness care and rehabilitation with obstetric and gynecologic clients.

### **MCN 354 Pediatric Nursing Care 2 cr**

Analysis of theories, concepts, evidence, and issues and trends in professional nursing care of the pediatric client and their family. Emphasis on the use of the nursing process and other systematic approaches to plan, implement, and evaluate health promotion and maintenance activities, illness care, and rehabilitation with clients and families in various stages of development.

**Prerequisite:** (NU 300 Minimum Grade of C and NU 301 Minimum Grade of C)

**Corequisite:** MCN 355

### **MCN 355 Pediatric Nsg Care Clinical 2 cr**

The purpose of this course is to provide students the opportunity to engage in clinical practice with the pediatric client and their family. Emphasis is on the role of the professional nurse in the application of concepts and theories related to health promotion and maintenance, illness care, and rehabilitation of clients and families in various stages of development.

**Prerequisite:** (NU 300 Minimum Grade of C and NU 301 Minimum Grade of C)

**Corequisite:** MCN 354

### **MCN 355B Pediatric Nursing Care Clinical 2 cr**

The purpose of this course is to provide students the opportunity to engage in clinical practice with the pediatric client and their family. Emphasis is on the role of the professional nurse in the application of concepts and theories related to health promotion and maintenance, illness care, and rehabilitation of clients and families in various stages of development.

### **MCN 520 MCN MSN Incomplete Extension 1-5 cr**

**MCN 538 Intro to Women's Health NP 3 cr**

The purpose of this course is to expand the Women's Health Nurse Practitioner student's knowledge and skills for obtaining, recording and analyzing a systematic health assessment of women. Emphasis is on the synthesis and application of nursing and related theories and scientific knowledge to the development of differential/nursing diagnoses as a basis for health promotion and management.

**Prerequisite:** NU 545 (may be taken concurrently) Minimum Grade of C and NU 518 (may be taken concurrently) Minimum Grade of C

**Corequisite:** MCN 541

**MCN 540 Women's Health NP CI Progression 1-4 cr**

The purpose of this progression practicum is to facilitate student independence in the Women's Health Nurse Practitioner role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses and to develop the necessary skills to progress to the next level of competency in the Women's Health Nurse Practitioner role.

**MCN 541 HPDP Women's Health NP 2 cr**

The purpose of this didactic course is to prepare the Women's Nurse Practitioner student to identify and implement appropriate health promotion and disease prevention strategies across the lifespan. The focus is on the advanced practice nursing of individuals and families in primary care settings. Emphasis is placed on health promotion/disease prevention with strategic planning at the primary, secondary and tertiary levels of prevention. Various issues are explored pertinent to the advanced practice role.

**Corequisite:** MCN 538

**MCN 542 Women's Health NP I 3 cr**

The purpose of this didactic course is to prepare the Women's Health Nurse Practitioner student to assess, diagnose, and manage selected health care needs of women. The focus is on advanced practice nursing with women primary, acute, and chronic health care settings. Emphasis is on wellness and the pathophysiology and epidemiology underlying acute and chronic health problems.

**Prerequisite:** MCN 538 Minimum Grade of C and NU 578 (may be taken concurrently) Minimum Grade of C

**Corequisite:** MCN 543

**MCN 543 Women's Health NP Pract I 3 cr**

The purpose of this practicum course is to provide opportunities for the Women's Health Nurse Practitioner student to apply concepts from MCN 542 Advanced Women's Health Nursing II in select clinical settings. Focus is on advanced practice nursing with women and families in primary, acute, and chronic health care settings. The emphasis is on diagnostic reasoning and decision making/critical thinking.

**Prerequisite:** NU 578 Minimum Grade of C

**Corequisite:** MCN 542

**MCN 544 Women's Health NP II 3 cr**

The purpose of this course is to provide the Women's Health Nurse Practitioner student an in-depth study of the health care management of women within the framework of advanced nursing. The focus is on selected acute and chronic complex health care problems. Emphasis is on the interaction among health care providers in a culturally diverse environment.

**Prerequisite:** MCN 542 Minimum Grade of C

**Corequisite:** MCN 545

**MCN 545 Women's Health NP Pract II 3 cr**

The purpose of this course is to provide opportunity for the Women's Health Nurse Practitioner student to practice within an advanced nursing framework. The focus is on the role of the advanced practice nurse in the health care management of women. Emphasis is on collaboration with other health care providers in a culturally diverse environment.

**Corequisite:** MCN 544

**MCN 546 Women's Health NP Prac III 4 cr**

The purpose of this culminating course is to provide a preceptor and faculty facilitated experience in the Women's Health Nurse Practitioner role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses.

**Prerequisite:** MCN 544 Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C and NU 607 (may be taken concurrently) Minimum Grade of C

**Corequisite:** MCN 547

**MCN 547 Women's Health NP III 3 cr**

The purpose of this course is to provide a forum for the evaluation of issues and trends encountered in advanced women's health nursing care. Emphasis is on critical analysis and management of issues by the Women's Health Nurse Practitioner student in an interdisciplinary health care system.

**Prerequisite:** NU 607 (may be taken concurrently) Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C and NU 610 (may be taken concurrently) Minimum Grade of C and NU 613 (may be taken concurrently) Minimum Grade of C

**Corequisite:** MCN 546

**MCN 548 Intro to Ped Primary Care NP 3 cr**

The purpose of this first didactic course is to prepare Pediatric Primary Care Nurse Practitioner students to assess, diagnose, and manage selected health care needs of children. Emphasis is placed on synthesis and application of nursing and related theories and scientific knowledge to development of differential diagnoses as a basis for health promotion and management.

**Prerequisite:** NU 545 (may be taken concurrently) Minimum Grade of C and NU 518 (may be taken concurrently) Minimum Grade of C

**Corequisite:** MCN 551

**MCN 551 HPDP Pediatric Primary Care NP 2 cr**

The purpose of this didactic course is to prepare the Pediatric Primary Care Nurse Practitioner student to identify and implement appropriate health promotion and disease prevention strategies for children from birth to adolescence. The focus is on the advanced practice nursing of children and families in primary care settings. Emphasis is placed on health promotion/disease prevention with strategic planning at the primary, secondary, and tertiary levels of prevention. Various issues are explored pertinent to the advanced practice role.

**Corequisite:** MCN 548

**MCN 552 Pediatric Prim Care NP I 3 cr**

The purpose of this didactic course is to prepare the Pediatric Primary Care Nurse Practitioner student to assess, diagnose, and manage selected health care needs of children from birth to school age. The focus is on advanced practice nursing with children and families in primary care settings. Emphasis is on the wellness, and the pathophysiology and epidemiology underlying acute and chronic health problems.

**Prerequisite:** MCN 548 Minimum Grade of C and NU 578 (may be taken concurrently) Minimum Grade of C

**Corequisite:** MCN 553

**MCN 553 Ped Prim Care NP Prac I 3 cr**

The purpose of this practicum course is to provide opportunities for the Pediatric Primary Care Nurse Practitioner student to apply concepts in select clinical settings. Focus is on advanced practice nursing with children and families in primary care settings. The emphasis is on diagnostic reasoning and decision making/critical thinking.

**Prerequisite:** NU 578 Minimum Grade of C

**Corequisite:** MCN 552

**MCN 554 Pediatric Primary Care NP II 3 cr**

The purpose of this course is to provide the Pediatric Primary Care Nurse Practitioner student an in-depth study of the health care management of children from school age to adolescence within the framework of advanced nursing. The focus is on selected acute and chronic complex health problems. Emphasis is on the interaction among health care providers in a culturally diverse environment.

**Prerequisite:** MCN 552 Minimum Grade of C

**Corequisite:** MCN 555

**MCN 555 Ped Prim Care NP Prac II 3 cr**

The purpose of this course is to provide opportunity for the Pediatric Primary Care Nurse Practitioner student to practice within an advanced nursing framework. The focus is on the role of the advanced practice nurse in the health care management of children. Emphasis is on collaboration with other health care providers in a culturally diverse environment.

**Corequisite:** MCN 554

**MCN 556 Ped Prim Care NP Pract III 4 cr**

The purpose of this culminating course is to provide a preceptor and faculty facilitated experience in the Pediatric Primary Care Nurse Practitioner role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses.

**Prerequisite:** MCN 554 Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C and NU 607 (may be taken concurrently) Minimum Grade of C

**Corequisite:** MCN 557

**MCN 557 Pediatric Primary Care NP III 3 cr**

The purpose of this course is to provide a forum for the evaluation of issues and trends encountered in advanced pediatric primary care health nursing. Emphasis is on critical analysis and management of issues by the Pediatric Primary Care Nurse Practitioner in an interdisciplinary health care delivery system.

**Prerequisite:** NU 607 (may be taken concurrently) Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C and NU 610 (may be taken concurrently) Minimum Grade of C and NU 613 (may be taken concurrently) Minimum Grade of C

**Corequisite:** MCN 556

**MCN 558 Intro Pediatric Acute Care NP 3 cr**

The course will introduce the Acute Pediatric Nurse Practitioner student to entry level NP decision making, evidenced based practice, documentation and resource optimization with an introductory emphasis on critical thinking skills in the development of appropriate history and examination, assessment, differential diagnosis, as well as diagnostic and treatment plans for pediatric patients in primary and acute care settings, as they prepare to start clinical rotations.

**Prerequisite:** NU 518 (may be taken concurrently) Minimum Grade of C and NU 545 (may be taken concurrently) Minimum Grade of C

**Corequisite:** MCN 571

**MCN 561 Peds Acute NP Clin Progression 1-4 cr**

This course provides an opportunity for the Acute Care Pediatric Nurse Practitioner student to apply more clinical time so as to master clinical concepts and improve competence before moving on to the subsequent term, or in their last clinical course before graduation.

**MCN 562 Pediatric Acute Care NP I 3 cr**

This course provides Acute Care Pediatric Nurse Practitioner students to assess, diagnose, and manage selected health care needs of children. The focus is on advanced practice nursing with children and families in acute care settings, evaluation diagnostic probability, evidenced based care and managing both inpatient and primary health care needs. Emphasis is placed on wellness, pathophysiology and epidemiology underlying acute and chronic health problems, as well as diagnostic reasoning, articulation of evidence based management plans, decision making, critical thinking and resource optimization.

**Prerequisite:** MCN 558 Minimum Grade of C and NU 578 (may be taken concurrently) Minimum Grade of C and MCN 571 Minimum Grade of C

**Corequisite:** MCN 563

**MCN 563 Ped Acute Care NP Prac I 3 cr**

This course provides an opportunity for the Acute Care Pediatric Nurse Practitioner student to apply concepts from Acute Care Pediatric Nurse Practitioner I course in select clinical inpatient and outpatient settings. The emphasis is on diagnostic reasoning, articulation of evidence based management plans, decision making, critical thinking and resource optimization. Practicum experiences will include primary care, inpatient hospitalist rotations, pediatric surgery rotations and urgent care rotations.

**Prerequisite:** NU 578 Minimum Grade of C

**Corequisite:** MCN 562

**MCN 564 Pediatric Acute Care NP II 3 cr**

This course prepares Acute Care Pediatric Nurse Practitioner students to assess, diagnose, and manage selected health care needs of both acute and chronically ill children, focusing on technology dependent children, hematology, transplant, infectious disease as well as those with hematological, medical and surgical emergencies. Emphasis is on diagnostic reasoning, articulation of evidence based management plans, decision making, critical thinking and resource optimization.

**Prerequisite:** MCN 562 Minimum Grade of C and MCN 563 Minimum Grade of C

**Corequisite:** MCN 565

**MCN 565 Ped Acute Care NP Prac II 3 cr**

This course provides an opportunity for the Acute Care Pediatric Nurse Practitioner student to apply concepts from Acute Care Pediatric Nurse Practitioner II in select clinical inpatient and outpatient settings. The emphasis is on diagnostic reasoning, articulation of evidence based management plans, decision making, critical thinking and resources optimization. Practicum experiences will include chronic subspecialty clinics and inpatient environments.

**Prerequisite:** MCN 562 Minimum Grade of C and MCN 563 Minimum Grade of C

**Corequisite:** MCN 564

**MCN 566 Ped Acute Care NP Pract III 4 cr**

This course provides an opportunity for the Acute Care Pediatric Nurse Practitioner student to apply concepts from Acute Care Pediatric Nurse Practitioner III in select clinical inpatient and outpatient settings. The emphasis is on diagnostic reasoning, decision making/critical thinking and resource utilization. Practicum experiences will include emergency departments and critical care/intensive care units.

**Prerequisite:** MCN 564 Minimum Grade of C and MCN 565 Minimum Grade of C or NU 607 (may be taken concurrently) Minimum Grade of C or NU 608 (may be taken concurrently) Minimum Grade of C or NU 610 (may be taken concurrently) Minimum Grade of C or NU 613 (may be taken concurrently) Minimum Grade of C

**Corequisite:** MCN 567

**MCN 567 Pediatric Acute Care NP III 3 cr**

This course prepares the Acute Care Pediatric Nurse Practitioner student to appropriately assess, diagnose and manage selected acute, emergent, unstable and life threatening pediatric health care conditions, focusing on psychiatric emergencies, trauma, shock, burns, organ failure, toxicology/ingestions, environmental exposures, neurological presentations, as well as those requiring life support and end of life/palliative care, as the student prepares to graduate and assume a professional ACPNP role. The focus is on application and synthesis of knowledge and skills acquired in all previous courses.

**Prerequisite:** NU 607 (may be taken concurrently) Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C and NU 610 (may be taken concurrently) Minimum Grade of C and NU 613 (may be taken concurrently) Minimum Grade of C and MCN 564 Minimum Grade of C and MCN 565 Minimum Grade of C

**Corequisite:** MCN 566

**MCN 568 Intro to Neonatal NP 3 cr**

The purpose of this first didactic course is to prepare Advanced Neonatal Nurse Practitioner students to assess, diagnose, and manage selected health care needs of neonates. Emphasis is placed on synthesis and application of nursing and related theories and scientific knowledge to the development of differential/nursing diagnoses as a basis for health promotion and management.

**Prerequisite:** NU 545 (may be taken concurrently) Minimum Grade of C and NU 518 (may be taken concurrently) Minimum Grade of C

**Corequisite:** MCN 571

**MCN 571 HPDP NNP/Peds Acute NP 2 cr**

The purpose of this didactic course is to prepare the Neonatal and Acute Care Pediatric Nurse Practitioner students to identify and implement appropriate health promotion and disease prevention strategies for the neonate to age 21 years. The focus is on the advanced practice nursing of individuals and families in primary care settings. Emphasis is placed on health promotion/disease prevention with strategic planning at the primary, secondary and tertiary levels of prevention. Various issues are explored pertinent to the advanced practice role.

**MCN 572 Neonatal NP I 3 cr**

The purpose of this didactic course is to prepare the Advanced Neonatal Nurse Practitioner student to assess, diagnose, and manage selected health care needs of neonates. The focus is on neonates and families in primary, acute, and chronic health care settings. Emphasis is placed on wellness and the pathophysiology and epidemiology underlying acute and chronic health problems.

**Prerequisite:** MCN 568 Minimum Grade of C and NU 578 (may be taken concurrently) Minimum Grade of C

**Corequisite:** MCN 573

**MCN 573 Neonatal NP Pract I 3 cr**

The purpose of this practicum course is to provide opportunities for the Advanced Neonatal Nurse Practitioner student to apply concepts in select clinical settings. Focus is on advanced nursing practice with neonates and their families in primary, acute, and chronic health care settings. The emphasis is on diagnostic reasoning and decision making/critical thinking.

**Prerequisite:** NU 578 Minimum Grade of C

**Corequisite:** MCN 572

**MCN 574 Neonatal NP II 3 cr**

The purpose of this course is to provide the Advanced Neonatal Nurse Practitioner student an in-depth study of the neonate within the framework of nursing. The focus is on selected acute and chronic complex health problems of neonates in the primary, acute, and chronic care settings. Emphasis is on the interaction among health care providers in a culturally diverse environment.

**Prerequisite:** MCN 572 Minimum Grade of C

**Corequisite:** MCN 575

**MCN 575 Neonatal NP Prac II 3 cr**

The purpose of this course is to provide opportunity for the Advanced Neonatal Nurse Practitioner student to practice within an advanced nursing framework. The focus is on the role of the advanced practice nurse in the management of the neonate. Emphasis is on collaboration with other health care providers in a culturally diverse environment.

**Corequisite:** MCN 574

**MCN 576 Neonatal NP Pract III 4 cr**

The purpose of this culminating course is to provide a preceptor-faculty facilitated experience in the Advanced Neonatal Nurse Practitioner role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses.

**Prerequisite:** MCN 574 Minimum Grade of C and NU 607 (may be taken concurrently) Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C

**Corequisite:** MCN 577

**MCN 577 Neonatal NP III 3 cr**

The purpose of this course is to provide a forum of the evaluation of issues and trends encountered in advanced neonatal nursing care. Emphasis is on critical analysis and management of issues by the Advanced Neonatal Nurse Practitioner in an interdisciplinary health care system.

**Prerequisite:** NU 607 (may be taken concurrently) Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C and NU 610 (may be taken concurrently) Minimum Grade of C and NU 613 (may be taken concurrently) Minimum Grade of C

**Corequisite:** MCN 576

**MCN 578 Neonatal NP Clin Progression 1-4 cr**

The purpose of this culminating course is to provide a preceptor-faculty supervised experience in the Neonatal Nurse Practitioner role with a focus on the application and synthesis of knowledge and skills acquired in all previous courses.

**MCN 581 Peds Primary NP CI Progression 1-4 cr**

The purpose of this progression practicum is to facilitate student independence in the Pediatric Primary Care Nurse Practitioner role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses and to develop the necessary skills to progress to the next level of competency in the Pediatric Primary Care Nurse Practitioner role.

**MCN 604 Pediatric Acute Care NP PP&D 3 cr**

This course assists the Pediatric Acute Care Nurse Practitioner DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the Acute Care Pediatric Nurse Practitioner students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C)

**MCN 617 Pediatric Acute Care NP Res I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the student will work with the primary faculty advisor to complete projects and advance their selected practice area. The student will have access to and authority for expanded scope of practice to master the DNP competencies. Residency sites will depend upon the student's career trajectory and approval by collaborating faculty. During the residency semester, students must participate in scheduled scholarly seminars online. Clinical hours of direct practice/management is required.

**Prerequisite:** MCN 604 Minimum Grade of S and NU 615 (may be taken concurrently) Minimum Grade of C

**MCN 618 Pediatric Acute Care NP Res II 3 cr**

Provides students the opportunity to fully express all DNP competencies. The student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

**Prerequisite:** MCN 617 Minimum Grade of C and NU 616 (may be taken concurrently) Minimum Grade of C

**MCN 619 Pediatric Acute Care NP Res III 3 cr**

Final course in residency series as student continues to implement and evaluate project plan. Provides student the opportunity to fully express all DNP competencies. The student, guided by the core faculty and advisor, completes quality improvement evidence-based system's change project.

**Prerequisite:** MCN 618 Minimum Grade of C and NU 612 (may be taken concurrently) Minimum Grade of C

**MCN 644 Women's Health NP PP&D 3 cr**

This course assists the women's health nurse practitioner DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the women's health nurse practitioner student's selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C)

**MCN 645 Women's Health NP Residency I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The women's health nurse practitioner student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the women's health nurse practitioner student will work with the primary faculty advisor to complete projects and advance their selected practice area. The women's health nurse practitioner student will have access to and authority for expanded scope of practice to master the DNP competencies. Residency sites will depend upon the women's health nurse practitioner student's career trajectory and approval by collaborating faculty. During the residency semester, the women's health nurse practitioner student must participate in scheduled scholarly seminars online. Clinical hours of direct practice/management is required.

**Prerequisite:** MCN 644 Minimum Grade of S and NU 615 (may be taken concurrently) Minimum Grade of C

**MCN 646 Women's Health NP Residency II 3 cr**

Provides women's health nurse practitioner students the opportunity to fully express all DNP competencies. The women's health nurse practitioner student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

**Prerequisite:** MCN 645 Minimum Grade of C and NU 616 (may be taken concurrently) Minimum Grade of C

**MCN 647 Women's Health NP Res III 3 cr**

Final course in residency series as women's health nurse practitioner student continues to implement and evaluate project plan. Provides women's health nurse practitioner student the opportunity to fully express all DNP competencies. The women's health nurse practitioner student, guided by the core faculty and advisor completes quality improvement evidence-based system's change project.

**Prerequisite:** MCN 646 Minimum Grade of C and NU 612 (may be taken concurrently) Minimum Grade of C

**MCN 654 Pediatric Primary Care NP PP&D 3 cr**

This course assists the pediatric primary care nurse practitioner DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the pediatric primary care nurse practitioner student's selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C)

**MCN 655 Ped Prim Care NP Residency I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The pediatric primary care nurse practitioner student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the pediatric primary care nurse practitioner student will work with the primary faculty advisor to complete projects and advance their selected practice area. The pediatric primary care nurse practitioner student will have access to and authority for expanded scope of practice to master the DNP competences. Residency sites will depend upon the pediatric primary care nurse practitioner student's career trajectory and approval by collaborating faculty. During the residency semester, the pediatric primary care nurse practitioner student must participate in scheduled scholarly seminars online. Clinical hours of direct practice/management is required.

**Prerequisite:** MCN 654 Minimum Grade of S and NU 615 (may be taken concurrently) Minimum Grade of C

**MCN 656 Ped Primary Care NP Res II 3 cr**

Provides pediatric primary care nurse practitioner students the opportunity to fully express all DNP competencies. The pediatric primary care nurse practitioner student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

**Prerequisite:** MCN 655 Minimum Grade of C and NU 616 (may be taken concurrently) Minimum Grade of C

**MCN 657 Ped Primary Care NP Res III 3 cr**

Final course in residency series as the Pediatric Primary Care Nurse Practitioner student continues to implement and evaluate project plan. Provides the Pediatric Primary Care Nurse Practitioner student the opportunity to fully express all DNP competencies. The Pediatric Primary Care Nurse Practitioner student, guided by the core faculty and advisor completes quality improvement evidence-based system's change project.

**Prerequisite:** MCN 656 Minimum Grade of C and NU 612 (may be taken concurrently) Minimum Grade of C

**MCN 674 Neonatal NP PP&D 3 cr**

This course assists the neonatal nurse practitioner DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the neonatal nurse practitioner students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C)

**MCN 675 NNP Residency I 3 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The neonatal nurse practitioner student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the neonatal nurse practitioner student will work with the primary faculty advisor to complete projects and advance their selected practice area. The neonatal nurse practitioner student will have access to and authority for expanded scope of practice to master the DNP competences. Residency sites will depend upon the neonatal nurse practitioner student's career trajectory and approval by collaborating faculty. During the residency semester, the neonatal nurse practitioner student must participate in scheduled scholarly seminars online. Clinical hours of direct practice/management is required.

**Prerequisite:** MCN 674 Minimum Grade of S and NU 615 (may be taken concurrently) Minimum Grade of C

**MCN 676 NNP Residency II 3 cr**

Provides neonatal nurse practitioner students the opportunity to fully express all DNP competencies. The neonatal nurse practitioner student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

**Prerequisite:** MCN 675 Minimum Grade of C and NU 616 (may be taken concurrently) Minimum Grade of C

**MCN 677 NNP Residency III 3 cr**

Final course in residency series as neonatal nurse practitioner student continues to implement and evaluate project plan. Provides neonatal nurse practitioner student the opportunity to fully express all DNP competencies. The neonatal nurse practitioner student, guided by the core faculty and advisor completes quality improvement evidence-based system's change project.

**Prerequisite:** MCN 676 Minimum Grade of C and NU 612 (may be taken concurrently) Minimum Grade of C

**MCN 692 MCN DNP Incomplete Extension 3 cr**

Students will register for this course to complete residency course work under supervision of faculty. Students must remain continuously enrolled until all residency requirements are completed.

## Mathematics (MA) (MA)

**MA 100 Mathematics in Society 3 cr**

An introduction and real life applications to the mathematics of finance, probability, and descriptive statistics with particular emphasis on mathematics of finance. Specific topics include geometric progressions, compound interest, annuities, perpetuities, permutations, combinations, probability measure, and statistical measures of central location and dispersion. This course does not satisfy the mathematics requirement for General Studies.

**MA 101 Intro to Mathematical Thought 3 cr**

A course designed to give the nonscience major-especially humanities and fine arts majors-an appreciation of the method, content, and scope of mathematics. This course does not satisfy the mathematics requirement for General Studies.

**MA 105 Algebra for Math Placement 4 cr**

Introduction to equations of straight lines in various forms and transition between these forms; Manipulation and solution of linear equations and linear inequalities; graphing solution sets on the number line and expression of solution sets in both set and interval notation. Simplification, multiplication, and division of polynomials; Factoring quadratic expressions and the solution of quadratic equations by factoring; Solution of basic rational equations; Addition, subtraction, multiplication and division of rational expressions; simplification of complicated ratios of rational expressions. Working with set operations: Absolute value inequalities and equations and compound inequalities; Addition, subtraction, multiplication, division, and simplification of expressions with radicals and/or rational exponents and rationalization of numerator or denominator. Credit for both MTH 100, MTH 101 and MA 105 is not allowed.

**MA 110 Finite Mathematics 3 cr**

This course is intended to give an overview of topics in finite mathematics together with their applications. The course includes logic, sets, counting, permutations, combinations, basic probability, descriptive statistics and their applications, and financial mathematics. Students are required to have a scientific calculator. Core Course. Note: May be offered for Honors credit. NOTE: MA 110 is not a Pre-requisite for nor is it intended to be preparatory for any course except MA 201 and MA 202.

**MA 111 Math in Society 3 cr**

This course focuses on developing mathematical concepts and interpreting data used in society. Topics may include percentage, creating and analyzing different types of graphs, estimation, apportionment, linear and exponential growth, simple and compound interest, and descriptive statistics. An emphasis on technology such as Excel will be prevalent.

**MA 112 Precalculus Algebra 3 cr**

The course covers algebraic, graphical and numerical properties of functions, focusing on linear, quadratic, general polynomial, absolute value, rational, exponential, and logarithmic functions. Topics also include equations, inequalities, and complex numbers. Applications of mathematics to modeling real world situations are emphasized. Credit for both MA 112 and MA 115 not allowed. Core Course.

**Prerequisite:** A02 22 or MTH 100 (may be taken concurrently) Minimum Grade of C or MMT 070 or MTH 101 Minimum Grade of C or MA 105 Minimum Grade of C or S02 510 or S12 540

**MA 113 Precalculus Trigonometry 3 cr**

Continuation of MA 112. Topics include numerical, graphical and algebraic properties of trigonometric functions, inverse trigonometric functions, right angle trigonometry, parametric equations, polar coordinates, and conic sections. Development and application of mathematical models to real-world situations is emphasized. Credit for both MA 113 and MA 115 not allowed. Core Course.

**Prerequisite:** A02 24 or MMT 080 or MA 112 Minimum Grade of C or S02 560 or S12 580 or SS2 24

**MA 115 Precal Algebra-Trigonometry 4 cr**

This fast-paced course is designed as a review of the algebra and trigonometry needed in calculus. It covers the material of MA 112 and MA 113 in one semester. Topics include numerical, graphical and algebraic properties of polynomial, rational, exponential, logarithmic, and trigonometric functions; inverse trigonometric functions; right angle trigonometry; parametric equations; polar coordinates and conic sections. Applications of mathematics to modeling real world situations are emphasized. Credit for both MA 112 and MA 115 not allowed; credit for both MA 113 and MA 115 not allowed. Core Course.

**Prerequisite:** A02 25 or MMT 080 or S02 570 or S12 590 or SS2 25

**MA 120 Calculus and Its Applications 3 cr**

Introduction to calculus with an emphasis on problem solving and applications. Key concepts are presented graphically, numerically and algebraically, although the stress is on a clear understanding of graphs and tabular data. The course covers: algebraic, exponential and logarithmic functions, their properties and their use in modeling; the concepts of derivative and definite integral and applications. Credit for both MA 120 and MA 125 not allowed. MA 120 is not a prerequisite for subsequent calculus courses. Core Course.

**Prerequisite:** A02 24 or MMT 080 or MA 112 Minimum Grade of C or MA 113 Minimum Grade of C or MA 115 Minimum Grade of C or S02 560 or S12 580 or SS2 24

**MA 125 Calculus I 4 cr**

The course provides an introduction to calculus with emphasis on differential calculus. Topics include limits of functions, derivatives of algebraic and transcendental functions, application of the derivative to curve sketching, optimization problems, and examples in the natural sciences, engineering, and economics. The course concludes with an introduction to anti-derivatives, definite integrals, and the fundamental theorem of calculus. Credit for both MA 120 and MA 125 is not allowed. Prerequisite: Sufficient Mathematics Placement Exam score. Core Course. NOTE: MA 110, MA 112, MA 113, MA 115, MA 120, and MA 125 have strict Pre-requisites. To be able to enroll in these courses a student needs either to pass the Pre-requisite course with C or better or to have a sufficient Mathematics Placement Exam score.

**Prerequisite:** A02 27 or MMT 090 or MA 113 Minimum Grade of C or MA 115 Minimum Grade of C or S02 620 or S12 640 or SS2 27

**MA 126 Calculus II 4 cr**

This course is a continuation of MA 125 with emphasis on integral calculus. Topics include techniques of integration; applications of the definite integral to geometry, natural sciences, engineering, and economics; improper integrals; infinite sequences and series; Taylor polynomials and Taylor series; parametric equations and polar coordinates. Core Course.

**Prerequisite:** MA 125 Minimum Grade of C

**MA 150 Contemporary Math-Stat Seminar 1 cr**

This course gives an overview of modern mathematics and statistics from the point of view of the practitioners. The course is designed for majors in mathematics and statistics at all levels as well as those student who are considering mathematics or statistics as a major or minor area of study. Topics usually included are elements of geometry, algebra, analysis, methods of statistical inference, the role of the computer in the analytical sciences; these topics vary from semester to semester. This course cannot be taken for credit simultaneously with ST 150. NOTE: May be offered for Honors Credit.

**MA 201 Math for Elem Teachers I 3 cr**

An examination of some of the major ideas encountered in K-6 mathematics. Topics include introduction to problem solving, numeration systems, modeling arithmetic operations of whole numbers, elementary number theory, properties and operations for whole numbers, integers, rational numbers and real numbers. An emphasis on problem solving is prevalent in this course. NOTE: MA 201 does not fulfill graduation requirements for any curriculum other than College of Education and Professional Studies.

**Prerequisite:** MA 110 Minimum Grade of C or MA 112 Minimum Grade of C or MA 113 Minimum Grade of C or MA 115 Minimum Grade of C or MA 120 Minimum Grade of C or MA 125 Minimum Grade of C or MA 150 Minimum Grade of C

**MA 202 Math for Elem Teachers II 3 cr**

An examination of some of the major topics encountered in teaching geometry in K-6 mathematics. Topics include geometric shapes in the plane and in space, U.S. and metric systems of measurement, perimeter and area of shapes in the plane, the Pythagorean Theorem, surface area and volume of figures in space, and coordinate geometry. An emphasis on problem solving is prevalent in this course. NOTE: MA 202 does not fulfill graduation requirements for any curriculum other than College of Education and Professional Studies.

**Prerequisite:** MA 110 Minimum Grade of C or MA 112 Minimum Grade of C or MA 113 Minimum Grade of C or MA 115 Minimum Grade of C or MA 120 Minimum Grade of C or MA 125 Minimum Grade of C or MA 150 Minimum Grade of C

**MA 227 Calculus III 4 cr**

Vectors; functions of several variables; partial derivatives; local linearity; directional derivatives; the gradient; differential of a function; the chain rule; higher order partial derivatives; optimization of functions of several variables; multiple integrals and their applications; parametric curves and surfaces; vector fields; line and surface integrals; vector calculus. Core Course.

**Prerequisite:** MA 126 Minimum Grade of C

**MA 237 Linear Algebra I 3 cr**

This course provides an introduction to linear algebra. Topics include systems of linear equations, matrices, Gaussian elimination, rank, linear independence, subspaces, basis, dimension, linear transformations, determinants, eigenvalues and eigenvectors, change of basis, diagonalization, the abstract concept of a vector space, and applications. Core Course.

**Prerequisite:** MA 126 Minimum Grade of C

**MA 238 Differential Equations I 3 cr**

This course provides an introduction to ordinary differential equations. Topics include first order differential equations, higher order linear differential equations, systems of first order linear differential equations, Laplace transforms, methods for approximating solutions to first order differential equations, applications. Students should have taken or be taking MA 227. Core Course.

**Prerequisite:** MA 126 (may be taken concurrently) Minimum Grade of C

**MA 267 Discrete Math Structures 3 cr**

This course is an introduction to discrete mathematics for students majoring in computer-related areas. Students will be introduced to concepts and methods that are essential to theoretical computer science. A strong emphasis is placed on mathematical reasoning and proofs. Topics include sets, functions, induction, recursion, combinatorics and graphs. Students must have sufficient mathematics placement exam score.

**Prerequisite:** A02 24 or MMT 080 or MA 113 Minimum Grade of C or MA 115 Minimum Grade of C or SS2 24

**MA 290 Special Topics - 1-3 cr**

Selected topics in elementary undergraduate mathematics. This course may be repeated for a maximum of six credits.

**MA 303 Math for Elem Teachers III 3 cr**

An exploration of problem solving strategies. Problems exemplifying the various problem solving strategies studied. Emphasis on the development of problem solving skills by exploring interesting problems which demand for their solution that the student select from a wide variety of possible strategies and use a wide variety of conceptual tools. NOTE: MA 303 does not fulfill graduation requirements for any curriculum other than elementary education.

**Prerequisite:** MA 202 Minimum Grade of C and MA 201 Minimum Grade of C

**MA 311 Intro to Number Theory 3 cr**

An introduction to classical number theory with a balance between theory and computation. Topics include mathematical induction, divisibility properties, properties of prime numbers, the theory of congruences, number theoretic functions, continued fractions.

**Prerequisite:** MA 126 Minimum Grade of C

**MA 316 Linear Algebra II 3 cr**

A continuation of MA 237. Topics include inner product spaces, spectral theorem for symmetric operators, complex vector spaces, Jordan canonical form. Additional topics such as duality and Tensor products among others to be included at the discretion of the instructor.

**Prerequisite:** MA 237 Minimum Grade of C

**MA 318 Matrix Theory 3 cr**

A theoretical as well as computational treatment of the notions of determinant, inverse, rank and diagonalization of a matrix with real and complex entries. Eigenvalues and eigenvectors, similarity, solutions of linear systems of algebraic equations, Jordan canonical forms. Students are required to have a graphing calculator.

**Prerequisite:** (MA 126 Minimum Grade of C or MA 233 Minimum Grade of C)

**MA 320 Foundations of Math - W 3 cr**

A transition to higher mathematics with an emphasis on proof techniques. Topics include symbolic logic, elementary set theory, induction, relations, functions, and the structure of the number system. Mathematics and Statistics majors are encouraged to take MA 320 as soon as possible after completing MA 125.

**Prerequisite:** MA 125 Minimum Grade of C and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**MA 321 Elementary Geometry 3 cr**

This course covers the major topics from the secondary school curriculum of plane and solid geometry from a modern viewpoint. Emphasis will be placed on axioms, undefined terms, definitions, theorems, and proofs. Topics include straightedge and compass constructions, Euclidean geometry, Euclidean space, congruence, isometry, reflection, rotation, translation, vectors, parallel postulate, similarity, Pythagorean theorem, coordinate geometry, non-Euclidean geometry, projective geometry, projective space, perspective, homogenous coordinates.

**Prerequisite:** MA 320 Minimum Grade of C

**MA 332 Differential Equations II 3 cr**

Series solutions of second order linear equations. Numerical methods. Nonlinear differential equations and stability. Partial differential equations and Fourier series. Sturm-Liouville problems.

**Prerequisite:** MA 227 Minimum Grade of C and MA 238 Minimum Grade of C

**MA 334 Advanced Calculus I 3 cr**

This is the first of a two course sequence designed to provide students with the theoretical context of concepts encountered in MA 125 through MA 227. Topics covered include Completeness Axiom, sequences of real numbers, suprema and infima, Cauchy sequences, open sets and accumulation points in Euclidean space, completeness of Euclidean space, series of real numbers and vectors, compactness, Heine- Borel Theorem, connectedness, continuity, Extremum Theorem, Intermediate Value Theorem, differentiation of functions of one variable.

**Prerequisite:** MA 227 Minimum Grade of C and MA 237 Minimum Grade of C and MA 320 Minimum Grade of C

**Cross-Listed:** MA 486

**MA 335 Advanced Calculus II 3 cr**

This is the second of a two course sequence designed to provide students with the theoretical context of concepts encountered in MA 125 through MA 227. Topics covered include integration of functions of one variable, pointwise and uniform convergence, integration and differentiation of series, differentiable mappings of several variables, chain rule, product rule and gradients, Mean Value Theorem, Taylor's Theorem, Inverse Function Theorem, Implicit Function Theorem.

**Prerequisite:** MA 334 Minimum Grade of C

**Cross-Listed:** MA 487

**MA 354 Comp Assist Math Modeling - W 3 cr**

This course is intended to provide the basic ideas regarding formulation, development, testing and reporting of mathematical models of various real world problems. Deterministic and stochastic models, optimization and simulations will be covered. Emphasis will be on careful mathematical formulations and the use of computer software, such as Microsoft Excel, Mathematica and Matlab. A term project will be an important component of this course. The course is taught in a laboratory setting with computers as lab equipment.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and MA 227 Minimum Grade of C and MA 238 Minimum Grade of C

**MA 367 Combinatorial Enumeration 3 cr**

An introduction to the mathematical theory of counting. Topics covered are: basic counting principles, permutations, combinations, pigeonhole principle, inclusion-exclusion principle, partitions, recurrence relations, generating functions, and enumeration under group action.

**Prerequisite:** (MA 126 Minimum Grade of C and MA 267 Minimum Grade of C) or (MA 320 Minimum Grade of C)

**MA 390 Special Topics 1-3 cr**

Selected topics in advanced undergraduate mathematics. This course may be repeated for a maximum of six credits.

**MA 410 History of Mathematics - W 3 cr**

Historical survey of the general development of mathematics with a balance of historical perspective and mathematical structure. CLEP College Composition score of 50 OR EH 102 OR EH 105 is required for W component.

**Prerequisite:** ((EH 102 Minimum Grade of C or MA 320 Minimum Grade of C) and EDM 310 (may be taken concurrently) Minimum Grade of C)

**MA 413 Abstract Algebra I - W 3 cr**

An introduction to group theory and ring theory. Topics include permutations and symmetries, subgroups, quotient groups, homomorphisms, as well as examples of rings, integral domains, and fields. CLEP College Composition score of 50 OR EH 102 OR EH 105 is required for W component.

**Prerequisite:** MA 237 Minimum Grade of C and (MA 311 Minimum Grade of C or MA 320 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**MA 414 Abstract Algebra II - W 3 cr**

A continuation of MA 413 focusing on rings and fields. Topics include rings, ideals, integral domains, fields and extension fields. Geometric constructions and Galois theory are introduced.

**Prerequisite:** MA 413 Minimum Grade of C and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**MA 425 Graph Theory 3 cr**

The purpose of this course is to give a first introduction to classical and modern methods in graph theory for majors in mathematics, computer science, and engineering. The goal is to enable the students to apply the basic concepts and methods in graph theory to the design and analysis of computer algorithms, to solving problems in graph theory, and to model applications in science and engineering.

**Prerequisite:** (MA 237 Minimum Grade of C or MA 320 Minimum Grade of C or MA 367 Minimum Grade of C)

**MA 434 Topology 3 cr**

An introduction to topology with emphasis on the geometric aspects of the subject. Topics covered include surfaces, topological spaces, open and closed sets, continuity, compactness, connectedness, product spaces, and identification and quotient spaces. Credit for both MA 434 and MA 542 is not allowed.

**Prerequisite:** MA 227 Minimum Grade of C and MA 237 Minimum Grade of C and MA 320 Minimum Grade of C

**MA 436 Numerical Analysis 3 cr**

This course provides an introduction to numerical analysis. Topics include numerical solutions of nonlinear equations, numerical differentiation and integration, interpolation and splines, as well as numerical methods for differential equations. An essential part of the course is the implementation and error analysis of discussed numerical methods in Python. No prior programming skills are required. Credit for both MA 436 & MA 565 is not allowed.

**Prerequisite:** MA 227 Minimum Grade of C and MA 238 (may be taken concurrently) Minimum Grade of C

**MA 437 Complex Variables 3 cr**

Arithmetic of complex numbers; regions in the complex plane, limits, continuity and derivatives of complex functions; elementary complex functions; mapping by elementary functions; contour integration, power series, Taylor series, Laurent series, calculus of residues; conformal representation; applications. Credit for both MA 437 and MA 537 not allowed.

**Prerequisite:** MA 238 Minimum Grade of C

**MA 451 Probability 3 cr**

A comprehensive introduction to probability, the mathematical theory used to model uncertainty, covering the axioms of probability, random variables, expectation, classical discrete and continuous families of probability models, the law of large numbers and the central limit theorem. Credit for both MA 451 and MA 550 is not allowed.

**Prerequisite:** MA 227 Minimum Grade of C and MA 237 Minimum Grade of C

**MA 452 Financial Mathematics 3 cr**

Introduction to financial mathematics and a brief introduction to financial economics. Students will learn about the time value of money, annuities, loans, bonds, general cash flows and portfolios, immunization, general derivatives, options, forwards and futures, swaps and hedging from the point of view of an actuarial scientist.

**Prerequisite:** MA 126 Minimum Grade of C

**MA 458 Operations Research - W 3 cr**

An introduction to linear programming. The course will include a study of the simplex method as well as using computers to solve linear systems of equations. As time permits, topics covered will include sensitivity analysis, duality, integer programming, transportation, assignment, transshipment, and networks. Credit for both MA 458 and MA 567 is not allowed.

**Prerequisite:** MA 237 Minimum Grade of C and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**MA 467 Mathematical Logic 3 cr**

An introduction to formal first-order logic, first-order metatheory, and its extensions. Topics include axiom systems and their models, completeness, compactness, and recursive sets and functions. Identical with PHL 467. Credit cannot be received for both PHL 467 and MA 467.

**Prerequisite:** (PHL 321 Minimum Grade of C or MA 320 Minimum Grade of C)

**Cross-Listed:** PHL 467

**MA 481 Cryptography 3 cr**

This course provides an introduction to classical and modern methods of message encryption and decryption (cryptography) as well as possible attacks to cryptosystems (cryptanalysis). Topics include classical (symmetric) cryptosystems (DES, AES), public-key (asymmetric) cryptosystems (Diffie-Hellman, RSA, ElGamal), modes of operation, one-way and trapdoor functions, Hash functions, cryptographic protocols. Credit for both MA 481 and MA 581 is not allowed.

**Prerequisite:** MA 311 Minimum Grade of C or (MA 126 Minimum Grade of C and MA 267 Minimum Grade of C)

**Cross-Listed:** MA 581

**MA 486 Advanced Calculus I 3 cr**

This is the first of a two-course sequence designed to provide students with the theoretical context of concepts encountered in MA 125 through MA 227. Topics covered include Completeness Axiom, sequences of real numbers, suprema and infima, Cauchy sequences, open sets and accumulation points in Euclidean space, completeness of Euclidean space, series of real numbers and vectors, compactness, Heine-Borel Theorem, connectedness, continuity, Extremum Theorem, Intermediate Value Theorem, differentiation of functions of one variable.

**Prerequisite:** (MA 227 Minimum Grade of C and MA 237 Minimum Grade of C and MA 320 Minimum Grade of C)

**Cross-Listed:** MA 334

**MA 487 Advanced Calculus II 3 cr**

This is the second of a two course sequence designed to provide students with the theoretical context of concepts encountered in MA 125 through MA 227. Topics covered include integration of functions of one variable, pointwise and uniform convergence, integration and differentiation of series, differentiable mappings of several variables, chain rule, product rule and gradients, Mean Value Theorem, Taylor's Theorem, Inverse Function Theorem, Implicit Function Theorem.

**Prerequisite:** (MA 486 Minimum Grade of C)

**Cross-Listed:** MA 335

**MA 490 Special Topics 1-3 cr**

Selected topics in advanced undergraduate mathematics. This course may be repeated for a maximum of six credits.

**MA 494 Directed Studies 1-3 cr**

Directed individual study. Requires permission of department chair.

**MA 499 Honors Senior Project - H 3-6 cr**

With the guidance and advice of a faculty mentor, honors students will identify, and carry out a research project in Mathematics. The outcome of the research project will include a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three members of the faculty, chaired by the faculty mentor.

**MA 501 Functions and Modeling 3 cr**

This course is designed for secondary mathematics education majors. The emphasis of this course is to engage in activities that will strengthen students' knowledge of common topics covered in secondary mathematics, and how these topics correlate to college mathematics. An emphasis on using multiple representations, data analysis, technology, and problem-solving is prevalent in this course. Students will also be asked to explain their reasoning through writing assignments and provide mathematical proofs to problems.

**Prerequisite:** MA 126 Minimum Grade of C

**MA 502 Intro to Abstract Algebra 3 cr**

An introduction to the fundamental concepts of modern algebra such as groups, rings, and fields through concrete examples. This course is designed for graduate students in the College of Education and Professional Studies.

**Prerequisite:** MA 126 Minimum Grade of C

**MA 503 Introduction to Analysis 3 cr**

A careful look at the elements, procedures, and applications of differential and integral calculus. This course is designed for graduate students in the College of Education and Professional Studies.

**Prerequisite:** MA 126 Minimum Grade of C

**MA 504 Introduction to Geometry 3 cr**

An introduction to the foundations of geometry using both synthetic and metric approaches. Euclidean, finite, projective, and hyperbolic geometries are discussed. The axioms for various geometries are discussed. The course is designed for graduate students in the College of Education and Professional Studies.

**Prerequisite:** MA 126 Minimum Grade of C

**MA 505 Mathematical Problem Solving 3 cr**

An in-depth activity-based approach to the methods and strategies for mathematical problem solving for students in Mathematical Education. Problems selected from logic, algebra, analysis, geometry, combinatorics, number theory and probability. This course is designed for graduate students in the College of Education and Professional Studies.

**Prerequisite:** MA 126 Minimum Grade of C

**MA 506 Statistics for Teachers 3 cr**

Prepares in-service and pre-service teachers to teach statistics in high schools using data-based approach. Uses hands-on-activities approach and simulation of situations to teach concepts and technology to teach data analysis. This course is designed for graduate students in the College of Education and Professional Studies.

**Prerequisite:** MA 126 Minimum Grade of C

**MA 507 Adv Ordinary Differential Eqns 3 cr**

A graduate-level introduction to topics of ordinary differential equations and their applications in physics and engineering.

**Prerequisite:** MA 227 Minimum Grade of C

**MA 508 Adv Partial Differential Eqns 3 cr**

A continuation of MA 507 with more emphasis on theory of partial differential equations, as well as their applications in physics and engineering problems.

**Prerequisite:** MA 227 Minimum Grade of C

**MA 511 Algebra I 3 cr**

A graduate level introduction to group theory. Topics include quotient groups, homomorphisms, group actions, Sylow theorems, composition series, simple groups, free groups, fundamental theorem of abelian groups.

**Prerequisite:** (MA 311 Minimum Grade of C) or (MA 320 Minimum Grade of C)

**MA 512 Algebra II 3 cr**

A graduate level introduction to ring theory and fields. Topics include ring homomorphisms, quotient rings, ideals, rings of fractions, Euclidean domains, principal ideal domains, unique factorization domains, modules, finite fields, field extensions.

**Prerequisite:** MA 511 Minimum Grade of C

**MA 515 Number Theory 3 cr**

Modular arithmetic, arithmetic functions; prime numbers; algebraic number theory.

**MA 516 Topics in Number Theory 3 cr**

A second course in number theory, covering topics of interest to the students and instructor.

**Prerequisite:** MA 515 Minimum Grade of C

**MA 518 Linear Algebra I 3 cr**

Fields, vector spaces, dual spaces, quotient spaces, multilinear forms, linear transformations, algebras, adjoints, eigenvalues.

**Prerequisite:** (MA 237 Minimum Grade of C)

**MA 519 Linear Algebra II 3 cr**

Triangular form, nilpotence, Jordan form, inner products, self-adjoint transformations, positive transformations, isometries, Spectral Theorem, polar decomposition, applications to analysis.

**Prerequisite:** MA 518 Minimum Grade of C

**MA 521 Enumerative Combinatorics 3 cr**

Pigeonhole principle, basic counting techniques, binomial coefficients, inclusion-exclusion principle, recurrence relations, generating functions, systems of distinct representatives, finite fields.

**Prerequisite:** (MA 320 Minimum Grade of C) or (MA 367 Minimum Grade of C)

**MA 525 Graph Theory 3 cr**

Fundamental concepts, connectedness, graph coloring, planarity and Kuratowski's theorem, four-color theorem, chromatic polynomial, Eulerian and Hamiltonian graphs, matching theory, network flows, NP-complete graph problems, Markov chains, matroids.

**Prerequisite:** (MA 320 Minimum Grade of C) or (MA 367 Minimum Grade of C) or (MA 521 Minimum Grade of C)

**MA 535 Real Analysis I 3 cr**

An introduction to real analysis. Topics include: the metric topology of the reals, limits and continuity, differentiation, Riemann-Stieltjes integral. Prerequisite: Undergraduate course in advanced calculus.

**MA 536 Real Analysis II 3 cr**

A continuation of MA 535. Topics covered include sequences and series of functions, differentiation and integration in several variables, an introduction to the Lebesgue integral and differential forms as time allows.

**Prerequisite:** MA 535 Minimum Grade of C

**MA 537 Complex Analysis 3 cr**

Arithmetic of complex numbers; regions in the complex plane; limits, continuity and derivatives of complex functions; elementary complex functions; mappings by elementary functions; contour integration; power series; Taylor series; Laurent series; calculus of residues; conformal representation; applications. Credit for both MA 537 and MA 437 is not allowed.

**Prerequisite:** MA 238 Minimum Grade of C

**MA 538 Topics in Complex Analysis 3 cr**

A second course in complex analysis, covering topics of interest to the students and instructor.

**Prerequisite:** MA 537 Minimum Grade of C

**MA 539 Measure Theory 3 cr**

Foundations of the general theory of measure and integration with particular attention to the Lebesgue integral. Function spaces, product measure and Fubini's theorem, the Radon-Nikodym theorem and applications to probability theory are discussed, and possibly additional topics such as Haar measure or the Ergodic Theorem.

**Prerequisite:** MA 536 Minimum Grade of C

**MA 540 Differential Geometry 3 cr**

Local and global theory of curves and surfaces in three-dimensional space.

**Prerequisite:** (MA 227 Minimum Grade of C) or (MA 237 Minimum Grade of C) or (MA 238 Minimum Grade of C)

**MA 542 Topology I 3 cr**

An introduction to topology with emphasis on the geometric aspects of the subject. Topics covered include surfaces, topological spaces, open and closed sets, continuity, compactness, connectedness, product spaces, and identification and quotient spaces. Credit for both MA 542 and MA 434 is not allowed.

**Prerequisite:** (MA 227 Minimum Grade of C) or (MA 237 Minimum Grade of C) or (MA 320 Minimum Grade of C)

**MA 543 Topology II 3 cr**

A continuation of MA 542. Topics covered include the fundamental group, triangulations, classification of surfaces, homology, the Euler-Poincare formula, the Borsuk-Ulam theorem, the Lefschetz fixed-point theorem, knot theory, covering spaces, and applications.

**Prerequisite:** MA 542 Minimum Grade of C or MA 434 Minimum Grade of C

**MA 550 Probability 3 cr**

A comprehensive introduction to probability, the mathematical theory used to model uncertainty, covering the axioms of probability, random variables, expectation, classical discrete and continuous families of probability models, the law of large numbers and the central limit theorem. Credit for both MA 550 and MA 451 is not allowed.

**Prerequisite:** (MA 227 Minimum Grade of C or MA 237 Minimum Grade of C)

**MA 551 Theory of Statistics 3 cr**

A comprehensive introduction to the mathematical foundations of statistics. Sufficient statistics and information, parameter estimation, maximum likelihood and moment estimation, optimality properties of estimators and confidence intervals. Hypothesis testing, likelihood ratio tests and power functions. Credit for both MA 551 and ST 470 is not allowed.

**Prerequisite:** MA 451 Minimum Grade of C or MA 550 Minimum Grade of C

**MA 555 Statistical Analysis I 3 cr**

A first course in an integrated two course sequence in applied statistical theory and methods for research workers in technical fields. Coverage includes probability and basic probability models, mathematical expectations, random sampling processes and central limit theorem, estimation, hypothesis testing and power analysis, some applications of the theory of least squares. Computer assisted data analysis is used.

**MA 560 Statistical Analysis II 3 cr**

A second course (continuation of MA 555) in an integrated two-course sequence in applied statistical theory and methods for research workers in technical fields. Coverage includes regression analysis, design and analysis of experiments, factorial experiments, analysis of covariance, nonparametric analytical techniques, analysis of count data. Computer assisted data analysis is used.

**Prerequisite:** MA 555 Minimum Grade of C

**MA 565 Numerical Analysis 3 cr**

This course provides an introduction to numerical analysis. Topics include numerical solutions of nonlinear equations, numerical differentiation and integration, interpolation and splines, as well as numerical methods for differential equations. An essential part of the course is the implementation and error analysis of discussed numerical methods in Python. No prior programming skills are required. Credit for both MA 436 & MA 565 is not allowed.

**Prerequisite:** MA 238 Minimum Grade of C

**MA 567 Operations Research 3 cr**

An introduction to linear programming. The course will include a study of the simplex method as well as using computers to solve linear systems of equations. As time permits, topics covered will include sensitivity analysis, duality, integer programming, transportation, assignment, transshipment, and networks. Credit for both MA 567 and MA 458 is not allowed.

**Prerequisite:** MA 237 Minimum Grade of C

**MA 568 Topics in Operations Research 3 cr**

A second course in operations research, covering topics of interest to the students and instructor.

**Prerequisite:** MA 567 Minimum Grade of C

**MA 571 Ordinary Diff Equations 3 cr**

An introduction to ordinary differential equations from a dynamical systems perspective. Topics include existence and uniqueness theorems, dependence on initial data, linear systems and exponential of operators, stability of equilibria, Poincare-Bendixson theorem. Additional topics such as applications to population dynamics, classical mechanics, periodic attractors among others will be included at the discretion of the instructor.

**Prerequisite:** MA 518 Minimum Grade of C

**MA 572 Partial Differential Equations 3 cr**

An introduction to partial differential equations emphasizing spectral methods. Topics include elementary Hilbert spaces, Fourier series and integrals and their applications to the study of the basic partial differential equations of mathematical physics. More advanced topics such as asymptotic properties and regularity of solutions and nonlinear equations among others will be included at the discretion of the instructor.

**Prerequisite:** MA 536 Minimum Grade of C

**MA 581 Cryptography 3 cr**

This course provides an introduction to classical and modern methods of message encryption and decryption (cryptography) as well as possible attacks to cryptosystems (cryptanalysis). Topics include classical (symmetric) cryptosystems (DES, AES), public-key (asymmetric) cryptosystems (Diffie-Hellman, RSA, ElGamal), modes of operation, one-way and trapdoor functions, Hash functions, cryptographic protocols. Credit for both MA 481 and MA 581 is not allowed.

**Prerequisite:** MA 311 Minimum Grade of C or (MA 126 Minimum Grade of C and MA 267 Minimum Grade of C)

**Cross-Listed:** MA 481

**MA 590 Special Topics - 1-3 cr**

Selected topics in elementary graduate mathematics. This course may be repeated for a maximum of six credits.

**MA 592 Seminar 1 cr**

Student Seminar. Topics covered vary. This course may be repeated indefinitely, but only two credits count towards the degree. Grading system: satisfactory/unsatisfactory.

**MA 594 Directed Study 1-3 cr**

Directed individual study. Prerequisites: Approval of the department chair.

**MA 599 Thesis 1-6 cr**

Thesis. Requires approval of research prospectus by Department Graduate Committee.

## Mathematics for College (MTH) (MTH)

**MTH 100 Intermediate Algebra 3 cr**

This course covers the foundations required for success in Precalculus Algebra. This course will provide an introduction to manipulating and solving algebraic expression, linear and quadratic equations and inequalities. Graphing functions, lines, piecewise functions, and quadratics will be explored. The algebraic manipulation of exponents, logarithms, rational and radical expressions, and polynomials will be discussed. Practical applications and problem solving are also included. This course is a prerequisite for MA 112. Credit for both MTH 100, MTH 101 and MTH 105 is not allowed.

**MTH 101 Essentials for Precalculus 3 cr**

This course covers the foundations required for success in Precalculus Algebra. This course will provide an introduction to manipulating and solving algebraic expression, linear and quadratic equations and inequalities. Graphing functions, lines, piecewise functions, and quadratics will be explored. The algebraic manipulation of exponents, logarithms, rational and radical expressions, and polynomials will be discussed. Practical applications and problem solving are also included.

This course is a corequisite support course that must be taken with MA 112. Credit for both MTH 100, MTH 101 and MTH 105 is not allowed.

**Prerequisite:** (MMT 60) or (A02 18) or (SS2 18) or (S02 460) or (S12 500)

**Corequisite:** MA 112

## Mechanical Engineering (ME) (ME)

**ME 135 Engr Graphics and Comm 3 cr**

Graphical representation of objects, orthographic, oblique, and isometric views. Freehand lettering and sketching, computer aided graphics, presentation of graphics based on numerical data using spreadsheet, word processor and presentation software.

**Prerequisite:** MA 125 (may be taken concurrently) Minimum Grade of C

**ME 228 Computational Engineering 3 cr**

Introduction to programming concepts in mechanical engineering including topics in linear algebra, loop structures for summations used in applications, and regression analyses.

**Prerequisite:** (MA 237 Minimum Grade of C)

**ME 312 Mech Engr Thermodynamics 3 cr**

Thermodynamics power and refrigeration cycles, gas mixtures, psychometrics, and combustion. One-half hour of design.

**Prerequisite:** EG 270 Minimum Grade of C

**ME 314 Machine Component Design 3 cr**

Analysis and design of machine elements to accomplish given tasks within limits of stress and size. One hour of design.

**Prerequisite:** EG 284 Minimum Grade of C and EG 315 Minimum Grade of C

**ME 316 Instrumentatn & Exp Method 3 cr**

Measuring system analysis and design, signal conditioning, analysis of data, statistical error analysis, communication of results.

**Prerequisite:** (EG 220 Minimum Grade of C and MA 238 Minimum Grade of C and PH 202 Minimum Grade of C) and (ME 228 Minimum Grade of C or ME 328 Minimum Grade of C)

**ME 317 Heat Transfer 3 cr**

Steady and transient, multi-dimensional conduction, forced and natural convection, radiation, and heat exchangers. One-half hour of design.

**Prerequisite:** (EG 360 Minimum Grade of C or ME 360 Minimum Grade of C) and (ME 228 Minimum Grade of C or ME 328 Minimum Grade of C) and EG 270 Minimum Grade of C

**ME 319 Instrumentatn & Exp Method Lab 1 cr**

Laboratory component of ME 316 Instrumentation. The same grade will be given in both courses.

**Prerequisite:** EG 220 Minimum Grade of D and (MA 238 Minimum Grade of D or MA 338 Minimum Grade of D) and (PH 202 Minimum Grade of D or PH 217 Minimum Grade of D)

**Corequisite:** ME 316

**ME 326 Materials Science 3 cr**

Mechanical, chemical, and physical properties of materials. Relationship between structure, processing, and properties engineering materials. One-half hour of design.

**Prerequisite:** (PH 202 Minimum Grade of C or PH 217 Minimum Grade of C) and (CH 115 Minimum Grade of C or CH 131 Minimum Grade of C) and EG 315 Minimum Grade of C

**ME 328 Numerical Methods 3-4 cr**

Numerical solutions of differential equations with applications to ME simulation and design. Introduction to Finite Element Analysis. One-half hour of design.

**Prerequisite:** (ME 228 Minimum Grade of C and MA 238 Minimum Grade of C)

**ME 336 Material Science Lab-W 1 cr**

Experimental study on the effect of thermal and mechanical processing on properties.

**Prerequisite:** ME 326 Minimum Grade of D and PH 202 Minimum Grade of C and CH 131 Minimum Grade of C and EG 315 Minimum Grade of C

**ME 360 Mechanics of Fluids 3 cr**

This course is a study of the properties of fluids including fluid statics and dynamics with applications to Mechanical Engineering and Aerospace Engineering. Topics include application of conservation of mass, momentum and energy; dimensional analysis; flow in pipes and duct; boundary layer flows; and compressible flow. Experiments are used to illustrate some principles.

**Prerequisite:** (EG 284 Minimum Grade of C and EG 270 Minimum Grade of C)

**ME 365 Design of Fluid Power Systems 3 cr**

Fluid power components are studied in detail. Design of complete hydraulic systems is stressed. One hour of design.

**Prerequisite:** EG 284 Minimum Grade of D and EG 315 Minimum Grade of D and (EG 360 Minimum Grade of D or CE 365 Minimum Grade of D or ME 324 Minimum Grade of D) and ME 328 Minimum Grade of D

**ME 410 Principles of Eng Design-W 3 cr**

In this course, students learn to apply engineering theory and methods to the design process. Topics include problem definition, concept development and evaluation, project management, materials selection, risk analysis, quality improvement and ethics in design (0-3-0).

**Prerequisite:** ME 314 Minimum Grade of C and EG 231 Minimum Grade of C and ME 336 (may be taken concurrently) Minimum Grade of C and ME 317 (may be taken concurrently) Minimum Grade of C and ME 316 Minimum Grade of C

**ME 411 Thermal System Design 3 cr**

Thermal system design using principles of thermodynamics, fluid mechanics, heat transfer, and numerical simulation. Communication of results. Three hours of design.

**Prerequisite:** ME 312 Minimum Grade of D and ME 317 Minimum Grade of D and ME 328 Minimum Grade of D and (EG 360 Minimum Grade of D or CE 365 Minimum Grade of D or ME 324 Minimum Grade of D)

**ME 414 Capstone Design 1 cr**

This course is considered a "Senior Capstone Course."

**Prerequisite:** ME 410 Minimum Grade of D

**Corequisite:** ME 416

**ME 416 Capstone Design Project 2 cr**

This is a team-based capstone project course. Each team is assigned a unique design problem in mechanical engineering or a closely-related field. Students must be enrolled concurrently in ME 414 - Capstone Design.

**Prerequisite:** ME 410 Minimum Grade of D

**Corequisite:** ME 414

**ME 417 Dynamics of Machines 3 cr**

A study of the effects of external forces and moments on the motion of machines. Topics include the study of the position, velocity and acceleration of machine components during operation and the determination of forces on the connections and members. One hour of design.

**Prerequisite:** EG 284 Minimum Grade of D and EG 315 Minimum Grade of D and ME 328 Minimum Grade of D

**ME 419 Computer Aided Design & Manu 3 cr**

Introduction to computer aided design (CAD) and computer aided manufacturing (CAM) principles and their practical applications as fundamental elements of contemporary product design and manufacturing. This course is dual listed with an equivalent 500-level mechanical engineering course. One hour of design.

**Prerequisite:** ME 135 Minimum Grade of D and ME 314 Minimum Grade of D

**ME 421 Mechanical System Design 3 cr**

A study of design techniques as applied to mechanical components and systems. Computer simulation and numerical techniques. Communication of results. Three hours of design.

**Prerequisite:** ME 314 Minimum Grade of D and ME 328 Minimum Grade of D

**ME 422 Gas Turbines 3 cr**

Introduction to gas turbines covering thermodynamics, fluid mechanics, combustion, cycle analysis, compressors, turbines and component design. One hour of credit.

**Prerequisite:** (EG 360 Minimum Grade of D or CE 365 Minimum Grade of D or ME 324 Minimum Grade of D) and ME 312 Minimum Grade of D

**ME 426 Dynamic Systems and Control 3 cr**

Modeling dynamic systems. Introduction to the principles of feedback control systems. Analysis of linear systems.

**Prerequisite:** (MA 238 Minimum Grade of D or MA 338 Minimum Grade of D) and ME 316 Minimum Grade of D and ME 328 Minimum Grade of D

**ME 429 Controls & Instr. Lab 1 cr**

Design and implementation of analog and digital feedback control of systems. Design and implementation of measurement systems, including signal conditioning, analog-to-digital and digital-to-analog conversion, statistical estimation of error, data analysis. Communication of laboratory results is emphasized.

**Prerequisite:** ME 426 (may be taken concurrently) Minimum Grade of D

**ME 430 Mechanism Synthesis 3 cr**

Kinematic synthesis of planar linkages for function, path, and motion generation. Topics include: degrees of freedom; graphical, linear analytical, and nonlinear analytical methods; and curvature theory. This course is dual-listed with an equivalent 500-level mechanical engineering course. One hour of design.

**Prerequisite:** EG 284 Minimum Grade of D and ME 328 Minimum Grade of D

**ME 431 Gas Dynamics 3 cr**

Introduction to compressible fluid flow. Conservation laws, isentropic flow, adiabatic flow, flow with heat transfer, normal shock. One hour of design.

**Prerequisite:** (EG 360 Minimum Grade of D or CE 365 Minimum Grade of D or ME 324 Minimum Grade of D) and ME 312 Minimum Grade of D

**ME 432 Advanced Thermodynamics 3 cr**

Continuation of Mechanical Engineering Thermodynamics to develop a broader and deeper understanding of thermal energy transformations. One hour of design.

**Prerequisite:** ME 312 Minimum Grade of D

**ME 438 Finite Element Analysis 3 cr**

Introduction to the finite element method. Engineering application to stress-strain analysis is emphasized. Other field problems are also considered. This course is dual-listed with an equivalent 500-level mechanical engineering course.

**Prerequisite:** ME 328 Minimum Grade of D

**ME 439 Boundary Elements I 3 cr**

Fundamental concepts of the boundary element method of numerically solving partial differential equations. Application to potential flow problems in heat transfer. This course is dual listed with an equivalent 500-level mechanical engineering course.

**Prerequisite:** ME 328 Minimum Grade of D

**ME 441 Microprocessors for Mech Engr 3 cr**

Basic concepts of programming and applying microprocessors to the control of mechanical systems. Assembly language programming. Memory decoding and use. Input and output circuits. Interfacing with the PIA.

**Prerequisite:** EG 220 Minimum Grade of D and ME 316 Minimum Grade of D

**ME 450 Heat Vent and Air Conditioning 3 cr**

Addresses the heating and cooling of buildings. Covers related engineering sciences, cooling and heating loads, systems, and equipment. One hour of design.

**Prerequisite:** (EG 360 Minimum Grade of D or CE 365 Minimum Grade of D or ME 324 Minimum Grade of D) and ME 312 Minimum Grade of D and ME 317 Minimum Grade of D

**ME 451 Refrigeration Systems 3 cr**

Study of refrigeration systems including solutions of typical engineering design problems. Concepts from fluid mechanics, thermodynamics, and heat transfer are used. One hour of design.

**Prerequisite:** (EG 360 Minimum Grade of D or CE 365 Minimum Grade of D or ME 324 Minimum Grade of D) and ME 312 Minimum Grade of D and ME 317 Minimum Grade of D

**ME 452 Combustion 3 cr**

Introduction to the theory of combustion processes, chemical equilibrium, adiabatic flame temperatures, reaction kinetics. This course is dual listed with an equivalent 500-level mechanical engineering courses.

**Prerequisite:** ME 312 Minimum Grade of D

**ME 453 IC Engines 3 cr**

Principles for analysis and design of internal combustion (I.C.) engines. Topics: include fuel-air cycles, fuel, air and exhaust flows, heat and mass transfer, engine performance.

**Prerequisite:** (EG 360 Minimum Grade of D or CE 365 Minimum Grade of D or ME 324 Minimum Grade of D) and ME 312 Minimum Grade of D and ME 317 Minimum Grade of D

**ME 460 Intro to Marine Engineering 3 cr**

Categorization of Ships, Ship Geometry and Hydrostatics, Ship Stability, Ship Hazards, Resistance and Power, Propellers and Propulsion Systems, Ship Dynamics and Control.

**Prerequisite:** EG 360 Minimum Grade of D and EG 315 Minimum Grade of D

**ME 461 Turbomachinery 3 cr**

Energy transfer between fluid and rotor; fluid flow in turbomachines, centrifugal and axial flow pumps and compressors; radial and axial flow turbines. One hour of design.

**Prerequisite:** (EG 360 Minimum Grade of D or CE 365 Minimum Grade of D or ME 324 Minimum Grade of D) and ME 312 Minimum Grade of D

**ME 463 Intro. Biomedical Engineering 3 cr**

Survey of topics and current issues in the field of biomedical engineering. Topics include biomechanics, biomedical instrumentation, biomaterials engineering, biomedical imaging, cellular mechanics, tissue engineering, biomedical design and ethics. A portion of the course is devoted to basic biology concepts and principles. Students will review literature and discuss technical and technological developments relevant to biomedical engineering.

**ME 472 Vibration Analysis-Synthesis 3 cr**

Steady-state and transient vibration analysis of discrete and continuous systems. Vibration problems as related to design are also included.

**Prerequisite:** EG 284 Minimum Grade of C and EG 315 Minimum Grade of C and ME 328 Minimum Grade of D

**ME 474 Noise and Vibration Control 3 cr**

Principles of acoustics; human response to noise; control of noise and vibration by means of vibration isolation, sound barriers, and absorption. One hour of design.

**Prerequisite:** ME 472 Minimum Grade of D

**ME 490 Special Topics 1-3 cr**

Topics of current mechanical engineering interest. Prerequisite: Consent of instructor

**ME 494 Directed Studies 1-3 cr**

Selected mechanical engineering topics of special or current interest not available to regularly scheduled courses. Prerequisite: Consent of instructor.

**ME 499 Honors Senior Project - H 1-6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project, relevant to the field of Mechanical Engineering study, that will lead to a formal presentation at the Annual Honors Student Colloquium. The senior project will be judged and graded by three faculty, chaired by the honors mentor. This course is required for Honors recognition. A minimum of 4 credit hours is required, but students may enroll for a maximum of 6 credit hours over two semesters. Prerequisites: Completion of an approved project prospectus.

**ME 518 Adv Mechanical Engr Analysis 3 cr**

Application of numerical methods including finite differences; finite element and boundary element techniques to the solution of problems in Mechanical Engineering. Prerequisite: Consent of instructor.

**ME 519 Computer Aided Design/Manufac 3 cr**

Introduction to computer aided design (CAD) and computer aided manufacturing (CAM) principles and their practical applications as fundamental elements of contemporary product design and manufacturing. This course is dual listed with an equivalent 400-level mechanical engineering course.

**ME 520 Advanced Fluid Mechanics 3 cr**

Analysis of steady and unsteady motion of a viscous fluid. Topics include: conservation equations, Newtonian fluids and the Navier-Stokes equations, vorticity, analytical solutions, boundary layers, instability of viscous flows. Prerequisite: Consent of instructor.

**ME 522 Gas Turbines 3 cr**

Introduction to gas turbines covering thermodynamics, fluid mechanics, combustion, cycle analysis, compressors, turbines, and component matching.

**Prerequisite:** ME 520 Minimum Grade of C

**ME 525 Boundary Layer Theory 3 cr**

Development of Navier-Stokes and boundary layer equations, perturbation theory application and boundary layer transition. Prerequisite: Consent of instructor.

**ME 530 Mechanism Synthesis 3 cr**

Kinematic synthesis of planar linkages for function, path, and motion generation. Topics include: degrees of freedom; graphical, linear analytical, and nonlinear analytical methods; and curvature theory. This course is dual-listed with an equivalent 400-level mechanical engineering course. Prerequisite: Consent of instructor.

**ME 538 Finite Element Analysis 3 cr**

Introduction to the finite element method. Engineering application to stress-strain analysis is emphasized. Other field problems are also considered. This course is dual-listed with an equivalent 400-level mechanical engineering course. Prerequisite: Consent of instructor.

**Prerequisite:** MA 507 (may be taken concurrently) Minimum Grade of C or MA 508 (may be taken concurrently) Minimum Grade of C

**ME 539 Boundary Elements I 3 cr**

Fundamental concepts of the boundary element method of numerically solving partial differential equations. Application to potential flow problems in heat transfer. This course is dual listed with an equivalent 400 level mechanical engineering course. Requires special permission of instructor.

**ME 540 Advanced Heat Transfer 3 cr**

Steady and transient conduction, external and internal forced convection, natural convection, radiation with participating media, boiling heat transfer, Stefan condition. Prerequisite: Consent of instructor.

**ME 541 Conduction Heat Transfer 3 cr**

Closed form analytical and approximate numerical solutions of one, two- and three-dimensional steady state and transient problems in conduction heat transfer. Prerequisite: Consent of instructor.

**Prerequisite:** MA 507 Minimum Grade of C

**ME 542 Convection Heat Transfer 3 cr**

Fundamental laws of motion and energy balance for a viscous fluid, classical solution of the Navier-Stokes and energy equations, laminar/turbulent hydrodynamic and thermal boundary layers, convection heat transfer in laminar/turbulent internal flows. Prerequisite: Consent of instructor.

**ME 543 Radiation Heat Transfer 3 cr**

Blackbody radiation, diffuse-gray surfaces, radiative exchange in a multi-surface enclosure, gas radiation in enclosures with participating media, introduction to available numerical methods. Prerequisite: Consent of instructor.

**ME 544 Heat Trans - Change of Phase 3 cr**

Boiling heat transfer and critical heat flux, condensation heat transfer, Stefan problem, freezing and melting, ablation, introduction to available numerical techniques. Prerequisite: Consent of instructor.

**Prerequisite:** ME 540 Minimum Grade of C or ME 542 Minimum Grade of C

**ME 545 Exp Fluid Mech and Heat Trans 3 cr**

Uncertainty analysis, system response, sampling theory and FFT, differential pressure measurement and multi-hole probes, thermo-couple and RTD, thermal anemometry, LDV and other non-intrusive optical methods, flow visualization. Prerequisites: Consent of instructor

**ME 550 Combustion 3 cr**

Introduction to the theory of combustion processes, chemical equilibrium, adiabatic flame temperature, reaction kinetics, flame structure. This course is dual-listed with an equivalent 400-level mechanical engineering course. Prerequisite: Consent of instructor.

**ME 551 Classical Thermodynamics 3 cr**

Postulational treatment of the physical laws of equilibrium, equations of state, processes, equilibrium, stability, reactive systems, phase transition. Prerequisite: Consent of instructor.

**ME 552 Statistical Thermodynamics 3 cr**

Principles of kinetic theory, quantum mechanics, and statistical mechanics with particular reference to thermodynamic systems. Conclusions of classical thermodynamics are established from the microscopic viewpoint. Prerequisite: Consent of instructor.

**ME 553 IC Engines 3 cr**

Principles for analysis and design of internal combustion (I.C.) engines. Topics include: fuel-air cycles, fuel, air and exhaust flows, heat and mass transfer, engine performance.

**ME 560 Compressible Fluid Flow 3 cr**

Foundations of fluid dynamics and thermodynamics of one dimensional flow and heat transfer, isentropic flow, shock waves and method of characteristics. Prerequisite: Consent of Instructor.

**ME 561 Turbomachinery 3 cr**

Energy transfer between fluid and rotor; fluid flow in turbomachines, centrifugal and axial-flow pumps and compressors; radial and axial flow turbines. Prerequisite: Consent of instructor.

**ME 562 Comp Fluid Dyn - Heat Trans I 3 cr**

Derivation of conservation equations, numerical solution of inviscid and viscous incompressible flow problems, emphasis on finite volume method, introduction to finite element and spectral method. Prerequisite: Consent of instructor.

**ME 563 Comp Fluid Dyn - Heat Trans II 3 cr**

Governing equations in general coordinates, differential geometry for curvilinear coordinates, grid generations, numerical uncertainties. Prerequisite: Consent of instructor.  
Prerequisite: ME 562 Minimum Grade of C

**ME 564 Turbulent Flow 3 cr**

Reynolds equations, statistics of turbulence, analysis of free and wall turbulence, turbulence models. Prerequisite: Consent of instructor.  
Prerequisite: ME 520 Minimum Grade of C

**ME 565 Lubrication 3 cr**

Friction of solids and fluids. Lubricants. Theory of sliding bearings. Multi-dimensional bearings with constant forces and velocities. Solid, hydrodynamic and gas lubrication. Design of bearings. Prerequisite: Consent of instructor.

**ME 566 Aerospace Propulsion 3 cr**

Airbreathing engines course. Apply fluids, thermodynamics, and heat transfer to analysis of air breathing engines. Topics to include: ideal cycle analysis, component performance, non-ideal cycle analysis, and blade aerodynamics.

**ME 569 Aircraft Stability and Control 3 cr**

Introduction to flight dynamics of aerospace vehicles. Basic overview of stability analysis and linear feedback control.  
Corequisite: MA 507

**ME 571 Advanced Engineering Dynamics 3 cr**

Three-dimensional kinematics and kinetics of particles and rigid bodies, energy, momentum, and stability; application of Lagrange's equations to machinery and gyro dynamics. Prerequisite: Consent of instructor.

**ME 572 Advanced Vibrations 3 cr**

Free and forced vibrations of mechanical systems having lumped mass and elasticity; introduction to vibrations of continuous systems; engineering applications. Prerequisite: Consent of instructor.  
Prerequisite: MA 507 (may be taken concurrently) Minimum Grade of C or MA 508 (may be taken concurrently) Minimum Grade of C

**ME 573 Vibrations of Continuous Sys 3 cr**

Equations of motion for strings, membranes, bars, and plates with various boundary conditions, steady state and transient solutions, exact and approximate methods; wave propagation in elastic media. Prerequisite: Consent of instructor.  
Prerequisite: MA 507 Minimum Grade of C

**ME 574 Nonlinear Vibrations 3 cr**

Vibrations of damped and undamped systems with nonlinear restoring forces; free and forced oscillations in self-sustained systems; Hills equation and its application to the study of the stability of nonlinear oscillations. Prerequisites: Consent of instructor.  
Prerequisite: ME 572 Minimum Grade of C and MA 508 Minimum Grade of C

**ME 575 Continuum Mechanics 3 cr**

Cartesian tensor analysis. Analysis of stress and strain, fundamental laws of continuum mechanics. Constitutive equations, application to solid and fluid mechanics. Prerequisite: Consent of instructor.

**ME 582 Advanced Materials Science 3 cr**

Classical and quantum mechanical model of atoms, bonding, magnetism, superconductivity, high strength low density materials, corrosion, biomedical materials. Prerequisite: Consent of the instructor.

**ME 583 Applied Elasticity 3 cr**

Classical problems in elasticity, torsion and bending theory, plane problems in rectangular and polar coordinates; axisymmetric problems, thermoelasticity. Prerequisite: Consent of instructor.  
Prerequisite: MA 507 (may be taken concurrently) Minimum Grade of C or MA 508 (may be taken concurrently) Minimum Grade of C

**ME 584 Introductory Metal Theory 3 cr**

Theories of metal to explain electrical conductivity and scattering process, electronic and lattice heat capacity, magnetic behavior, cohesion and lattice constant. Prerequisite: Consent of instructor.  
Prerequisite: MA 507 Minimum Grade of C

**ME 585 Theory of Plates 3 cr**

Basic equations of rectangular and circular plates with various boundary conditions; classical solutions and approximate methods in the theory of thin plates. Prerequisite: Consent of instructor.  
Prerequisite: MA 507 Minimum Grade of C

**ME 586 Theory of Shells 3 cr**

Introduction to differential geometry; general equations for arbitrary shells; shallow shell theory with applications; solutions to membrane and bending theory for shells of revolution. Prerequisite: Consent of instructor.  
Prerequisite: ME 585 Minimum Grade of C

**ME 589 Biomechanics 3 cr**

Discrete mass and continuum mechanics description of biological materials, biodynamics of limb and gross body motions, various models for injury to head, neck, torso, and extremities. Prerequisite: Consent of instructor.

**ME 590 Sp Top - 1-3 cr**

Topics of current mechanical engineering interest. Prerequisite: Consent of instructor.

**ME 592 Directed Independent Study 1-3 cr**

Directed study, under the guidance of a faculty advisor, of a topic from the field of Mechanical Engineering not offered in a regularly scheduled course. Requires permission of the instructor.

**ME 594 Projects in Mechanical Engr 1-3 cr**

May be repeated for credit. Prerequisite: Approved proposal and consent of director of engineering graduate studies.

**ME 599 Thesis 1-6 cr**

Thesis research may be taken more than once. Prerequisite: Approved prospectus.

## Medical Genetics - MD (GEN)

### GEN 400 Med Genetics Externship 4 cr

To be determined.

### GEN 410 Clinical Research 4 cr

Research subjects of mutual interest to student-tutor will be selected. Data collection from clinical observation, hospital records, literature review, dermatoglyphics, pedigrees, etc., will be utilized (i.e., childhood neoplasia vs. parental size). Emphasis will be placed on offering the student an opportunity to master, in depth, a selected major human disorder. If warranted, the publication of the results will be encouraged.

### GEN 444 Special Elective 1-4 cr

To be prepared by the student in conjunction with the Course Director and approved by the Vice Dean before course can be added to schedule. This course is designed to offer students and faculty/clinical faculty an opportunity to develop electives which are not offered in the Elective Manual. Such an elective may be made permanent and printed in the next edition of the Elective Manual at the request of the Course Director and with the approval of the Curriculum Committee. At the discretion of the Vice Dean, this elective may count as the required "in-house" elective. 1.000 TO 4.000 Credit hours

### GEN 450 Clinical Research-Genetics 1-4 cr

Research subjects of mutual interest to student-tutor will be selected. Data collection from clinical observation, hospital records, literature review, dermatoglyphics, pedigrees, etc., will be utilized (i.e., childhood neoplasia vs. parental size). Emphasis will be placed on offering the student an opportunity to master, in depth, a selected major human disorder. If warranted, the publication of the results will be encouraged.

### GEN 455 Gen of Dev Dis and Mental Re 1-4 cr

The student will be assigned up to six families to investigate, review, synthesize, outline anticipatory care and outline genetic counseling contents and strategies.

### GEN 456 Explore Your Own Chromosomes 1-4 cr

The student will gain "hands-on" experience with the techniques used in chromosome analysis through the exploration of the student's own karyotype. The student will acquire basic skills in cell culture and harvesting, various banding procedures, fluorescence in situ hybridization (FISH), microscopic analysis and karyotype interpretation. The clinical relevance of these techniques and interpretation of results in a clinical context will be stressed.

### GEN 457 Design Interactive Med Gen-CAI 1-4 cr

The student will interact with the faculty and a full time staff person specialized in the use of HTML. The student will select a clinical syndrome or topic appropriate for the design of an interactive HTML, PC teaching-learning module. If warranted, this module may be used in the COM curriculum or be placed on the World Wide Web. The student will have access to clinical encounters, patient videotapes, a photographic archive, and a multimedia station. The staff HTML specialist will finalize programming aspects to the extent desired by the student.

### GEN 458 Gen Attuned to Clinical Reside 1-4 cr

A curriculum will be designed jointly by the faculty- student to achieve a problem oriented and context specific agenda relevant to an anticipated clinical residency. The agenda will emphasize appropriate disorders where preventive medicine, genetics, teratology, dysmorphology, diagnostic DNA, cytogenetic and biochemical medical genetic laboratory applications are of importance. During mornings, the student will work in clinical settings relevant to the above. In the afternoons, the student will review background and other information needed to define a "genetic point of view" of a clinical disorder. The role of diagnostic, differential diagnosis, anticipatory care, reproductive risks, and genetic counseling will be emphasized. The student will use departmental computer databases and printed materials, as well as those used for genetic counseling. The student will present a weekly clinical review and generate a written report summarizing a clinical disorder, to be of suitable quality as handouts for a COM II class or to be published as a short clinical contribution.

### GEN 459 Early Detect-Prevent of Birth 1-4 cr

A Birth Defects Monitoring System is functioning at the USAMC. Pregnancy outcomes (miscarriage, stillbirth, and neonates) are examined systematically to insure early detection, promote anticipatory management, and formulate preventive strategies. The student will work in parallel with genetic nurses interacting with the Intensive Care Nursery and other sites. At the Department of Medical Genetics, students will gain first hand experience with PC computer technology utilized to define and register anomalies encountered. The student will be expected to select an etiologically related group of birth defects and generate a synthesis report based on actual data augmented by a review of recent advances in basic and clinical sciences.

### GEN 460 Clinical Molecular Genetics 1-4 cr

This rotation is oriented toward clinical molecular diagnosis and research with opportunities to participate in areas ranging from the study of inherited diseases using new techniques, such as fluorescent in situ hybridization (FISH) and recombinant DNA, to research in gene mapping and identification. Students are expected to learn the laboratory procedures necessary for identification of chromosome specific microdeletion syndromes, trisomy, and translocation by FISH analysis, as well as Southern blot and polymerase chain reaction (PCR) techniques for identification of trinucleotide expansions, gene arrangements, and gene mapping, to derive phenotype- genotype correlation of patients and their families.

### GEN 482 Design Interactive Medical Gen 1-4 cr

The student will interact with the faculty and a full time staffperson specialized in the use of HTML. The student will select a clinical syndrome or topic appropriate for the design of an interactive HTML PC teaching-learning module. If warranted, this module may be used in the COM curriculum or be placed on the World Wide Web. The student will have access to clinical encounters, patient videotapes, a photographic archive and a multimedia station. The staff HTML specialist will finalize programming aspects to the extent desired by the student.

**GEN 484 Early Det/Prev of Birth Defect 4 cr**

A Birth Defects Monitoring System is functioning at the USAMC. Pregnancy outcomes (miscarriage, stillbirth and neonates) are examined systematically to insure early detection, promote anticipatory management and formulate preventive strategies. The student will work in parallel with genetic nurses interacting with the Intensive Care Nursery and other sites. At the Department of Medical Genetics, students will gain first hand experience with PC computer technology utilized to define and register the anomalies encountered. The student will be expected to select an etiologically related group of birth defects and generate a synthesis report based on actual data augmented by a review of recent advances in basic and clinical sciences.

## Meteorology (MET) (MET)

**MET 110 Orientation to Meteorology 1 cr**

In this course, freshmen meteorology students are introduced to the Meteorology program at the University of South Alabama and to the profession of meteorology in general, including career opportunities. The course will provide students with information about the curriculum and how to succeed in the major. They will be presented with information about scholarships, internships, and extracurricular activities such as working for the South Alabama Mesonet and undergraduate research opportunities. Guest lectures from meteorology faculty and professionals in the field will be included. Successful alumni will talk about their careers and how the Meteorology program at South helped them get there. The course will be interlaced with map discussions, field trips, and other hands-on weather-related activities. Student outputs will include several reflection paper assignments and a professional resume.

**MET 140 Introduction to Meteorology 3 cr**

This course focuses on introducing the student to the basic concepts of meteorology. Major topics include the structure of our atmosphere, heat balance, meteorological measurements, atmospheric stability, atmospheric motion, and wind circulations on both the global and local scales. Other areas covered may include an introduction to air masses, fronts, and precipitation processes. The analysis of US Government weather charts is also introduced. Core course.

**Corequisite:** MET 140L

**MET 140L Intro to Meteorology Lab 1 cr**

Laboratory exercises associated with MET 140.

**Corequisite:** MET 140

**MET 150 Weather Graphics for Broadcast Meteorology 2 cr**

In this course, broadcast meteorology students will learn how to build weather graphics using the Baron Lynx broadcast software system. The system is detailed, extensive, and powerful, but has a relatively steep learning curve. Knowing how to build a professional weather forecast show using the Baron software early in their curriculum, will allow broadcast meteorology students to focus on their on camera performance later in the curriculum. Knowing the details of building a professional show in Baron, will give students a huge advantage on the job market. This course will focus on the nuts and bolts of building a weather forecast show, on camera presenting and building a sound forecast are emphasized in other courses.

**MET 191 Tropical Weather Discussion 1 cr**

Tropical Weather Discussion is an introductory course in current or recently-active tropical weather systems. This course mainly reviews the structure, behavior, history and potential forecasts of tropical cyclones in the Atlantic, Pacific, and Indian Ocean basins from a meteorological perspective with special emphasis on activity in the Atlantic basin. The course is taught during the Fall Semester because it overlaps with the most active period of the Atlantic Hurricane Season. Other tropical weather topics such as El Nino, La Nina, monsoon troughs, tropical upper-tropospheric troughs, Madden Julian Oscillation, and hurricane climatology are discussed during weeks of inactivity when no tropical cyclones may be occurring. This course may be repeated for credit up to two times for a total of three hours; however, the course may only count once toward a meteorology elective.

**MET 340 Introduction to Meteorology 4 cr**

Analysis of weather phenomena and patterns on a global and local scale. Major topics include the heat balance, stability, precipitation processes, cyclonic activity, severe weather and forecasting techniques. Particular attention is devoted to the jet stream and its effect on surface weather.

**Prerequisite:** GEO 101 Minimum Grade of C

**Cross-Listed:** GEO 340

**MET 342 Severe Weather 3 cr**

A study of the causes, structure and impact of tornadoes, hurricanes, thunderstorms and severe weather systems (Identical to GEO 342).

**Prerequisite:** MET 353 Minimum Grade of C or GEO 353 Minimum Grade of C

**MET 353 General Meteorology 4 cr**

An overall view of the field of meteorology for science majors and minors. This course uses a quantitative approach to study the composition of the atmosphere, atmospheric processes, global circulation, and storm development. Laboratory exercises pay particular attention to hands-on analysis of meteorological charts (identical to GEO 353.)

**Prerequisite:** (MET 140 Minimum Grade of D and MET 140L Minimum Grade of D) and ((MA 112 Minimum Grade of C or MA 171 Minimum Grade of C) or (MA 113 Minimum Grade of C or MA 172 Minimum Grade of C) or (MA 125 Minimum Grade of C or MA 132 Minimum Grade of C))

**Cross-Listed:** GEO 353

**MET 353L General Meteorology Lab 1 cr**

Laboratory exercises associated with MET 353. Particular attention is given to hands-on weather analysis of meteorological charts.

**Corequisite:** MET 353

**Cross-Listed:** GEO 353L

**MET 354 Dynamic Meteorology I 3 cr**

Dynamic meteorology is the study of atmospheric motions that control our weather and climate. Using fundamental laws of physics (fluid dynamics and thermodynamics), a set of mathematical equations that describe how the atmosphere behaves, is derived. These equations are too complex to solve analytically, but with certain assumptions they can be simplified so that approximate solutions can be found. Even though approximate, these solutions still give useful information about the current state of the atmosphere and its evolution into the future. The theories derived in dynamic meteorology underlie all forecasting rules and techniques. Thorough understanding of these theories is invaluable to becoming a skilled forecaster.

**Prerequisite:** (MA 126 Minimum Grade of C or MA 233 Minimum Grade of C) and (PH 201 Minimum Grade of C or PH 216 Minimum Grade of C)

**MET 355 Dynamic Meteorology II 3 cr**

The circulation of the atmosphere and the structure of storms is quantitatively analyzed using equations of atmospheric flow. The jet stream, atmospheric waves, mid-latitude cyclones, and the concept of vorticity are given considerable attention.

**Prerequisite:** MET 354 Minimum Grade of C or GEO 344 Minimum Grade of C or GEO 354 Minimum Grade of C

**MET 356 Physical Meteorology 3 cr**

A detailed investigation of adiabatic processes, thermodynamic diagrams, atmospheric stability, and precipitation processes. Additional topics include atmospheric composition and aerosols, radiation and electricity.

**Prerequisite:** (MET 353 (may be taken concurrently) Minimum Grade of C or GEO 353 (may be taken concurrently) Minimum Grade of C) and (MA 126 (may be taken concurrently) Minimum Grade of C or MA 233 (may be taken concurrently) Minimum Grade of C) and (PH 201 (may be taken concurrently) Minimum Grade of C or PH 216 (may be taken concurrently) Minimum Grade of C)

**MET 357 Meteorological Instrumentation 2 cr**

Design, calibration, use and maintenance of existing and newly developed meteorological instruments and instrumentation systems. Analysis of data collected by instruments and instrument systems.

**Prerequisite:** (MET 353 Minimum Grade of C or GEO 353 Minimum Grade of C)

**MET 358 Radar Meteorology 4 cr**

This course is designed to give the student a three-fold introduction to weather radar and its value in the workplace. Basic radar principles and assumptions applicable to all radars are presented; the Doppler function and limitations are covered in depth with final emphasis on properly utilizing weather radar in an operations setting.

**Prerequisite:** (MET 354 Minimum Grade of C or GEO 344 Minimum Grade of C or GEO 354 Minimum Grade of C) and (PH 202 Minimum Grade of C or PH 217 Minimum Grade of C)

**MET 359 Introduction to TV Weather 2 cr**

This course gives the students the basic skills necessary for broadcasting weather information on TV. This course will focus on the basic principles and techniques of effective TV weather broadcasting.

**Prerequisite:** (MET 353 Minimum Grade of C or GEO 353 Minimum Grade of C)

**MET 360 Atmospheric Analysis 1 cr**

Analysis of meteorological charts. Provides additional preparation prior to Synoptic.

**Prerequisite:** (MET 353 Minimum Grade of C or GEO 353 Minimum Grade of C) and (MET 354 Minimum Grade of C or GEO 344 Minimum Grade of C or GEO 354 Minimum Grade of C)

**MET 370 Satellite Meteorology 3 cr**

This course is an introduction to the weather satellite and its influence on meteorological observations and forecasting. Both radiative propagation theory and satellite interpretation of meteorological features will be covered extensively.

**Prerequisite:** MET 356 Minimum Grade of C and (PH 202 Minimum Grade of C or PH 217 Minimum Grade of C)

**MET 401 Weather Forecasting I 2 cr**

A course specifically designed for students minoring in Meteorology. Students are introduced to weather forecasting concepts and methods.

**Prerequisite:** (MET 353 Minimum Grade of C or GEO 353 Minimum Grade of C)

**MET 402 Weather Forecasting II 2 cr**

A course specifically designed for students minoring in Meteorology. Weather forecasting techniques are discussed with an emphasis on the use of meteorological models and severe weather forecasting.

**Prerequisite:** MET 401 Minimum Grade of C

**MET 410 MET Phenomenology - W 3 cr**

This class is an introduction to reading meteorological journal and professional writings and to writing some of the standard scientific forms common in both operational and research meteorology: summaries, conference abstracts, and scientific journal articles. The students will engage in brief examination of some of the fundamental phenomena in the atmosphere through selected journal articles and write about these topics in an appropriate manner as inquisitive meteorologists.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C) and (MET 353 Minimum Grade of C or GEO 353 Minimum Grade of C) and ((MET 354 Minimum Grade of C or GEO 344 Minimum Grade of C or GEO 354 Minimum Grade of C) or MET 401 Minimum Grade of C)

**MET 420 Computer Apps in Earth Science 4 cr**

An introduction to basic Python programming, with examples and exercises pertinent to Earth Science and GIS applications.

**Prerequisite:** MA 112 Minimum Grade of D or MA 110 Minimum Grade of C

**Cross-Listed:** GIT 420

**MET 430 Mesoscale Meteorology 3 cr**

Assessment of mesoscale phenomena, including frontogenesis and frontolysis, low-level jet streams, nocturnal boundary layer wind maxima, sea and land breezes, gravity waves, dry lines, lake-effect snow, and deep moist convection. Emphasis on scale analysis, subsynoptic-scale dynamics, interactions with larger-scale processes, and case study examples.

**Prerequisite:** (MET 355 Minimum Grade of C or GEO 345 Minimum Grade of C or GEO 355 Minimum Grade of C)

**MET 440 Air Pollution Meteorology 2 cr**

Air Pollution Meteorology is a survey course in air pollution topics taught primarily from an atmospheric perspective. This course covers topics on air pollution history, methods of measuring air quality, sources of air pollution, basic atmospheric pollution dispersion concepts, basic principles of air pollution modeling and prediction, and an overview of the impacts of polluted air on human health and the environment.

**Prerequisite:** MET 140 Minimum Grade of C or GEO 101 Minimum Grade of C and MA 110 Minimum Grade of C

**MET 442 Tropical Meteorology 3 cr**

This course presents an overview of meteorology in the tropics. The tropical realm is defined and the importance of solar radiation and distribution of temperature, moisture and precipitation in driving tropical weather systems is discussed. The general circulation in the tropics is explored along with seasonal and non-seasonal variations, including the Monsoon and El Nino/La Nina. Certain mesoscale and local circulations common to the tropics are also discussed. Several weeks will be spent investigating tropical cyclones.

**Prerequisite:** MET 353 Minimum Grade of C or GEO 353 Minimum Grade of C

**MET 443 Climatology - W 3 cr**

Analysis of global climate as aggregate weather. Component elements, factors controlling distribution, resulting area patterns, and climatic classification are studied (identical to GEO 443). Fee

**Prerequisite:** MET 140 Minimum Grade of C or GEO 101 Minimum Grade of C

**Cross-Listed:** GEO 443

**MET 454 Synoptic Meteorology I 6 cr**

Principles of dynamic and physical meteorology are applied to current surface and upper air analyses of frontal cyclones. An emphasis is placed on forecasting techniques, daily weather discussions, continuity and analysis.

**Prerequisite:** MET 355 Minimum Grade of C and MET 356 Minimum Grade of C

**MET 455 Synoptic Meteorology II 6 cr**

This course continues the development of principles learned in MET 454. Principles of atmospheric dynamics and conceptual models will be studied and employed through the use of surface and upper air analyses, satellite and radar data. A multi-week overview of numerical weather prediction principles and concepts will be accomplished along with the integration and interpretation of model guidance of actual modeling simulations using basic concepts of numerical weather prediction. Topics on mid-latitude cyclones and fronts will continue to be expanded beyond Synoptic I. Ensemble prediction and atmospheric oscillations will be discussed along with intrinsic predictability limitations. This course serves as the capstone class for meteorology majors.

**Prerequisite:** MET 454 Minimum Grade of C

**MET 456 Applied Climatology - W 3 cr**

Training in the application of climatology to solve real world problems. In addition to an examination of present day climate patterns, their causes, and mechanisms, the course focuses on the El Nino, recent and past climates, the natural and human impact on the Earth's energy balance, global warming, ozone hole and the chaos theory.

**Prerequisite:** (EH 102 (may be taken concurrently) Minimum Grade of C or EH 105 Minimum Grade of C) and (MET 353 (may be taken concurrently) Minimum Grade of C or GEO 353 Minimum Grade of C) and (MET 341 Minimum Grade of C or GEO 341 Minimum Grade of C)

**MET 490 Sp Top - 1-4 cr**

Meteorological topics not covered in current meteorology courses. May be repeated when content varies for a maximum of four hours. May require permission of instructor.

**MET 492 Seminar - 1-4 cr**

Departmental seminar investigating a special field of meteorology. (Topic announced prior to registration.) May be repeated when content varies for a maximum of eight hours. Requires permission of instructor.

**MET 494 Directed Studies 1-4 cr**

Independent research in field, laboratory, or library under the direction of a member of the meteorology faculty. Prerequisite: Requires permission of instructor. May be taken for a total of eight hours.

**MET 495 Mesonet Internship 1 cr**

Students will learn various aspects of mesonet (mesoscale weather station network) operation and maintenance. Students will take part in routine weather station site visits, emergency site visits when a sensor malfunctions, and quality control of incoming data. Once a year every weather station receives a complete retrofit where all sensors are replaced with freshly calibrated sensors. If such a retrofit occurs during the semester of a student's internship, the student will be given the opportunity to take part in this process as well. A large component of this course will consist of field work. Depending on student schedules and mesonet behavior, time will also be spent in the lab performing manual data quality control using the USA Mesonet website.

**Prerequisite:** (MET 353 Minimum Grade of C or GEO 353 Minimum Grade of C)

**MET 496 Internship in Meteorology 1-3 cr**

On-the-job learning through occupational, professional, or research work with an approved firm, agency, or meteorology faculty member. Open only to meteorology majors. Prerequisite: Permission of department chair.

**MET 497 Broadcast Meteorology Pract I 3 cr**

This course focuses on introducing the student to the ever evolving technology in broadcast meteorology. Emphasis is placed on the application of meteorological data through the use of professional television weather graphics systems in order to develop a "weather story". Particular attention is given to the use of chroma key mechanics/techniques for public viewing.

**Prerequisite:** MET 359 Minimum Grade of C

**MET 498 Broadcast Meteorology Prac II 3 cr**

This course focuses on communicating accurate forecasts and other important weather information to the public. Attention is given to fine-tuning the on-air weather presentation style, as well as developing a professional resume tape of weather shows in order to gain employment as a broadcast meteorologist. Special attention is given to severe weather cut-ins and accurately conveying severe weather threats to the public.

**Prerequisite:** (MET 355 (may be taken concurrently) Minimum Grade of C or GEO 345 Minimum Grade of C or GEO 355 Minimum Grade of C) and MET 497 Minimum Grade of C

**MET 540 Topics in Air Pollution MET 3 cr**

Topics in Air Pollution Meteorology is a graduate course on advanced air pollution topics taught primarily from an atmospheric perspective. This course provides an overview of "dry" meteorological processes, such as temperature, pressure, wind, and general circulation combined with topics on air pollution history, methods of measuring air quality, sources of air pollution, atmospheric pollution dispersion concepts, principles of air pollution modeling and prediction, and the impacts of polluted air on human health and the environment.

**MET 590 Meteorology 1-6 cr**

An in-depth course for advanced students in meteorology. Topics and titles will be selected to examine the subject matter in an area of current interest to students and in an area of particular faculty expertise. Includes specialized topics not currently listed in the Bulletin.

**MET 594 Grad Dir St in Meteorology- 1-4 cr**

Graduate level independent study in Meteorology under the direction of a member of Meteorology's Graduate Faculty. Student must have an approved topic and must be accepted by a Graduate Faculty mentor before registering for this class. Prerequisite: Graduate standing.

## Microbiology/Immunology - MD (MIC)

**MIC 211 Microbiology and Immunology 8 cr**

This course presents the fundamental aspects of pathogenic microbiology including morphology, metabolism and replication of microorganisms, the basic principles of the use of chemotherapeutic agents, microbial genetics, and medical microbial ecology. The major bacterial, viral, mycotic, and parasitic diseases of humans are covered in detail. The basic principles of immunology and infection in relation to clinical disease of the various body systems are discussed.

**MIC 447 Molecular Basis Pathogenesis 1-4 cr**

Bench research on the biology or the rickettsiales family of intracellular pathogens and on the pathogenesis of the diseases caused by these organisms. Participation in ongoing research or initiation of new projects are possible.

**MIC 530 Microbes & Host Defense 3 cr**

Presents the fundamental aspects of microbiology including morphology, metabolism of micro-organisms, the basic principles of the use of antibiotics and chemotherapeutic agents, microbial genetics, virology, and medical microbial ecology. The principles of immunology and infection in relation to clinical disease are discussed with special emphasis on laboratory diagnosis.

**MIC 536 Literature Reports 1 cr**

Students and faculty participate in a supervised reading of the current literature and meet periodically to interact in a discussion of the selected article or topic. The goal of this course is to maintain the faculty's and students' level of information at a "state of the art" in both methods and theory in the discipline and to develop critical skills in reviewing the literature.

**MIC 537 Dir St - Microbiology 1-6 cr**

Students participate in research under the direction of a graduate faculty member. This course should be taken by students who have completed their lab rotations, but have not yet submitted a formal research proposal.

**MIC 590 Sp Top - 1-3 cr**

Each course provides in-depth tutorial exposure to specific areas in the discipline. Student and/or faculty presentations followed by group discussions, examine the subject matter in an area of current interest either to one student or a group of students. Credit and title are arranged with an individual faculty member.

**MIC 630 Adv Microbial Pathogenesis 3 cr**

This course discusses the fundamentals of this area with particular emphasis on *Escherichia coli* and *Salmonella typhimurium* as model systems. The development of problem solving skills will be stressed. Topics including aerobic vs. anaerobic metabolism, membrane physiology, biosynthesis of macromolecules and regulation of gene expression provide view of microbial cell.

**Prerequisite:** IDL 580 Minimum Grade of B and IDL 581 Minimum Grade of B

**MIC 632 Advanced Immunology 3 cr**

Selected topics in immunology are considered using formal lectures followed by student presentations. Design and interpretation of immunological experiments are emphasized throughout the course.

**Prerequisite:** IDL 580 Minimum Grade of B and IDL 581 Minimum Grade of B

**MIC 633 Advanced Virology 3 cr**

This course reviews the reproductive cycles of important human viruses and subviral agents and the diseases they cause. The focus is on the molecular biology of animal viruses and their mechanisms of regulation, assembly, and pathogenesis. Human immunodeficiency virus will be considered in detail. The course is constructed as an interactive lecture series with student reports and literature surveys.

**Prerequisite:** IDL 580 Minimum Grade of B and IDL 581 Minimum Grade of B

**MIC 636 Microbiology-Immun Res Sem 1 cr**

Students present a research topic for discussion before members of the department. Usually scheduled on a rotational basis. Student participation required after end of second year. Attendance required.

**MIC 799 Research-Dissertation 1-6 cr**

Independent research by the student under the sponsorship of the graduate faculty in individual departments in the Basic Medical Sciences. Students are required to submit a research project description form before enrolling in this course. Progress reports of the work accomplished are required every six months.

## Military Science (MS) (MS)

**MS 101 Introduction to the Army 1 cr**

An introductory course on the Army and basic Soldier skills. Introduces Cadets to the Army and the Profession of Arms. Students are encouraged to attend Physical Training (PT) Lab three (3) times per week for 1 hour per session and a 2 hour leadership lab every other week.

**MS 102 Foundations of Leadership 1 cr**

Introduces Cadets to the personal challenges and competencies that are critical for effective leadership. Students are encouraged to attend Physical Training (PT) Lab three (3) times per week for 1 hour per session and a 2 hour leadership lab every other week.

**MS 201 Leadership and Ethics 3 cr**

Focuses on leadership and ethics. The course adds depth to the Cadets knowledge of the different leadership styles. Cadets will conduct a leadership analysis of famous leaders and self-assessment of their own leadership style. Students are required to attend Physical Training (PT) Lab three (3) times per week for 1 hour per session and a 2 hour leadership lab every other week.

**Prerequisite:** MS 101 Minimum Grade of C and MS 102 Minimum Grade of C

**MS 202 Army Doctrine 3 cr**

A further development of common task and leadership skills required to prepare cadets to lead small military units. Focuses on Army doctrine and decision making. The course begins with analytical techniques, creative thinking skills and the Army problem solving process as related to situations faced by leaders when making decisions. Students are required to attend Physical Training (PT) Lab three (3) times per week for 1 hour per session and a 2 hour leadership lab every other week.

**Prerequisite:** (MS 101 (may be taken concurrently) Minimum Grade of C and MS 102 (may be taken concurrently) Minimum Grade of C)

**MS 301 Training Management 3 cr**

Focuses on training management and the warfighting functions. It is an academically challenging course where you will study, practice, and apply the fundamentals of Training Management and how the Army operates through the Warfighting functions. Cadets also conduct physical fitness training three times per week focusing on development of individual flexibility, muscular strength, and cardio-respiratory endurance. Students are required to attend Physical Training (PT) Lab three (3) times per week for 1 hour per session and a 2 hour leadership lab every week. Contact Hour Distributions: 3 hours and 1 lab.

**MS 302 Applied Leadership 3 cr**

Focuses on applied leadership in small unit operations. It is an academically challenging course where you will study, practice, and apply the fundamentals of direct level leadership and small unit tactics at the platoon level. They also conduct military briefings and develop proficiency in the operational orders process. Cadets also conduct physical fitness training three times per week focusing on development of individual flexibility, muscular strength, and cardio-respiratory endurance. Students are required to attend Physical Training (PT) Lab three (3) times per week for 1 hour per session and a 2 hour leadership lab every week.

**Prerequisite:** MS 301 Minimum Grade of C

**MS 401 The Army Officer 3 cr**

Focuses on development of the Army Officer. It is an academically challenging course where you will develop knowledge, skills and abilities to plan, resource, and assess training at the small unit level. You will also learn about Army programs that support counseling subordinates and evaluating performance, values and ethics, career planning, and legal responsibilities. In addition, MSL IVs are rotated through a variety of leadership positions that support a variety of ROTC battalion training and recruiting events throughout the semester where the MSL IV student will receive detailed and constructive feedback on their leader attributes and core leader competencies from experienced cadre. Students are required to attend Physical Training (PT) Lab three (3) times per week for 1 hour per session and a 2 hour leadership lab every week.

**Prerequisite:** MS 301 Minimum Grade of C and MS 302 Minimum Grade of C

**MS 402 Company Grade Leadership 3 cr**

This course is an academically challenging course where you will develop knowledge, skills, and abilities required of junior officers pertaining to the the Army in Unified Land Operations and Company Grade Officer roles and responsibilities. Additionally, it will discuss platoon leadership, how to take charge of your platoon and the additional duties you may have as a 2LT. Students will continue to examine the Army Profession and what it means to be a professional in the U.S. Army. The overall focus is on broadening the students knowledge of the Army.

**Prerequisite:** MS 401 Minimum Grade of B

**MS 494 Directed Studies 1-3 cr**

Directed study and research. May be repeated in different subject areas. Course work will be specified by the instructor prior to the beginning of the semester. Studies may include but are not limited to research papers, special projects, and leadership seminars. One and three hour courses are available.

## Multisystem Disorder Module-MD (MSD)

**MSD 210 Multisystem Disorders 2 cr**

The Multisystem Disorders Module will focus on diseases that affect the whole body or involve multiple organs (e.g., atherosclerosis, diabetes mellitus, vitamin deficiencies and HIV). Each day, a novel topic will be interactively reviewed and discussed by a faculty expert in the field. Students and faculty will use higher order board-style questions as a platform for discussion.

## Musculoskeletal - MD (MDK)

**MDK 230 Musculoskeletal 5 cr**

## Musculoskeletal - MD (MSK)

**MSK 120 Musculoskeletal 6 cr**

This module uses an integrated curriculum of basic science and clinical material to develop the students' knowledge and ability to describe and diagnose conditions of the skin and the musculoskeletal systems. In order to cultivate this ability in the student, team-based and small-group learning exercises, lectures, anatomy labs, hands-on clinical skills labs, independent learning, clinical experiences, and the study of anatomic and radiological images will be utilized. The module will begin with an introduction to dermatology, muscle and connective tissue. This will include illustrative cases that portray these tissues in normal physiology, development and aging, and disease. In the musculoskeletal segment, students will study the structures of the musculoskeletal system of the upper and lower extremity and head and neck, in both the normal and diseased states. At the end of the module, the students will have learned how to apply their emerging knowledge of normal and abnormal structure, as well as function of these tissues and systems in order to recognize and ultimately treat conditions associated with injury and/or illness. Given the nature and frequency of abnormal musculoskeletal conditions within our society, especially in geriatrics and sports, a comprehensive, interdisciplinary and holistic approach to the professional care for these individuals will be emphasized.

**MSK 230 Musculoskeletal 8 cr**

This module uses an integrated curriculum of basic science and clinical material to develop the student's knowledge and ability to describe and diagnose conditions of the skin and the musculoskeletal systems. In order to cultivate this ability in the student, team based and active learning exercises, lectures, anatomy labs, hands on clinical skills labs, independent learning, clinical experiences, and the study of anatomic and radiological images will be utilized. The module will begin with an introduction to dermatology, muscle and connective tissue. This will include illustrative cases that portray these tissues in normal physiology, development and aging, and disease. In the musculoskeletal segment, students will study the structures of the musculoskeletal system of the upper and lower extremity and head and neck, in both the normal and diseased states. At the end of the module, the students will have learned how to apply their emerging knowledge of normal and abnormal structure, and function of these tissues and systems in order to recognize, and ultimately treat conditions associated with injury and/or illness. Given the nature and frequency of abnormal musculoskeletal conditions within our society, especially in geriatrics and sports, a comprehensive, inter-disciplinary, and holistic approach to the professional care for these individuals will be emphasized.

## Museum Studies (MUM) (MUM)

**MUM 201 Intro to Museum Studies 3 cr**

This course is designed to provide a general introduction to museum history, practice, and the role of museums in contemporary society. The class will explore a range of museum positions, curatorial practices, collection management, museum administration, and the academic and public roles museums play in society.

**Prerequisite:** EH 102 Minimum Grade of C

**MUM 290 Special Topics - 3 cr**

Different subjects or themes in museum studies as announced. This course may be repeated twice when content varies, for a maximum of nine credit hours. Prerequisite: To be announced.

**MUM 390 Special Topics - 3 cr**

Different subjects or themes in museum studies as announced. This course may be repeated twice when content varies. for a maximum of nine credit hours. Prerequisite: To be announced.

## Music Education (MUE) (MUE)

**MUE 010 Music Education 0 cr**

The Piano Proficiency documents mastery of minimum piano proficiency skills for students who do not need to enroll in class piano.

**MUE 102 Elementary Class Piano 1 cr**

Functional keyboard playing. Open to music majors and minors only. No previous knowledge in piano necessary. To be taken in sequence.

**MUE 103 Elementary Class Piano 1 cr**

Functional keyboard playing. Open to music majors and minors only.

**Prerequisite:** MUE 102 Minimum Grade of D

**MUE 120 Elementary Class Voice 1 cr**

Beginning voice instruction emphasizing the fundamentals of singing and the vocal mechanism. This is the first semester of a two semester sequence.

**MUE 121 Intermediate Class Voice 1 cr**

This course is a continuation of MUE 120. Vocal fundamentals and the mechanics of singing will be emphasized. More advanced vocal exercises, diction, and interpretation will be stressed.

**Prerequisite:** MUE 120 Minimum Grade of D

**MUE 141 String Methods 1 cr**

The techniques of teaching the string instruments in class situations and the development of some proficiency on each string instrument.

**MUE 170 Elementary Class Percussion 1 cr**

Beginning percussion instruction with emphasis on development of sight-reading, concert style/mallet techniques and basic concepts of percussion instruments.

**MUE 182 Elementary Class Guitar 1 cr**

Beginning guitar instruction with the development of proficiency in sight reading and correct right and left hand techniques. No previous knowledge of guitar is necessary. Open to any university student except guitar majors. To be taken in sequence.

**MUE 183 Elementary Class Guitar 1 cr**

Beginning guitar instruction with the development of proficiency in sight reading and correct right and left hand techniques.

**Prerequisite:** MUE 182 Minimum Grade of D

**MUE 202 Intermediate Class Piano 1 cr**

A continuation of elementary class piano including sight reading and keyboard harmony. Open to music majors and minors only.

**Prerequisite:** MUE 103 Minimum Grade of D

**MUE 203 Intermediate Class Piano 1 cr**

A continuation of elementary class piano including sight-reading and keyboard harmony. Open to music majors and minors only.

**Prerequisite:** MUE 202 Minimum Grade of D

**MUE 212 Adv Keyboard Musicianship I 1 cr**

MUE 212 is the first of four courses required of all concentration level and performance level piano majors. During the course students develop sight reading ability, read lead sheets, learn accompanying strategies and practice systematic piano technique. Class piano pedagogy is also addressed. Prerequisite: Piano major or concentration.

**MUE 213 Adv Keyboard Musicianship II 1 cr**

The second of four courses required of all concentration level and performance level piano majors. During the course, students develop sight-reading ability, read lead sheets, learn accompanying strategies and practice systematic piano technique. Class piano pedagogy is also addressed.

**Prerequisite:** MUE 212 Minimum Grade of D

**MUE 236 Mus-Lit Integ for Early Chldhd 3 cr**

This course examines the use of music and literature integration in the early childhood classroom - establishing an active-learning environment, identifying elements of music in children's literature, engaging students in the storytelling process, and preparing music-literature instruction.

**MUE 240 String Methods 1 cr**

The techniques of teaching the string instruments in class situations and the development of some proficiency on each string instrument.

**MUE 241 Woodwind Methods 1 cr**

The techniques of teaching the woodwind instruments in class situations and the development of some proficiency on each of the main woodwinds.

**MUE 242 Brass Methods 1 cr**

The techniques of teaching the brass instruments in class situations and the development of some proficiency on each of the main brass instruments.

**MUE 243 Percussion Methods 1 cr**

The techniques of teaching percussion instruments in class situations and the development of some proficiency on all percussion instruments.

**MUE 301 Music Literacy Child and Youth 3 cr**

The fundamentals of music, music reading, and instruction for those working with children and youth in group settings.

**MUE 312 Adv Keyboard Music III Vocal 1 cr**

MUE 213 is the third of four courses required of all concentration and performance level piano majors. Students will develop sight reading ability, read lead sheets, learn accompanying strategies and practice systematic piano technique. Vocal accompanying workshops and class piano pedagogy are included.

**Prerequisite:** MUE 213 Minimum Grade of D

**MUE 313 Adv Keyboard Music IV Inst 1 cr**

MUE 313 is the fourth of four courses required of all concentration and performance level piano majors. During the course, students develop sight reading ability, read lead sheets, learn accompanying strategies and practice systematic piano technique. Instrumental accompanying workshops and class piano pedagogy are included.

**Prerequisite:** MUE 312 Minimum Grade of D

**MUE 322 Early Chld/Elem Mus Perf Mthds 3 cr**

The study of music and performance methods as used in dance and theatre throughout various early childhood and elementary settings.

**MUE 336 Performing Arts for Young Chld 3 cr**

This course provides an overview of the planning, preparation, and delivery of the performing arts in a developmentally appropriate environment. Students will explore dramatic arts, improvisation, use of musical instruments, and vocal exploration as a means of communication, expression, and learning for the young child. Appropriate learning environments and routines will be discussed regarding the individual child's needs of social, physical, and sensory motor skills and the role of facilitating the growth through discovery.

**MUE 342 Brass Methods Class 1 cr**

The techniques of teaching the brass instruments in class situations and the development of some proficiency on each of the main brass instruments.

**MUE 345 Percussion Methods 1 cr**

The techniques of teaching percussion instruments and the development of some proficiency on all percussion instruments.

**MUE 346 Marching Band Techniques 1 cr**

The techniques of organization, administration, instruction, and rehearsal of the marching band.

**MUE 411 Woodwind Pedagogy 2 cr**

A survey of the teaching techniques, instruments, accessories and pedagogical materials for woodwind instruments. Prerequisite: Upper division studio study in woodwinds or permission of instructor

**MUE 412 Brass Pedagogy 2 cr**

This course is intended as a technique course specific to high and low brass instruments. Topics of study will include: development of technique, etudes, performance preparation, pedagogical literature, performance anxiety. Upper division studio study in brass or permission of instructor.

**MUE 413 Percussion Pedagogy 2 cr**

A comprehensive study of methods and materials used to teach percussion instruments. Upper division studio study in percussion or permission of instructor.

**MUE 414 Guitar Pedagogy 2 cr**

A survey of the teaching techniques, instruments, accessories and pedagogical materials for guitar. Prerequisite: Upper division studio study in guitar or permission of the instructor.

**MUE 415 String Pedagogy 3 cr**

A comprehensive study that is intended as a technique course specific string instruments. Topics of study include: development of technique, performance preparation, pedagogical literature, and performance anxiety. Prerequisite: Upper division studio study in strings or permission of instructor.

**MUE 430 Exceptional Music 3 cr**

The philosophical and practical approach to increasing the effectiveness of learning and content retention for the exceptional student through music.

**MUE 434 Keyboard, Voice, Guitar 3 cr**

The study of music literature, note reading, and the effective practice of incorporating keyboard, voice, and guitar through music education and music therapy.

**MUE 436 Integrating Arts in Education 1-3 cr**

This course examines arts integration as a philosophical approach to increasing the effectiveness of learning and content retention in the PK-12 classroom.

**MUE 444 Elementary/General Music 3 cr**

Music program, methods, music literature, and teaching aids for elementary and middle school students. Prerequisites: Junior level or above in music education, concentration, admission to candidacy, completion of two-thirds of teaching field.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**MUE 446 Piano Pedagogy 2 cr**

Methods and materials for the private lesson. Lab practice in teaching included. Offered in alternate years. Prerequisite: Piano major or piano concentration.

**MUE 448 Vocal Pedagogy 2 cr**

Theory and practice of the art of teaching singing as it relates to Voice Science, with regard to both current and historical practices, physiology, function, acoustics, observations, and hands-on experience. Prerequisite: Upper division in vocal studio studies or permission of instructor

**MUE 455 Tch Mu in Middle-Scondary Sch 3 cr**

Assists the student in organizing materials and in developing methods of teaching music in middle and secondary schools. Prerequisites: Junior level or above in music education concentration, admission to candidacy, completion of two-thirds of teaching field.

**MUE 494 Directed Studies - 1-3 cr**

An individual project concerned with the student's special interests in music education. May be repeated for a maximum of six hours. Prerequisite: Department Chair permission.

**MUE 501 Instrumental Music Education 3 cr**

Study of the organization, development, appraisal, role and future trends of instrumental programs in the public schools.

**MUE 502 Choral Music Education 3 cr**

Choral Music Education is designed to provide broad exposure to elements that comprise a comprehensive choral program at the elementary and secondary levels.

**MUE 512 Foundations of Music Education 4 cr**

Sequential study of major philosophies guiding music teaching and the history of music education that have led to contemporary issues and problems in Music Education. Major philosophies including Pestalozzi, Reimer, and the praxial approach of Mark and history from perspectives of sociology, psychology, philosophy, curriculum, history and comparative curricula, including emerging trends in the profession.

**MUE 513 Curr and Assess in Music Ed 4 cr**

Critical evaluation of current literature, research, and assessment tools used in the curriculum and teaching of music. This course examines the relationship between curriculum theory and philosophy of music education. Through the study of traditional and contemporary models of curriculum development and evaluation, students broaden their understanding of curriculum as it impacts the learning process. Field experience required.

**MUE 515 String Pedagogy 3 cr**

A comprehensive study that is intended as a technique course specific to all string instruments. Topics of study will include: development of technique, etudes, performance preparation, pedagogical literature, and performance anxiety.

**MUE 519 Brass Pedagogy 3 cr**

A teaching techniques course specific to brass instruments. Topics of study will include teaching philosophy and techniques, pedagogical literature, lesson structure, and resources for further brass research.

**MUE 520 Adv Stdy in EC/Elem/Gen Music 4 cr**

Music supervision and administration, program development, conducting children's choirs, inclusion, instructional materials and innovative teaching techniques for early childhood and elementary music programs, including Kodaly, Orff, Dacroze, and Gordon.

**MUE 534 Keyboard, Voice, Guitar 3 cr**

The study of music literature, note reading, and the effective practice of incorporating keyboard, voice, and guitar through music education and music therapy.

**MUE 536 Integrating Arts in Education 1-3 cr**

This course examines arts integration as a philosophical approach to increasing the effectiveness of learning and content retention in the PK-12 classroom.

**MUE 540 Adv Study in Tchg Choral Music 4 cr**

Focus of the course is to enhance the student's knowledge of rehearsal techniques and instructional strategies, strengthening the role of the conductor, techniques for analytical preparation of choral music, and organization of choral programs. Emphasis will also be given to expanding knowledge of choral repertoire and resources for the choral conductor.

**MUE 548 Graduate Vocal Pedagogy 2 cr**

Vocal Pedagogy is a 2 credit hour course for the upper level undergraduate voice major and graduate vocal performance majors. It focuses on the art, science and profession of teaching singing. Class meetings will be dedicated to lecture, class discussion, presentations, and workshops with various pedagogical and voice science topics.

**MUE 560 Adv Study in Tchg Instr Music 4 cr**

The purpose of this course is to help the student develop teaching materials, gain greater familiarity with instrumental music repertoire, and develop instructional strategies for instrumental music. Emphasis will be placed on rehearsal procedures, analytical techniques, organizational structure, instrumental music program management, and advanced instrumental conducting.

**MUE 564 Woodwind Pedagogy 3 cr**

This course involves the study of teaching principles of the woodwind family, with specialized instruction given to students' primary woodwind instrument. Focusing on the art of teaching by examining pedagogical concepts and history, woodwind performance majors will experience teaching demonstrations and the discovery of new and standard teaching literature for woodwind instruments.

**MUE 570 Internship in Music Education 6 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the P-12 program. Students will be placed with persons holding a valid teaching certification in the appropriate licld. Prereq: All program coursework completed.

**MUE 585 Practicum in Music Education 1-4 cr**

Observation and involvement in the teaching of undergraduate music courses at the college level with opportunities for individual research and teaching experiences.

**MUE 587 Percussion Pedagogy 2 cr**

A comprehensive study of methods and materials used to teach percussion instruments.

**MUE 589 Reading and Conference 1 cr**

Guided study in preparation of the portfolio-video recording and self critique, pedagogical project and research paper - which should be taken in conjunction with preparation of the final portfolio.

**MUE 590 Special Topics - 1-3 cr**

Special topics in music education designed to meet specific needs and special interests, and to explore current issues in the field. May be repeated for a maximum of nine hours when content varies. Requires permission of department chair.

## Music Literature (MUL) (MUL)

**MUL 101 Introduction to Music 3 cr**

Music, what it is and how to listen to it; basic materials of music and the great style periods of music literature in the Western World. Attendance at approved concerts is required.

**MUL 201 Contemporary Music 3 cr**

An introduction to music-literature trends in the 20th century.

**MUL 235 Survey Musical Masterworks I 2 cr**

This course is the first of a two semester sequence and will familiarize the student with the vocabulary, traditions, conventions, genres, and repertoire of the art music world. The course will focus on the 'greatest hits' of the concert repertoire and other works of a regional/timely interest.

**Prerequisite:** MUT 113 Minimum Grade of C

**MUL 236 Survey Musical of Masterwks II 2 cr**

This course is the second of a two semester sequence and will familiarize the student with the vocabulary, traditions, conventions, genres, repertoire of the art music world. The course will focus on the 'greatest hits' of the concert repertoire and other works of a regional/timely interest.

**Prerequisite:** MUL 235 Minimum Grade of D

**MUL 315 History of Music Theatre - W 3 cr**

A comprehensive overview of the origins and evolution of American Music Theatre to present time. The course also includes both general and specific information toward appropriate performance choices. Cross-listed with DRA 315. Credit cannot be received for both DRA 315 and MUL 315.

**Cross-Listed:** DRA 315

**MUL 335 History of Music I - W 3 cr**

Music of the Western World from pre-Christian times to 1750: evolution of forms, styles, and media.

**Prerequisite:** MUT 113 Minimum Grade of C and MUL 236 Minimum Grade of D and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**MUL 336 History of Music II - W 3 cr**

Music of the Western World from 1750 to the present: evolution of forms, styles, and media.

**Prerequisite:** MUL 335 Minimum Grade of D and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**MUL 411 Woodwind Literature 3 cr**

A survey of the major works of the solo, concerto, and chamber music repertoire for the woodwind instruments. Prerequisites: Upper division studio study in woodwinds or permission of instructor.

**MUL 412 Brass Literature 3 cr**

A survey of the major works of the solo, concerto, and chamber music repertoire for brass instruments. Prerequisite: Upper division brass studio study or permission of instructor.

**MUL 413 Percussion Literature 3 cr**

A survey of the major works of the solo, concerto, and chamber music repertoire for percussion instruments. Prerequisite: Upper division studio study in percussion or permission of instructor.

**MUL 414 Guitar Literature 3 cr**

A survey of the major works of the solo, concerto, and chamber music repertoire for guitar. Prerequisite: Upper division studio study in guitar or permission of instructor.

**MUL 415 String Literature 3 cr**

A survey of the major works of the solo, concerto, chamber music repertoire for string instruments. Prerequisite: Upper division studio study in strings or permission of instructor.

**MUL 438 Keyboard Literature 3 cr**

Major works and styles in the keyboard literature from English Virginalists through the contemporary period. Offered in alternate years. Prerequisites: Upper division piano study or instructor permission.

**MUL 442 Organ Literature 3 cr**

Music for pipe organ, both secular and sacred. Offered in alternate years. Prerequisites: Upper division organ study or instructor permission.

**MUL 444 Vocal Solo Literature 3 cr**

A comprehensive overview of standard solo vocal repertoire within the foundation of historical performance practice of sacred and secular vocal music from its beginnings to the present.

**Prerequisite:** MUL 335 Minimum Grade of D and MUL 336 Minimum Grade of D

**MUL 494 Dir St - 1-3 cr**

An individual project concerned with the student's special interests. May be repeated for up to 6 hours. Requires Department Chair permission.

**MUL 501 Graduate Research in Music 2 cr**

Methods and materials of research in music. Bibliography and bibliographical aids. Introduction to musicology. Critical and historical writing. A survey of references and sources consulted in graduate music courses; format for papers and thesis, including footnotes and bibliography.

**MUL 512 Brass Literature 3 cr**

A survey of the major works of the method, solo, orchestral, and chamber music repertoire for brass instruments.

**MUL 515 String Literature 3 cr**

A survey of the major works of the solo, concerto, and chamber music repertoire for string instruments.

**MUL 530 Symphonic Literature 3 cr**

A survey of the development of the symphony and related forms from its origins through the twentieth century.

**MUL 535 American Music 4 cr**

Early music in the colonies. Various attempts to create an individual 'American' musical style. Diversity of influences: European, African American, Native American, Spanish-Mexican, religious, jazz, folk song, minstrel, etc. Music of Billings, Mason, Gottschalk, MacDowell, Sousa, Ives, Gershwin, Copland, and others.

**MUL 544 Art Song Literature & History 2 cr**

Art Song Literature and History is an advanced study of art song literature from 1800-present for the graduate vocal performance major. Elements of form, style, poetic materials, and performance practice will be covered. Special emphasis will be given to elements of preparation and literature exploration for the emerging performer.

**MUL 545 Opera Literature and History 2 cr**

Opera Literature and History is designed to provide the student with a comprehensive study of opera from its earliest development to the present day. Elements of form, style, social/political influences, and stagecraft will be explored. Critical analysis of operatic works will be developed through guided listening and viewing assignments.

**MUL 546 Collab Piano Lit for Vocal 3 cr**

The graduate-level Vocal Accompanying Literature course offers a survey of music composed for voice(s) and piano from the pianist's perspective. Music for solo voice and piano will be explored chronologically. Additional units will feature standard choral music, choral/vocal music for church services, strategies for playing musical theater scores and techniques for operatic score reduction.

**MUL 564 Woodwind Literature 3 cr**

Woodwind Literature examines solo and chamber woodwind literature. The course will focus on the evolution of woodwind literature and masterworks in the repertoire.

**MUL 566 Coll Piano Lit for Instruments 3 cr**

Graduate-level Collaborative Piano Literature for keyboard and various instruments is a survey course which seeks to expose students to musical works written for solo instrument and piano/keyboard, standard chamber music (piano trios, quartets and quintets), non-standard chamber music and piano concertos. Collaborative duos will be explored by instrument type (violin, flute, trumpet, etc.), while chamber music will be studied chronologically.

**MUL 585 Grad Piano Literature Survey 2 cr**

The chronological survey includes units on pre-piano literature from England, France, Germany and Italy, early development of the classical sonata, the Viennese Classical period, late Beethoven and Schubert, the Romantics, Brahms and Nationalism, Debussy and Impressionism, piano music from 1920-1950, piano music since 1950.

**MUL 587 Percussion Literature 3 cr**

A survey of the major works of solo, concerto and chamber music repertoire for percussion instruments.

**MUL 590 Spec Topics in Music History 1-4 cr**

A study of works and styles appropriate to the topics listed: (1) Middle Ages; (2) Renaissance; (3) Baroque Period; (4) Classical Period; (5) Romantic Period; (6) Modern. May be repeated for credit when topics vary.

## Music Organization (MUO) (MUO)

**MUO 111 University Concert Choir 0.5,1 cr**

This large ensemble is open to all majors, and performs the masterpieces of choral literature. Required of all voice majors, and a placement audition is required for all participants.

**MUO 114 Chamber Singers 0.5 cr**

A small, select ensemble devoted to the performance of vocal chamber music. Audition and instructor permission required.

**MUO 115 Chorale 0.5,1 cr**

The Chorale is the preeminent choral ensemble on campus. Chorale members are chosen through special auditions, and perform in area schools and venues to promote the University and the Department of Music.

**MUO 116 USA Opera Theatre 0.5-1 cr**

A performing ensemble dedicated to training students in the fundamentals of stage craft, performance, and production through experience with music for the stage. Standards of opera, operetta, and American musical theater are explored in scene exercises and fully-staged productions on and off campus. Enrollment is open to all students through audition or permission of the instructor. Course is cross-listed with DRA 116. Credit cannot be received for both MUO 116 and DRA 116.

**Cross-Listed:** DRA 116

**MUO 117 University Symphony Band 0.5,1 cr**

A large performing ensemble of woodwind, brass and percussion instrumentalists with an emphasis on wind band literature and live performance. Open to music majors and non-music majors with prior instrumental performance experience in high school or junior college.

**MUO 118 Woodwind Ensemble 0.5 cr**

The study and performance of literature for all combinations of woodwind instruments.

**MUO 119 Brass Ensemble 0.5 cr**

The study and performance of literature for all combinations of brass instruments.

**MUO 120 Percussion Ensemble 0.5 cr**

The study and performance of literature for all combinations of percussion instruments.

**MUO 121 Jazz Band 0.5 cr**

The ensemble study of jazz with an emphasis on literature and live performance.

**MUO 122 Basketball Pep Band 0.5 cr**

Performs for USA Basketball Games throughout the basketball season. Schedule varies annually.

**MUO 123 String Ensemble 0.5 cr**

The study and performance of literature for all combinations of string instruments.

**MUO 124 Piano Ensemble 0.5 cr**

The study and performance of two-piano and piano-ensemble literature. Required of piano majors.

**MUO 125 Guitar Ensemble 0.5 cr**

The study and performance for ensemble literature for guitar Required for all guitar majors.

**MUO 126 Collegium Musicum 0.5 cr**

A performing ensemble dedicated to combined chamber music experience of both vocal and instrumental forces, playing one-to-a-part, and focusing on music written before 1800. Enrollment is open to the entire university community through audition or permission of the co-directors. By virtue of the terms of the attached constitution, members will learn to choose repertoire, budget and raise small funds, develop programs, reserve performance space, organize print material, and explore the dynamics of team production. This team-taught course will also be dedicated to sharing cultural forces and encouraging the exchange of attitudes shared historically by all people.

**MUO 127 Wind Ensemble 0.5,1 cr**

A select performing ensemble of woodwind, brass, and percussion instrumentalists with an emphasis on wind ensemble literature and live performance. Open to music majors and non-majors with prior instrumental performance experience in high school or junior college. Audition or permission of instructor required for participation.

**MUO 129 Mixed Chamber Ensemble 0.5 cr**

The study and performance of chamber literature for all combinations of instruments and voices.

**MUO 130 University Marching Band 1 cr**

A large performing ensemble of woodwind, brass, percussion instrumentalists, and appropriate auxiliary personnel with an emphasis on live performance for athletic events. Open to music majors and non-music majors with prior instrumental performance experience in high school or junior college.

**MUO 131 University Winterguard 0.5,1 cr**

A large performing ensemble consisting of appropriate auxiliary personnel (flags, rifles, sabres, etc.) with an emphasis on live performance.

**MUO 133 University Orchestra 0.5,1 cr**

A large performing ensemble of string, woodwind, brass, and percussion instrumentalists with an emphasis on orchestral literature and live performance. Open to music majors and non-music majors with prior instrumental performance experience in high school or junior college. Audition or permission of instructor required for participation.

**MUO 136 World Music Ensemble 0.5 cr**

The study and performance of world literature for all combinations of instruments with an emphasis on music from non-Western cultures.

**MUO 137 University Band 0.5,1 cr**

A performing ensemble of woodwind, brass, and percussion instrumentalists with an emphasis on concert band literature and live performance. Open to music majors and non-majors with prior instrumental performance experience in high school, junior college, or at the university level. No audition is required for this ensemble and it is open to the entire campus community as well as faculty and staff.

**MUO 138 Flute Choir 0.5 cr**

The study and performance of literature for all combinations of flutes.

**MUO 139 Trumpet Ensemble 0.5 cr**

The study and performance of literature for all combinations of trumpets.

**MUO 140 Horn Choir 0.5 cr**

The study and performance of literature for all combinations of horns.

**MUO 141 Trombone Choir 0.5 cr**

The study and performance of literature for all combinations of trombones.

**MUO 142 Tuba-Euphonium Ensemble 0.5 cr**

The study and performance of literature for all combinations of tubas and euphoniums.

**MUO 143 Brass Choir 0.5 cr**

The study and performance of literature for large brass ensemble.

**MUO 144 USA Steel Band 0.5 cr**

The study and performance of literature for steel band including the traditional styles of soca and calypso music from the Caribbean. Instructor permission required.

**MUO 145 Clarinet Ensemble 0.5 cr**

The study and performance of literature for all combinations of clarinets.

**MUO 411 University Concert Choir 0.5,1 cr**

This large ensemble is open to all majors, and performs the masterpieces of choral literature. Required for all voice majors, and a placement audition is required for all participants.

**MUO 414 Chamber Singers 0.5 cr**

A small, select ensemble devoted to the performance of vocal chamber music. Audition and instructor permission required.

**MUO 415 Chorale 0.5,1 cr**

The Chorale is the preeminent choral ensemble on campus. Chorale members are chosen through special auditions and perform in area schools and venues to promote the University and the Department of Music.

**MUO 416 USA Opera Theatre 0.5-1 cr**

A performing ensemble dedicated to training students in the fundamentals of stage craft, performance, and production through experience with music for the stage. Standards of opera, operetta, and American musical theater are explored in scene exercises and fully-staged productions on and off campus. Enrollment is open to all students through audition or permission of the instructor. Course is cross-listed with DRA 416. Credit cannot be received for both MUO 416 and DRA 416.

**Cross-Listed:** DRA 116

**MUO 417 University Symphony Band 0.5,1 cr**

A large performing ensemble of woodwind, brass and percussion instrumentalists with an emphasis on wind band literature and live performance. Open to music majors and non-music majors with prior instrumental performance experience in high school or junior college.

**MUO 418 Woodwind Ensemble 0.5 cr**

The study and performance of literature for all combinations of woodwind instruments.

**MUO 419 Brass Ensemble 0.5 cr**

The study and performance of literature for all combinations of brass instruments.

**MUO 420 Percussion Ensemble 0.5 cr**

The study and performance of literature for all combinations of percussion instruments.

**MUO 421 Jazz Band 0.5 cr**

The ensemble study of jazz with an emphasis on literature and live performance.

**MUO 423 String Ensemble 0.5 cr**

The study and performance of literature for all combinations of string instruments.

**MUO 424 Piano Ensemble 0.5 cr**

The study and performance of two-piano and piano-ensemble literature. Required of piano majors.

**MUO 425 Guitar Ensemble 0.5 cr**

The study and performance of ensemble literature for guitar. Required of guitar majors.

**MUO 426 Collegium Musicum 0.5 cr**

A performing ensemble dedicated to combined chamber music experience of both vocal and instrumental forces, playing one-to-a-part, and focusing on music written before 1800. Enrollment is open to the entire university community through audition or permission of the co-directors. By virtue of the terms of the attached constitution, members will learn to choose repertoire, budget and raise small funds, develop programs, reserve performance space, organize print material, and explore the dynamics of team production. This team-taught course will also be dedicated to sharing cultural forces and encouraging the exchange of attitudes shared historically by all people.

**MUO 427 Wind Ensemble 0.5,1 cr**

A select performing ensemble of woodwind, brass and percussion instrumentalists with an emphasis on wind ensemble literature and live performance. Open to music majors and non-majors with prior instrumental performance experience in high school or junior college. Audition or permission of instructor required for participation.

**MUO 429 Mixed Chamber Ensemble 0.5 cr**

The study and performance of chamber literature for all combinations of instruments and voices.

**MUO 430 University Marching Band 1 cr**

A large performing ensemble of woodwind, brass, percussion instrumentalists, and appropriate auxiliary personnel with an emphasis on live performance for athletic events. Open to music majors and non-music majors with prior instrumental performances experience in high school or junior college.

**MUO 431 University Winterguard 0.5,1 cr**

A large performing ensemble consisting of appropriate auxiliary personnel (flags, rifles, sabres, etc.) with an emphasis on live performance.

**MUO 433 University Orchestra 0.5-1 cr**

A large performing ensemble of string, woodwind, brass and percussion instrumentalists, with an emphasis on orchestral literature and live performance. Open to music majors and non-music majors with prior instrumental performance experience in high school or junior college. Audition or permission of instructor required for participation.

**MUO 436 World Music Ensemble 0.5 cr**

The study and performance of world literature for all combinations of instruments with an emphasis on music from non-Western cultures.

**MUO 437 University Band 0.5,1 cr**

A performing ensemble of woodwind, brass, and percussion instrumentalists with an emphasis on concert band literature and live performance. Open to music majors and non-majors with prior instrumental performance experience in high school, junior college, or at the university level. No audition is required for this ensemble and it is open to the entire campus community as well as faculty and staff.

**MUO 438 Flute Choir 0.5 cr**

The study and performance of literature for all combinations of flutes.

**MUO 439 Trumpet Ensemble 0.5 cr**

The study and performance of literature for all combinations of trumpets.

**MUO 440 Horn Choir 0.5 cr**

The study and performance of literature for all combinations of horns.

**MUO 441 Trombone Choir 0.5 cr**

The study and performance of literature for all combinations of trombones.

**MUO 442 Tuba-Euphonium Ensemble 0.5 cr**

The study and performance of literature for all combinations of tubas and euphoniums.

**MUO 443 Brass Choir 0.5 cr**

The study and performance of literature for large brass ensemble.

**MUO 444 USA Steel Band 0.5 cr**

The study and performance of literature for steel band including the traditional styles of soca and calypso music from the Caribbean. Instructor permission required.

**MUO 445 Clarinet Ensemble 0.5 cr**

The Study and performance of literature for all combinations of clarinets.

**MUO 507 Ensemble with Coll Keyboard 1 cr**

The Director for Collaborative Keyboard studies will meet with the student enrolled in MUO 507 to determine an ensemble assignment. Assignments may include one of the following: accompany/collaborate with Opera Theater, Symphony Band, Wind Ensemble, Concert Choir, Chorale, Chamber Music Ensemble or smaller ensemble.

**MUO 511 University Concert Choir 0.5,1 cr**

This large ensemble is open to all majors, and performs the masterpieces of choral literature. Required for all voice majors, and a placement audition is required for all participants.

**MUO 514 Chamber Singers 0.5 cr**

A small, select ensemble devoted to the performance of vocal chamber music. Audition and instructor permission required.

**MUO 515 Chorale 0.5,1 cr**

The Chorale is the preeminent choral ensemble on campus. Chorale members are chosen through special auditions, and perform in area schools and venues to promote the University and the Department of Music.

**MUO 516 Opera & Musical Theatre Wrkshp 1 cr**

A performing ensemble dedicated to training students in the fundamentals of stage craft, performance, and production through experience with music for the stage. Standards of opera, operetta, and American musical theatre are explored in scene exercises and fully-staged productions on and off campus. Enrollment is open to all students through audition or permission of the instructor.

**MUO 517 University Symphony Band 0.5,1 cr**

A large performing ensemble of woodwind, brass and percussion instrumentalists with an emphasis on wind band literature and live performance. Open to music majors and non-music majors with prior instrumental performance experience in high school or junior college.

**MUO 518 Woodwind Ensemble 0.5 cr**

The study and performance of literature for all combinations of woodwind instruments.

**MUO 519 Brass Ensemble 0.5 cr**

The study and performance of literature for all combinations of brass instruments.

**MUO 520 Percussion Ensemble 0.5 cr**

The study and performance of literature for all combinations of percussion instruments.

**MUO 521 Jazz Band 0.5 cr**

The ensemble study of jazz with an emphasis on literature and live performance.

**MUO 523 String Ensemble 0.5 cr**

The study and performance of literature for all combinations of string instruments.

**MUO 524 Piano Ensemble 0.5 cr**

The study and performance of two-piano and piano-ensemble literature. Required of piano majors.

**MUO 525 Guitar Ensemble 0.5 cr**

The study and performance of ensemble literature for guitar. Required of guitar majors.

**MUO 526 Collegium Musicum 0.5 cr**

A performing ensemble dedicated to combined chamber music experience of both vocal and instrumental forces, playing one-to-a-part, and focusing on music written before 1800. Enrollment is open to the entire university community through audition or permission of the co-directors. By virtue of the terms of the attached constitution, members will learn to choose repertoire, budget and raise small funds, develop programs, reserve performance space, organize print material, and explore the dynamics of team production. This team-taught course will also be dedicated to sharing cultural forces and encouraging the exchange of attitudes shared historically by all people.

**MUO 527 Wind Ensemble 1 cr**

A select performing ensemble of woodwind, brass and percussion instrumentalist with an emphasis on wind ensemble literature and live performance. Open to music majors and non-majors with prior instrumental performance experience in high school or junior college. Audition or permission of instructor required for participation.

**MUO 529 Mixed Chamber Ensemble 0.5 cr**

The study and performance of chamber literature for all combinations of instruments and voices.

**MUO 530 University Marching Band 1 cr**

A large performing ensemble of woodwind, brass, percussion instrumentalists, and appropriate auxiliary personnel with an emphasis on live performance for athletic events. Open to music majors and non-majors with prior instrumental performance experience in high school or junior college.

**MUO 531 University Winterguard 0.5,1 cr**

A large performing ensemble consisting of appropriate auxiliary personnel (flags, rifles, sabres, etc.) with an emphasis on live performance.

**MUO 533 University Orchestra 0.5,1 cr**

A large performing ensemble of string, woodwind, brass and percussion instrumentalists with an emphasis on orchestral literature and live performance. Open to music majors and non-majors with prior instrumental performance experience in high school or junior college. Audition or permission of instructor required for participation.

**MUO 536 World Music Ensemble 0.5 cr**

The study and performance of world literature for all combinations of instruments with an emphasis on music from non-Western cultures.

**MUO 537 University Band 0.5,1 cr**

A performing ensemble of woodwind, brass and percussion instrumentalists with an emphasis on concert band literature and live performance. Open to music majors and non-majors with prior instrumental performance experience in high school, junior college, or at the university level. No audition is required for this ensemble and is open to the entire campus community as well as faculty and staff.

**MUO 538 Flute Choir 0.5 cr**

The study of performance of literature for all combinations of flutes.

**MUO 539 Trumpet Ensemble 0.5 cr**

The study and performance of literature for all combinations of trumpets.

**MUO 540 Horn Choir 0.5 cr**

The study and performance of literature for all combinations of horns.

**MUO 541 Trombone Choir 0.5 cr**

The study and performance of literature for all combinations of trombones.

**MUO 542 Tuba - Euphonium Ensemble 0.5 cr**

The study and performance of literature for all combinations of tubas and euphoniums.

**MUO 543 Brass Choir 0.5 cr**

The study and performance of literature for large brass ensemble.

**MUO 544 USA Steel Band 0.5 cr**

The study and performance of literature for steel band including the traditional styles of soca and calypso music from the Caribbean. Instructor permission required.

**MUO 545 Clarinet Ensemble 0.5 cr**

The study and performance of literature for all combinations of clarinets.

## Music Studio (MUS) (MUS)

### **MUS 201 Intro to Music Edu Technology 2 cr**

Application of current Music Technology for the N-12 curriculum. Laboratory experience is given in selected software programs appropriate to music education.

**Prerequisite:** MUT 113 Minimum Grade of C

### **MUS 202 Vocal Diction I 1 cr**

A lecture/performance course, rooted in the International Phonetic Alphabet (IPA), designed to enable singers to analyze and perform vocal repertoire in English and Italian. Prerequisite: Open to music majors and minors only.

### **MUS 203 Vocal Diction II 1 cr**

A lecture/performance course, rooted in the International Phonetic Alphabet (IPA), designed to enable singers to analyze and perform vocal repertoire in French and German.

**Prerequisite:** MUS 202 Minimum Grade of D

### **MUS 204 Introduction to Music Business 3 cr**

A general overview of the music industry is the primary objective of the course. Some emphasis will be placed on career options.

### **MUS 304 Principles of Music Business I 3 cr**

A continuation of MUS 204, 304 will place emphasis on the legal aspects of the music industry.

**Prerequisite:** MUS 204 Minimum Grade of D

### **MUS 305 Principles Music Business II 3 cr**

A continuation of MUS 304, 305 will address marketing and promoting in music.

**Prerequisite:** MUS 304 Minimum Grade of D

### **MUS 404 Recording Technology 2 cr**

This course provides an overview of analog and digital audio, introduces students to basic recording/mixing tools and topics include: microphone and mixer preparation, studio and computing capture/edit. Also addressed: project management, assets, and project.

**Prerequisite:** MUT 213 Minimum Grade of C

### **MUS 421 Music - Sound and Multimedia 2 cr**

This course familiarizes students with the techniques and materials for incorporating sound and music in the Wintel and Macintosh multimedia environments. Topics to be addressed will include making music with and without MIDI, sound resources, special effects, commercial libraries and sounds, digital sequencing, authoring environments, and legal issues.

### **MUS 422 Sequencing 2 cr**

To familiarize students with professional-level music sequencing software, hardware, and techniques. Students will gain practical skills with MIDI recording, playback, and editing.

### **MUS 470 Internship Music Bus 9-12 cr**

Internship is a program that provides qualified university students with supervised experience in production practices, management techniques, research applications, personnel matters, and other activities found in the modern music industry. Prerequisites: Completion of the Music Industry Concentration core including College of Business course requirements, permission of the participating business-organization, and approval of the departmental internship coordinator and department chair.

### **MUS 490 Special Topics 1-3 cr**

This course introduces students to fundamental techniques and materials for working with studio-quality sound, hardware and software. Topics will be drawn from: MIDI/music networks, graphic notation, MIDI controllers/sequencers, sampling basics, and film and video synchronization fundamentals. May be repeated for a maximum of nine credit hours.

**Prerequisite:** MUS 421 Minimum Grade of D and MUS 422 Minimum Grade of D

### **MUS 499 Senior Honors Proj in Music-H 3-6 cr**

With the guidance and advice of a faculty mentor, Honors Students will identify, and carry out a research project in music. The outcome of the research project will include a written report and formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three members of the faculty, chaired by the faculty mentor. Requires permission of department chair.

### **MUS 501 Music Education Technology 3 cr**

Application of current Music Technology for the N-12 curriculum. Laboratory experience is given in selected software programs appropriate to music education.

### **MUS 521 Music - Sound and Multimedia 3 cr**

To familiarize students with the techniques and materials for incorporating sound and music in the multimedia environment. Topics to be addressed will include making music with and without MIDI, sound resources, special effects, commercial libraries and sounds, digital sequencing, authoring environments, and legal issues.

### **MUS 522 Sequencing 2 cr**

This course familiarizes students with professional-level music sequencing software, hardware, and techniques. Students will gain practical skills with MIDI recording, playback, and editing. Instructor permission required.

### **MUS 585 Practicum in Coll Keyboard 2 cr**

The Director for Collaborative Keyboard studies will meet with the student enrolled in MUS 585 to assign literature, which will be studied during the semester. Assignments may include several selections with vocalists, as well as collaboration with strings, woodwinds and brass. The goal of the course is to gain practical experience as collaborator studying standard repertoire with a varied group of vocalists and instrumentalists.

### **MUS 587 Arranging for Percussion 1 cr**

The analysis of existing musical works from various genres and the ability to create effective musical arrangements scored only for percussion instruments.

### **MUS 590 Sp Top in Music Technology 1-3 cr**

Special topics in Music Technology. May be repeated for a maximum of 9 hours.

**Prerequisite:** MUS 522 Minimum Grade of D

## Music Theory (MUT) (MUT)

### **MUT 112 Basic Music Theory I 3 cr**

Integrated course in aural and non-aural music theory including music skills, part writing analysis, counterpoint, sight singing, dictation, keyboard harmony, and computer applications in part writing and ear training.

### **MUT 113 Basic Music Theory II 3 cr**

Elementary part-writing in two, three, and four voices. Sight-singing, ear-training, and keyboard harmony. Must be taken in sequence.

**Prerequisite:** MUT 112 Minimum Grade of C

**MUT 212 Intermediate Music Theory I 3 cr**

A continuation of elementary theory. Chromatic harmony and remote modulation; sight-singing, ear training, keyboard harmony. Must be taken in sequence.

**Prerequisite:** MUT 113 Minimum Grade of C

**MUT 213 Intermediate Music Theory II 3 cr**

A continuation of elementary theory. Chromatic harmony and remote modulation; sight-singing, ear-training, keyboard harmony. Must be taken in sequence.

**Prerequisite:** MUT 212 Minimum Grade of C

**MUT 312 Integrated Analytical Tech I 2 cr**

This is the first semester of a two semester sequence designed to familiarize students with the rudiments of formal analysis, counterpoint, and practical orchestration for 18th, 19th, and 20th century music - particularly emphasizing classical, jazz, pop, and selected world-music styles.

**Prerequisite:** MUT 213 Minimum Grade of C

**MUT 313 Integrated Analytical Tech II 2 cr**

This is the second semester of a two semester sequence designed to familiarize students with the rudiments of formal analysis, counterpoint, and practical orchestration for 18th, 19th, and 20th century musics - particularly emphasizing classical, jazz, pop, and selected world-music styles.

**Prerequisite:** MUT 312 Minimum Grade of C

**MUT 314 Introduction to Composition 2 cr**

Compositional techniques and the writing of original compositions for solo instruments and small ensembles.

**Prerequisite:** MUT 213 Minimum Grade of D

**MUT 361 Fundamentals of Conducting 3 cr**

Basic baton technique; simple and complex rhythms; score reading; practical choral and instrumental conducting techniques.

**Prerequisite:** MUT 213 Minimum Grade of D

**MUT 362 Instrumental Conducting 3 cr**

Advanced baton technique; psychology of rehearsal; interpretative and conducting techniques for instrumental organization.

**Prerequisite:** MUT 361 Minimum Grade of D

**MUT 364 Choral Cond and Lit 3 cr**

Advanced conducting with attention to the harmonic and formal analysis of choral works; special emphasis on performance practice.

**Prerequisite:** MUT 361 Minimum Grade of D

**MUT 412 Orchestration 2 cr**

The techniques of scoring for the orchestra, band, and small ensembles.

**Prerequisite:** MUT 213 Minimum Grade of D

**MUT 413 Band Arranging 2 cr**

The techniques of scoring for the modern concert wind band. Offered in alternate years.

**Prerequisite:** MUT 213 Minimum Grade of D

**MUT 421 Composition I 3 cr**

Original work in musical composition. To be taken in sequence. Offered by special arrangement only.

**Prerequisite:** MUT 314 Minimum Grade of D

**MUT 422 Composition II 3 cr**

Original work in musical composition. To be taken in sequence. Offered by special arrangement only.

**Prerequisite:** MUT 421 Minimum Grade of D

**MUT 431 Jazz Improvisation I 2 cr**

The study of elementary improvisation techniques used in contemporary jazz performance. Instructor permission required.

**MUT 432 Jazz Improvisation II 2 cr**

The study of intermediate to advanced improvisation techniques used in contemporary jazz performance. Instructor permission required.

**MUT 490 Special Topics - 1-3 cr**

Special topics in music theory and composition. May be repeated for a maximum of six hours credit when content varies.

**MUT 512 Intro Analysis of Music Lit 4 cr**

Introduction to the techniques of analysis applied to a selection of music literature emphasizing works from the seventeenth century to the middle of the twentieth century.

**MUT 513 Pedagogy of Theory 1-4 cr**

Practices and principles of teaching music theory, emphasizing most desirable and practical offerings possible. A comparative survey of current systems and materials for teaching music theory and aural skills. Review of materials and methods used in teaching the written music theory sequence and in teaching aural skills (music dictation and sight singing). Includes review of textbooks and technology used in the classroom.

**MUT 531 Jazz Improvisation I 2 cr**

The study of elementary improvisation techniques used in contemporary jazz performance. Instructor permission required.

**MUT 532 Jazz Improvisation II 2 cr**

The study of intermediate to advanced improvisation techniques used in contemporary jazz performance. Instructor permission required.

## Native American Studies (NAS) (NAS)

**NAS 101 Intro Native American Studies 3 cr**

This course is designed to provide a general introduction to Native American Studies. The class will explore a range of topics covering historical and contemporary issues from the perspective of Native Americans.

**NAS 390 Directed Studies- 1-6 cr**

Directed Studies consists of readings or projects relating to Native American Studies chosen by the student and completed under direct supervision of the course director.

**NAS 490 Special Topics - 3 cr**

An investigation of issues and concepts in Native American Studies for advanced undergraduate students. May be repeated, when content varies, for a total of six hours.

**NAS 496 Internship Native Am Studies 3-6 cr**

Internship in Native American Studies allows the student to combine academic learning with practical experience as an intern with a position relevant to Native American Studies.

## Natural Science Educ (NSE) (NSE)

**NSE 201 Intro to Physical Science 3 cr**

The scientific attitude, the application of physical laws and principles to modern life, and assembling of apparatus and materials for demonstrating these principles are studied. (Not open to science majors.)

**NSE 202 Intro to Physical Science 3 cr**

The scientific attitude, the application of physical science laws and principles to modern life, and assembling of apparatus and materials for demonstrating these principles are studied. (Not open to science majors.)

**NSE 403 Aerospace Education 3 cr**

Basic principles of flight; survey of space exploration, military, commercial, and general aviation. Preparation of materials for use in teaching.

**NSE 404 Aerospace Education 3 cr**

Basic scientific principles applied in aerospace. Development of model rockets and aircraft. Preparation of materials for use in teaching.

**NSE 494 Dir St - 1-3 cr**

Directed study. No more than 6 hours can be accepted for a Bachelor's Degree and Class B Certificate. Prerequisite: Permission of department chair.

**NSE 501 Adv Aerospace Education 3 cr**

Scientific principles applied in aerospace education. Development of model rockets and aircraft. Preparation of advanced materials for teaching.

**NSE 594 Dir St and Research 1-3 cr**

Students explore through directed study problems and issues of special interest or signification in Science Education. No more than 3 hours of any departmental 594 courses can be applied toward a degree program. Prerequisite: Permission of department chair.

## Neurology - MD (NRY)

**NRY 311 Neurology 4 cr**

This rotation includes time on both inpatient and outpatient services, including performing hospital and Emergency Room consultations. The student will become proficient in performing a neurological examination and will learn the basic principles underlying diagnosis and management of the most common neurologic disorders.

**NRY 400 Neurology Externship 4 cr**

To be determined.

**NRY 411 Neurology 4 cr**

Four-week rotation in neurology, including time spent on the USAMC service, performing ER and hospital consults and in out-patient clinics, including offices of private Neurologists.

**NRY 444 Spec Elec-Neurology 4 cr**

To be prepared by the student in conjunction with the Course Director and approved by the Vice Dean before course can be added to schedule. This course is designed to offer students and faculty/clinical faculty an opportunity to develop electives which are not offered in the Elective Manual. Such an elective may be made permanent and printed in the next edition of the Elective Manual at the request of the Course Director and with the approval of the Curriculum Committee. At the discretion of the Vice Dean, this elective may count as the required "in-house" elective.

**NRY 450 Acting Intern - Neurology 4 cr**

This is a four-week rotation in neurology, which provides advanced experience and clinical responsibilities in general neurology. Flexibility is provided to students to tailor their experiences in subspecialty areas, including stroke, epilepsy, multiple sclerosis, neuromuscular disease and clinical neurophysiology. The acting intern will take 5 overnight ccalls with the inpatient neurology service at the USA Medical Center alongside an upper level resident where the AI will function at the leve of a first year neurology resident.

**NRY 460 Clinical Outpatient Neurology 4 cr**

This is a four-week rotation in neurology, which provides advanced experience and clinical responsibilities in general neurology. Flexibility is provided to students to tailor their experiences in subspecialty areas, including stroke, epilepsy, multiple sclerosis, neuromuscular disease and clinical neurophysiology.

**NRY 480 Clinical Neurology 1-4 cr**

Four-week rotation in neurology, including time spent on the USAMC service, performing ER and hospital consults and in outpatient clinics, including offices of private Neurologists.

## Neuroscience and Behavior - MD (NSB)

**NSB 240 Neuroscience and Behavior 12 cr**

Neuroscience and Behavior concludes the pre-clerkship curriculum as a 12-week module designed to provide students with the knowledge and skills to understand and evaluate normal function, disease processes, injuries and psychiatric disorders of the human nervous system. The first 10 weeks study focus on the anatomy, biology and function of the central and peripheral nervous systems as students learn the diagnostic methods and criteria, pathophysiology and treatments of prevalent and prototypical neurologic injuries and disorders. Training shifts in the final two weeks to behavioral science as students learn about the classification, clinical presentation, psychopathology and treatment of prevalent psychiatric conditions. Upon completion of the module, students will have a fundamental understanding of the structure and function of the human nervous system, the clinical manifestations of common neurologic and psychiatric disorders, and treatments for these conditions. Students will learn to take an accurate neurologic history, conduct the essential elements of the neurologic exam, perform a psychiatric assessment, and develop interpersonal skills and professional attitudes expected in the practice of neurology and psychiatry.

## Neurosurgery - MD (NSY)

**NSY 311 Neurosurgery 4 cr****NSY 400 Neurosurgery Externship 4 cr**

To be determined.

**NSY 411 Neurological Surgery 1-4 cr**

Four-week experience in neurosurgery including rotations on clinical admission, consultation, and patient services of the department. This includes both adult and child experience.

**NSY 444 Spec Elec-Neurosurgery 4 cr**

To be prepared by the student in conjunction with the Course Director and approved by the Vice Dean before course can be added to schedule. This course is designed to offer students and faculty/clinical faculty an opportunity to develop electives which are not offered in the Elective Manual. Such an elective may be made permanent and printed in the next edition of the Elective Manual at the request of the Course Director and with the approval of the Curriculum Committee. At the discretion of the Vice Dean, this elective may count as the required "in-house" elective.

**NSY 480 Neurological Surgery 4 cr**

Four-week experience in neurosurgery including rotations on clinical admission, consultation and patient services of the department. This includes both adult and child experience.

# Nursing (NU) (NU)

## NU 101 Freshman Seminar in Nursing 2 cr

The purpose of this course is to introduce the unique requirements and opportunities of professional nursing to beginning students who have declared nursing as their major and are considering nursing as a major. The course focuses on the value of higher education as a base for a career in nursing and develops an awareness of activities and support services available within the University to enhance student success. Academic rules and regulations and policies related to admission, progression, and graduation in the University and College are discussed.

## NU 300 Foundations of Prof Nsg 5 cr

The purpose of the course is to provide students the opportunity to appraise theories, concepts, evidence, issues and trends in promoting the health of an adult-geron population experiencing commonly occurring health care needs. Emphasis is on the use of the nursing process and other systematic approaches to assess, plan, implement, and evaluate health promotion and maintenance activities, illness care, and rehabilitation with adults in a variety of acute and community settings.  
**Prerequisite:** (NU 325 Minimum Grade of C and NU 327 Minimum Grade of C and NU 311 Minimum Grade of C and HSC 343 (may be taken concurrently) Minimum Grade of C and HSC 342 (may be taken concurrently) Minimum Grade of C)

**Corequisite:** NU 301

## NU 301 Foundations of Prof Nsg Clin 3 cr

Application of concepts and theories related to health promotion and maintenance, illness care, and rehabilitation with an adult-geron population experiencing commonly occurring health care needs. Emphasis is the role of the professional nurse and on the use of the nursing process with an adult-geron population in a variety of acute and community based settings.

**Prerequisite:** (NU 325 Minimum Grade of C and NU 327 Minimum Grade of C and NU 311 Minimum Grade of C) and (HSC 342 (may be taken concurrently) Minimum Grade of C and HSC 343 (may be taken concurrently) Minimum Grade of C)

**Corequisite:** NU 300

## NU 302 Essentials of Professional Nsg 4 cr

The purpose of this course is to provide an overview of pathophysiology, pharmacology, clinical skills assessment, and medication administration. The course focuses on the responsibility of the professional nurse in ensuring quality and safety.

**Prerequisite:** (NU 325 (may be taken concurrently) and NU 311 (may be taken concurrently) and NU 327 (may be taken concurrently) and HSC 343 (may be taken concurrently))

## NU 303 Essen of Medical-Surgical Nsg 4 cr

The purpose of this course is to provide an overview of pathophysiology, pharmacology, clinical skills assessment, and medication administration within the medical-surgical nursing environment. The course focuses on the responsibility of the professional nurse in ensuring quality and safety in providing medical-surgical care for diverse populations across the lifespan.

## NU 304 Evidence Based Practice NU- W 3 cr

The purpose of this course is to introduce evidence-based practice (EBP), including the basic components of the research process to the undergraduate nursing student. Emphasis within the course is on evaluation of research relevant to nursing practice, and the implications of its application to care provided to the patient. Implications of research and EBP are examined, including the roles of clinical expertise, ethics, and patient values and preferences. This course requires professional component standing. This is a writing (W) course. NU 304 Course Objective Changes 1. Demonstrate foundational understanding of the research process, theory, and evidence-based practice process. 2. Integrate evidence into clinical practice by applying ethical and legal implications of research and using a systematic approach to evidence-based practice processes. 3. Evaluate evidence relevant to nursing practice. 4. Integrate professional writing standards in nursing research and evidence-based practice.

## NU 305 Essen of OB/Peds/Psych Nsg 4 cr

The purpose of this course is to provide an overview of pathophysiology, pharmacology, clinical skills assessment, and medication administration within specialty areas of foci including the maternal, child, and mental health settings. The course focuses on the responsibility of the professional nurse in ensuring quality and safety in providing specialty care to women and children, and to those with mental health needs across the lifespan.

## NU 306 Essentials of Adult Geron Nsg 4 cr

The purpose of this course is to provide an overview of pathophysiology, pharmacology, clinical skills assessment, and medication administration within the adult gerontological nursing environment. The course focuses on the responsibility of the professional nurse in ensuring quality and safety in providing care for diverse populations across the adult lifespan.

## NU 307 Concepts of Profess Nsg Pract 4 cr

The purpose of this course is to provide an opportunity for students to remediate on practice accountability or professionalism in order to be successful post-graduation. The course focuses on the responsibility of the professional nurse in ensuring quality and safety in providing care to diverse populations across the lifespan, interacting as a member of an interdisciplinary health care team, and demonstrating accountability for personal actions within the professional practice environment.

## NU 311 Clinical Nursing Skills 3 cr

The purpose of this course is to provide students the opportunity to acquire basic nursing care skills. The emphasis is on the responsibilities of the professional nurse in ensuring quality and safety. Students are introduced to simulation as an approach to sharpen clinical reasoning and communication skills in a safe environment. Prerequisites: Admission or special permission of instructor.

**Corequisite:** NU 325

## NU 311B Clinical Nursing Skills 3 cr

The purpose of this course is to provide students the opportunity to acquire basic nursing care skills. The emphasis is on the responsibilities of the professional nurse in ensuring quality and safety. Students are introduced to simulation as an approach to sharpen clinical reasoning and communication skills in a safe environment. Prerequisites: Admission or special permission of instructor.

**NU 325 Health Assessment 3 cr**

The purpose of the course is to provide students the opportunity to acquire basic nursing assessment skills. The emphasis is on the assessment skills of the whole person, including physical, psychological, sociocultural, and spiritual aspects of persons from all stages of life. Students will learn skills associated with obtaining a health history and performing health assessments across the lifespan. Prerequisite: Admission to professional component or special permission of instructor.

**Corequisite:** NU 311

**NU 325B Health Assessment 3 cr**

The purpose of the course is to provide students the opportunity to acquire basic nursing assessment skills. The emphasis is on the assessment skills of the whole person, including physical, psychological, sociocultural, and spiritual aspects of persons from all stages of life. Students will learn skills associated with obtaining a health history and performing health assessments across the lifespan. Prerequisite: Admission to professional component or special permission of instructor. Restricted to students in the RN to BSN program.

**Corequisite:** NU 311

**Cross-Listed:** NU 325

**NU 327 Patho Basis of Nursing 3 cr**

The purpose of the course is to provide students the opportunity to acquire the theory and evidence applicable to the physiology and alterations in physiology of individuals across the lifespan. The emphasis of this course is alterations in cardiovascular, pulmonary, genitourinary, gastrointestinal, immune, neurological, musculoskeletal, and endocrine systems. Prerequisite: Admission to professional component or special permission of instructor.

**Prerequisite:** (NU 311 (may be taken concurrently) Minimum Grade of C and NU 325 (may be taken concurrently) Minimum Grade of C)

**NU 327B Patho Basis of Nursing 3 cr**

The purpose of the course is to provide students the opportunity to acquire the theory and evidence applicable to the physiology and alterations in physiology of individuals across the lifespan. The emphasis of this course is alterations in cardiovascular, pulmonary, genitourinary, gastrointestinal, immune, neurological, musculoskeletal, and endocrine systems. Prerequisite: Admission to professional component or special permission of instructor. Restricted to students in the RN to BSN program.

**NU 332 Clinical Nutrition 2 cr**

The purpose of this course is to provide students the opportunity to acquire nutritional theory and evidence required for health promotion and disease prevention of individuals across the lifespan.

**Prerequisite:** (NU 325 Minimum Grade of C and NU 327 Minimum Grade of C and NU 311 Minimum Grade of C and HSC 343 Minimum Grade of C and HSC 342 Minimum Grade of C and NU 300 (may be taken concurrently) Minimum Grade of C and NU 301 (may be taken concurrently) Minimum Grade of C)

**NU 390 Sp Top - 1-8 cr**

Study of a significant topic or problem in Nursing and the Health Professions. This course may be repeated for a total of four credits. Requires special permission.

**NU 394 Directed Study - 1-4 cr**

Individual study in a nursing area chosen in consultation with instructor. Requires special permission.

**NU 395 Study Abroad Cultural Exp 9 cr**

The purpose of this course for the undergraduate student is to develop an improved understanding of culture, Leininger's theory of Diversity and Universality, to recognize any cultural practices that affect health care, to incorporate this understanding into the provision of care. Culture will be examined through writing, cultural experiences, through collaboration. The course is underpinned by Dr. Leininger's definition of culture and her theory of culture care.

**NU 405 Transition to RN Practice 2 cr**

Building on previous knowledge and experience in the practical nursing role, this course will prepare Licensed Practicum Nurses (LPN) to transition to the baccalaureate-prepared registered nursing (RN) role through critical analysis of the relationship between leadership, policy advocacy, and membership within the interdisciplinary healthcare team. Students will also examine how nursing theory guides professional practice. Students will build confidence in professional nursing roles including leader, advocate, and caregiver to deliver inclusive, person-centered, trauma-informed healthcare in a diverse society.

**Prerequisite:** NU 447

**Corequisite:** NU 460

**NU 412 Dec Making Prof Nsg Practice 3 cr**

This course focuses on continuing the leadership development of the student within the context of providing professional nursing care to patients and families across the lifespan. Decision-making, delegation, and motivation competencies are emphasized.

**Prerequisite:** (CMN 420 (may be taken concurrently) Minimum Grade of C and CMN 421 (may be taken concurrently) Minimum Grade of C and AHN 447 Minimum Grade of C and AHN 448 Minimum Grade of C and NU 414 (may be taken concurrently) Minimum Grade of C)

**Corequisite:** NU 460

**NU 414 Issues & Trends Healthcare -W 3 cr**

The purpose of this web based course is to provide students the opportunity to integrate leadership roles and functions, management strategies, current issues and trends affecting nursing and health care and continued professional development, into a personal lifelong learning plan. Emphasis is on the professional nurse as a leader in improving patient care and cost effectiveness of health care and the development of a current nursing workforce. National interest areas such as patient safety, policy, patient centered care, and the process for quality improvement are primary focuses.

**Prerequisite:** (AHN 447 (may be taken concurrently) Minimum Grade of C and AHN 448 (may be taken concurrently) Minimum Grade of C)

**NU 450 Lead/Mang Roles Prof Nsg Pra-W 4 cr**

The purpose of this course is the continued development of conceptual and practical knowledge of professional nursing leadership and management roles in a complex adaptive healthcare system. Content includes but is not limited to: management, systems leadership, professional values, personal vs organizational philosophy, quality improvement, and performance appraisal. Other topics related to professional nursing include social, political, legal, and ethical issues.

**NU 451 Current Issues/Trends Prof Nsg 4 cr**

Current issues and trends affecting nursing and healthcare in society will be reviewed. Emphasis will be on the development of professional nursing contributions to the changing healthcare environment. Content includes but is not limited to: Issues in the healthcare environment including social, legal, ethical, safety and political.

**Prerequisite:** (NU 450 (may be taken concurrently) Minimum Grade of C)

**NU 452 Clinical Preven & Pop Health 4 cr**

Theoretical concepts related to healthcare promotion/disease prevention to improve health at individual, family, and population level in the global community. Content includes but is not limited to: health behaviors, health literacy, at-risk populations, genetics, chronic illness, socioeconomic status, environmental exposures, ethics, advocacy, social justice, civic responsibility and strategies of risk reduction and improvement in disparities in outcomes are evaluated and applied to population health.

**Prerequisite:** (NU 450 (may be taken concurrently) Minimum Grade of C)

**NU 453 Infor Manag & Tech in Hlthcare 4 cr**

This course will prepare Registered Nurse students to recognize the critical role of information management and patient care technology in identifying technological solutions to enhance delivery of quality patient care and outcomes. Content includes but is not limited to: nurse sensitive indicators (assessment, pathophysiology), safety, ethical and legal aspects.

**Prerequisite:** NU 450 Minimum Grade of C

**NU 454 Research & EBP Practicum-W 4 cr**

This course allows Registered Nurse students to analyze basics research process and methodology. Students will complete direct and indirect clinical care experiences, identify practice issues, levels of evidence, identify and synthesize evidence, and propose practice initiatives by participating in quality improvement in a variety of diverse healthcare or community systems. Content includes but is not limited to: organizational models, change theory, critical thinking, ethical, legal and political influences. \*Practice integrated experience - develop a quality improvement initiative to address a system or community health need or problem. This is a direct and indirect clinical course.

**Prerequisite:** (NU 450 Minimum Grade of C and NU 451 Minimum Grade of C and NU 452 (may be taken concurrently) Minimum Grade of C and NU 453 (may be taken concurrently) Minimum Grade of C and NU 455 (may be taken concurrently) Minimum Grade of C) or EH 102 Minimum Grade of C or EH 105 Minimum Grade of C

**NU 455 Concept Interprofessional Care 4 cr**

Develop skills to support communication and collaboration among healthcare professionals and delivery of safe, high quality patient care. Focus on applying current Interprofessional Education Collaborative (IPEC) competencies, including collaborative strategies and resource management in complex healthcare systems.

**Prerequisite:** NU 450 Minimum Grade of C

**NU 460 Practicum 6 cr**

Culminating clinical practice course to provide students an in-depth learning experience in a selected areas of nursing practice. The leadership, management, and caregiver roles of the professional nurse with patients and their families in a selected areas of nursing practice is will be emphasized. Students are assigned to nurse preceptors and with faculty guidance focus on leadership and management, and application of the nursing process, theories, concepts, issues and trends in caring for patients in a variety of preceptorship placements in acute and community settings. Concepts of interprofessional practice will be emphasized. A total of 270 clinical hours will be required.

**Prerequisite:** (AHN 447 Minimum Grade of C and AHN 448 Minimum Grade of C and CMN 420 (may be taken concurrently) Minimum Grade of C and CMN 421 (may be taken concurrently) Minimum Grade of C and NU 414 (may be taken concurrently) Minimum Grade of C)

**Corequisite:** NU 412

**NU 490 Special Topics 9 cr**

Study of a significant topic or problem in nursing and the health professions. This course may be repeated for a total of four credits. Requires special permission.

**NU 496 Service Abroad Hlth Related EX 9 cr**

This is a service learning course that will culminate in select communities in the international setting Emphasis is on providing culturally competent care by providing and immersion experience.

**NU 499 NU Honors Senior Project 1-6 cr**

The purpose of the course is to provide students the opportunity to investigate scholarly undergraduate research, service-learning, or study abroad experiences resulting in development of the written honors thesis. Nursing Honors Program. Requires special permission.

**Prerequisite:** HON 301 (may be taken concurrently) Minimum Grade of D

**NU 500 Explore Culture Sexual Assault 2 cr**

The purpose of this course is to provide nursing students an in-depth exploration of forensic nursing concepts and principles related to caring for the victim and survivor of sexual violence from a population health care perspective with a cultural emphasis. A spectrum of compassionate care incorporating cultural understanding and respect that is cognizant from assault to post trauma aftermath including life-long sequelae and its prevention is utilized. Prevention and health promotion models of care within the context of transcultural global health priorities are reviewed. Forensic nursing concepts and principles related to caring for the victim of sexual violence from a culturally congruent population healthcare perspective across the lifespan are explored including compassionate continued care post-sexual assault.

**NU 502 Sexual Assault Vic Practicum 1 cr**

The purpose of this course is to provide nursing students opportunities to apply didactic principles to ensure competency in the care of the sexually traumatized patient with particular emphasis on complex forensic histories involving special populations and challenging treatment situations. Students will conduct forensic interviews, exams, preserve evidence, and determine proper techniques involving patients from diverse cultural backgrounds. Students will identify, critical analyze, determine follow up, and evaluate patient responses that may include a variety of cultural, economic, and physical challenges.

**Prerequisite:** NU 500 (may be taken concurrently) Minimum Grade of C

**NU 503 Trauma Care Sexual Assault Vic 2 cr**

The purpose of this course is to expand the graduate nursing student's knowledge of trauma, particularly sexual trauma. The focus is on examining ongoing threats to safety among individuals, communities, and witnesses to trauma. The course will facilitate students to create policy initiatives, community service activities, and to become violence prevention advocates. The student will understand NP leadership in collaboration with SART, professional nurse testimony and participation in the legal process to empower victims, decrease revictimization, and ensure social justice and healthcare access to the victim, suspect, witness and communities impacted by sexual violence.

**Prerequisite:** NU 500 Minimum Grade of C

**NU 504 Adv Pharm Care Post Assault 2 cr**

The purpose of this course is to examine the pharmacological principles and the current treatment modalities of post-sexual assault care.

The focus is the selection and monitoring of drug therapy of sexual assault victims throughout the the lifespan and across post trauma disease processes. Motivational patient education and follow-up to incentivize adherence and prevent complications will be explored using the pathology of infectious and communicable disease, psychosocial science, pediatric growth and development, and the legal systems as its framework.

**Prerequisite:** NU 500 Minimum Grade of C

**NU 505 Sup Care Comorbid Post Assault 2 cr**

The purpose of this course is to increase the graduate student's knowledge of the victim/survivor's response to trauma, particularly sexual trauma. The focus is on examining the behavioral, psychological, and physiologic response of victims/survivors across the lifespan with consideration of gender and socio-cultural factors. The emphasis is on patient centered care and includes a multidisciplinary team approach to developing individualized plans of care to facilitate restorative healing for victims/survivors of sexual trauma.

**Prerequisite:** NU 500 Minimum Grade of C

**NU 506 EBP & Informatics Prof Nurses 4 cr**

This course assists students who have completed Registered Nurse training to apply principles of evidence-based practice (EBP) and informatics to modern nursing practice issues. The focus of the course is on the application, interpretation, and incorporation of research principles to promote improvement of health care outcomes. Emphasis is on critical appraisal of research and use of data in quality improvement.

**NU 507 Leadership & Management Roles 4 cr**

This course assists students who have completed Registered Nurse training to development conceptual and practical knowledge of professional nursing leadership and management roles in a complex adaptive healthcare system. The focus of the course is on nursing roles related to management, system leadership, professional values, personal vs organizational philosophy, quality improvement, and performance appraisal. Social, political, legal, and ethical issues surrounding professional nursing leadership will be evaluated.

**NU 508 Clinical Prevention & Pop Hlth 4 cr**

The purpose of this graduate course for Registered Nurse students is to promote knowledge and understanding of theoretical concepts related to the professional nurses' role in population health promotion. Emphasis will be on healthcare promotion/disease prevention to improve health at individual, family, and population levels in the global community. Content related to health behaviors, health literacy, at-risk populations, genetics, chronic illness, socioeconomic status, environmental exposures, ethics, advocacy, social justice, civic responsibility and strategies of risk reduction and improvement in disparities in outcomes are evaluated and applied by the registered nurse to population health will be a focus.

**NU 509 Bioethics Advan Practice Nsg 1 cr**

This course examines bioethical topics that emerge in contemporary health care and explores the socio-political, legal, technological, and economic variables that contribute to these issues. Students will gain understanding of ethical and legal concepts and apply the principles in advanced nursing practice

**NU 510 Addictions Practicum I 1 cr**

This course serves as a one of three practicum courses in the Addictions Subspecialty nursing program. The purpose of this practicum course is preparation in prevention, screening, assessment, diagnosing, and management/treatment including recovery care of OUD/SUD integrated health care and telehealth settings across the lifespan. While preparation is across the life span, emphasis will be focused on child, adolescent, and transitional-age populations.

**Corequisite:** HSC 580

**NU 511 Addictions Practicum II 2 cr**

This course serves as a one of three practicum courses in the Addictions Subspecialty nursing program. The purpose of this practicum course is preparation in prevention, screening, assessment, diagnosing, and management/treatment including recovery care of OUD/SUD integrated health care and telehealth settings across the lifespan. While preparation is across the life span, emphasis will be focused on child, adolescent, and transitional-age populations.

**Prerequisite:** (NU 510 Minimum Grade of C and HSC 580 Minimum Grade of C)

**Corequisite:** HSC 581

**NU 512 Addictions Practicum III 2 cr**

This course serves as a one of three practicum courses in the Addictions Subspecialty nursing program. The purpose of this practicum course is preparation in prevention, screening, assessment, diagnosing, and management/treatment including recovery care of OUD/SUD integrated health care and telehealth settings across the lifespan. While preparation is across the life span, emphasis will be focused on child, adolescent, and transitional-age populations.

**Prerequisite:** (NU 510 Minimum Grade of C and NU 511 Minimum Grade of C and HSC 580 Minimum Grade of C and HSC 581 Minimum Grade of C)

**Corequisite:** HSC 582

**NU 513 Addictions Practicum IV 4 cr**

This course serves as an optional fourth practicum in the Additions Specialty nursing program. The purpose of this practicum course is reinforcement of prevention, screening, assessment, diagnosing, and management/treatment including recovery care of OUD/SUD and other addiction disorders within integrated health care and telehealth settings across the lifespan. Emphasis will be focused on child through geriatric age population.

**Prerequisite:** (NU 510 Minimum Grade of C and NU 511 Minimum Grade of C and NU 512 Minimum Grade of C and HSC 580 Minimum Grade of C and HSC 581 Minimum Grade of C and HSC 582 Minimum Grade of C)

**NU 515 Clinical Concepts/CNS Role I 2 cr**

The purpose of this course is to introduce students to the role of the Clinical Nurse Specialist and examine the epidemiologic, assessment, diagnostic, management and evaluation of adolescent/adult/old adult patients across the continuum of healthcare services (from wellness through acute care). The course focuses on health promotion, health protection, and disease management of patients with cardiovascular, pulmonary, and musculoskeletal health issues to include differential diagnoses and pharmacotherapeutics. The course explores the dynamic interplay between the pathophysiologic basis of disease and the psychosocial and socio-cultural responses to acute illness and injury as clinical decision-making skills are developed. Emphasis within the course is placed on synthesizing and applying the core competencies of the Clinical Nurse Specialist.

**Prerequisite:** NU 545 (may be taken concurrently) Minimum Grade of C and NU 578 (may be taken concurrently) Minimum Grade of C and NU 518 (may be taken concurrently) Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C

**Cross-Listed:** AHN 515

**NU 516 Clinical Concepts/CNS Role II 3 cr**

The purpose of this course is to integrate advanced pharmacology and pathophysiology, and assessment for the provision of advanced nursing care across the continuum of healthcare services (from wellness through acute care) to meet the specialized needs of adolescent/adult/old adult patients. The course focuses on health promotion, health protection, and disease management of patients with endocrine, neurologic, gastrointestinal, renal, and genitourinary health problems. Emphasis within the course is placed on the CNS's influence on health care incorporating the perspectives of technology, social justice, fiscal stewardship, patient advocacy, and evidence-based practice.

**Prerequisite:** NU 515 Minimum Grade of C and AHN 516 Minimum Grade of C

**Corequisite:** AHN 517

**NU 517 Clinical Concepts/CNS Role III 3 cr**

The purpose of this course is to provide a forum for the analysis, synthesis, and application of knowledge required for the CNS role in the management of acute and chronic problems as well as management and prevention of exacerbations of chronic health problems from adolescent/adult/older adult age groups. The course focuses on health promotion, health protection, and disease management of patients with hematology/oncology, immunology, infectious disease, integumentary, and psychosocial health issues. The emphasis is on the CNS spheres of influence to identify problems, manage resources and fiscal outcomes, design and select therapeutic interventions, and evaluate products and devices for use with patients and health team members from diverse cultural and ethnic backgrounds. Potential for contributions and entrepreneurial opportunities within nursing will be addressed.

**Prerequisite:** NU 516 Minimum Grade of C and AHN 517 Minimum Grade of C and NU 607 (may be taken concurrently) Minimum Grade of C and NU 610 (may be taken concurrently) Minimum Grade of C and NU 613 (may be taken concurrently) Minimum Grade of C

**Corequisite:** AHN 518

**NU 518 Adv Nursing Assessment 3 cr**

This course is designed to further develop the student's advanced knowledge and skills for obtaining and recording a systematic health history and advanced physical examination of individuals and families across the lifespan. The course involves synthesis and application of nursing, biologic, psychologic, and socio-cultural knowledge and theories in comprehensive health assessment for the purposes of health promotion, differential diagnosis, and development of health records. The central objective is the development of cognitive and clinical skills needed to provide comprehensive care to individuals of all ages in primary, secondary, and tertiary care settings.

**NU 520 NU MSN Incomplete Extension 1-5 cr****NU 526 Trauma-Informed Integrated Behavioral Healthcare Practicum I 1 cr**

The purpose of this practicum course is to prepare graduate nursing students in interprofessional behavioral health assessment, and professionalism in trauma-informed care in integrated settings serving patients across the life-span. While preparation is across the life span with emphasis focused on child through transitional age population.

**Corequisite:** HSC 512

**NU 527 Trauma-Informed Integrated Behavioral Healthcare Practicum II 2 cr**

This course serves as the second of three practicum courses in the Trauma-Informed Integrated Behavioral Healthcare nursing subspecialty. The purpose of this practicum course is to prepare the graduate nursing student to apply knowledge of screening, intake, intervention and trauma-informed care in integrated telehealth settings serving across the lifespan with emphasis on child through transitional age populations.

**Prerequisite:** (NU 526 Minimum Grade of C and HSC 512 Minimum Grade of C)

**Corequisite:** HSC 511

**NU 528 Trauma-Informed Integrated Behavioral Healthcare Practicum III 2 cr**

This course serves as the third of three practicum courses in the Trauma-Informed Integrated Behavioral Healthcare nursing subspecialty. The purpose of this practicum course is to prepare graduate nursing students to participate in screening, intake, intervention, and trauma-informed care in integrated settings serving across the lifespan with emphasis on child through transitional age populations.

**Prerequisite:** (NU 526 Minimum Grade of C and NU 527 Minimum Grade of C and HSC 511 Minimum Grade of C and HSC 512 Minimum Grade of C)

**Corequisite:** HSC 510

**NU 535 Clin Ldr Role & Competencies 3 cr**

The purpose of this courses is to explore the role and function of the clinical nurse leader. The course focuses on the implementation of the role which will vary across settings and facilities. The emphasis is on evidenced-based practice and knowledge and skills that the CNL role requires for successful enactment of the role.

**Prerequisite:** NU 607 Minimum Grade of C and NU 518 (may be taken concurrently) Minimum Grade of C and NU 545 (may be taken concurrently) Minimum Grade of C and NU 578 (may be taken concurrently) Minimum Grade of C

**Corequisite:** NU 536

**NU 536 Clin Nurse Ldr Pract I 5 cr**

The purpose of this first of two capstone Clinical Nurse Leader courses is to provide students an in-depth preceptor-based clinical experience in a selected area of nursing practice. The focus of the course is on the CNL as caregiver, leader, and care manager. Emphasis is on the application of the nursing process, theories, concepts, research, issues and trends in providing care in complex patient situations and managing the care of a group of patients.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 578 Minimum Grade of C)

**Corequisite:** NU 535

**NU 537 Clin Nurse Leader Synthesis 3 cr**

The purpose of this culminating synthesis course for the CNL role is provide students an opportunity to analyze and evaluate actual CNL practice patterns. The course focuses on continuing to build the students competencies in clinical decision making, problem identification, resource management, and outcome measurement for a selected patient population at the point of care. The emphasis is on working with patients and health team members from diverse cultural and ethnic background, accountability for coordination, delegation and supervision of care within a multidisciplinary team.

**Prerequisite:** (NU 535 Minimum Grade of C and NU 536 Minimum Grade of C) and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 607 Minimum Grade of C

**Corequisite:** NU 538

**NU 538 Clinical Nurse Ldr Pract II 4 cr**

The purpose of this second of two capstone Clinical Nurse Leader courses is to provide students an immersion experience in the CNL role in a selected area of nursing practice. The focus of the course is to further develop CNL competencies with emphasis on team leading and building, advocacy, communication, resource and outcomes management, and evidenced based practice.

**Prerequisite:** NU 535 Minimum Grade of C and NU 536 Minimum Grade of C

**Corequisite:** NU 537

**NU 539 Intro to Nursing Informatics 3 cr**

The purpose of this course is to provide the student an introduction to nursing informatics and the evolving importance of the application and evaluation of information technology in nursing and health care. The emphasis of the course is to provide the students the expertise and knowledge to function effectively in the modern health care information technology (IT) environment.

**NU 545 Physio-Patho Basis of Adv Nsg 3 cr**

The purpose of this course is to provide the advanced practice nurse with knowledge of normal physiology and alterations in physiology in individuals across the life span. The focus is theory and research applicable to organ systems and cellular events. Emphasis is on regulatory and compensatory functions in health and in pathophysiological conditions.

**NU 553 Administrative Concepts 2 cr**

The purpose of this course is to examine concepts, theories and current trends in healthcare administration. The focus is the identification of leadership and management strategies in the management of physical, financial, and human resources in healthcare systems. Emphasis is placed on organizational leadership and management theories, ethical and legal issues, human resource management, and teamwork and collaboration to meet the health care needs of vulnerable populations in culturally diverse communities.

**Prerequisite:** NU 607 (may be taken concurrently) Minimum Grade of C

**Corequisite:** NU 554

**NU 554 Resource Manag Field Study 1 cr**

The purpose of the supervised field study activity is to provide the student with a clinical experience to investigate the purpose and structure of a health care agency in the community. The course focus is on administration and resource management in health care organizations. Emphasis within the course is placed on the synthesis of the knowledge acquired in previous courses.

**Prerequisite:** NU 607 (may be taken concurrently) Minimum Grade of C  
**Corequisite:** NU 553

**NU 556 Informatics & Qual Care Improv 3 cr**

The purpose of this course is to focus on quality improvement models and methods which will use client outcome measures across a broad range of health care settings. Emphasis will be placed on Continuous Quality Improvement (CQI) methods and their relationships with current health care systems.

**Prerequisite:** (ISC 555 Minimum Grade of C and ISC 550 Minimum Grade of C and NU 539 Minimum Grade of C and NU 553 Minimum Grade of C and NU 554 Minimum Grade of C and NU 565 Minimum Grade of C)

**Corequisite:** NU 557

**NU 557 Clinical Informatics Pract I 2 cr**

This clinical course allows students to integrate concepts and theories in clinical informatics in selected health care settings. This practicum offers students an opportunity to work closely with a health care vendor and integrate concepts/theories in clinical informatics. Additionally students will begin to learn how to configure and customize operating systems. Students will also begin to identify their site for Clinical Informatics Practicum II.

**Corequisite:** NU 556

**NU 558 Seminar in Nursing Informatics 3 cr**

This course will provide students the opportunity to discover the responsibilities of the Nursing Informatics Specialist's role by applying legal/ethical concepts to selected case studies in a variety of situations.

**Prerequisite:** NU 607 (may be taken concurrently) Minimum Grade of C and NU 610 (may be taken concurrently) Minimum Grade of C and NU 613 (may be taken concurrently) Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C

**Corequisite:** NU 559

**NU 559 Clinical Informatics Pract II 2 cr**

This clinical course allows students to integrate and apply informatics competencies in the nurse informatics specialty role while working closely with a guided preceptor. This role may take place within a variety of health care settings.

**Corequisite:** NU 558

**NU 560 Adm & Mgt for Adv Nsg Practice 3 cr**

The purpose of this course is to examine concepts and methods of nursing administration. The focus is on management of physical, financial, and human resources in dynamic healthcare systems. Emphasis is on leadership, communication, interprofessional team functioning, and collaboration and to meet healthcare needs in culturally diverse populations.

**Prerequisite:** NU 607 (may be taken concurrently) Minimum Grade of C and NU 613 (may be taken concurrently) Minimum Grade of C

**NU 561 Nursing Admin Concepts-Theory 3 cr**

The purpose of this course is to introduce the role of the nurse executive. The course focuses on role expectations and professional competency requirements. Emphasis within the course is placed on the influential role of the nurse executive in improving patient care, improving health of populations, and reducing healthcare costs.

**Corequisite:** NU 566

**NU 563 Exec Admin Clin Progression 1-4 cr**

The purpose of this progression practicum is to facilitate student independence in the Executive Nurse Administrator role. The focus is on the application and synthesis of knowledge and skills acquired in all previous courses and to develop the necessary skills to progress to the next level of competency in the Executive Nurse Administrator role.

**NU 565 Nursing Administration Finance 3 cr**

The purpose of this course is to introduce nurse administrators to healthcare financial management. The course focuses on reimbursement and expenditures for healthcare delivery. Emphasis within the course is placed on basic accounting, financial decision-making, statement analysis, & staffing plans.

**Prerequisite:** (NU 607 (may be taken concurrently) Minimum Grade of C and NU 539 Minimum Grade of C and NU 553 (may be taken concurrently) Minimum Grade of C and NU 554 (may be taken concurrently) Minimum Grade of C)

**NU 566 Nursing Admin Field Study 4 cr**

The purpose of this first practicum course is to provide the nurse executive student a faculty and preceptor facilitated clinical experience in a healthcare setting. The course focuses on the professional role and competencies of the nurse executive. Emphasis within the course is placed on the application and synthesis of knowledge and skills acquired in previous courses.

**Prerequisite:** NU 565 Minimum Grade of C and NU 554 Minimum Grade of C and HSC 571 Minimum Grade of C

**Corequisite:** NU 561

**NU 567 Nursing Admin Internship 3 cr**

The purpose of this culminating practicum course is to provide students a faculty and preceptor facilitated clinical experience in a healthcare setting. The course focuses on continued professional role and competencies development of the nurse executive. Emphasis within the course is placed on the application and synthesis of knowledge and skills acquired in previous courses.

**Prerequisite:** NU 566 Minimum Grade of C and NU 539 Minimum Grade of C and NU 607 (may be taken concurrently) Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C and NU 610 (may be taken concurrently) Minimum Grade of C and NU 613 (may be taken concurrently) Minimum Grade of C

**Corequisite:** NU 568

**NU 568 Nursing Admin Seminar 3 cr**

The purpose of this course is to prepare students for the role of nurse executive. The course focuses on professional competency development. Emphasis within the course is placed on strategic planning, governance, regulations, politics, and current issues trend.

**Prerequisite:** NU 539 Minimum Grade of C and NU 561 Minimum Grade of C and NU 566 Minimum Grade of C

**Corequisite:** NU 567

**NU 570 Emergency NP I 2 cr**

This course is the first course in a series of four didactic courses for the Emergency Nurse Practitioner student. The purpose of this didactic course is to prepare Emergency Nurse Practitioner students to assess, diagnose, and manage the health care needs of patients across the lifespan in emergent, urgent, and ambulatory care settings. Emphasis is placed on (1) synthesis and application of critical thinking, diagnostic reasoning, and scientific knowledge in the development of differential as a basis of care management; (2) treatment of acute health problems across the lifespan based on current evidence-based practice; and (3) collaboration and communication among health care providers in culturally diverse environment. The focus of this course is on the advanced practice nursing role in caring for individuals in the emergency care settings with thoracic-respiratory and cardiovascular disorders.

**Corequisite:** NU 571

**NU 571 Emergency NP Practicum I 1-3 cr**

This course is the third course in a series of four practicum courses for the Emergency Nurse Practitioner student that will provide intensive study into clinical specialty. The purpose of this practicum course is to provide the Emergency Nurse Practitioner student the opportunity to apply and integrate knowledge acquired thorough coursework. Development and refinement of clinical expertise in advanced emergency nursing is expected throughout the four clinical courses. The focus is on advanced practice nursing role in caring for individuals of all ages in the emergency care setting.

**Prerequisite:** NU 578 Minimum Grade of C

**Corequisite:** NU 570

**NU 572 Emergency NP II 2 cr**

This course is the second course in a series of four didactic courses for the Emergency Nurse Practitioner student. The purpose of the didactic courses is to prepare Emergency Nurse Practitioner students to assess, diagnose, and manage the health care needs of patients across lifespan in emergent, urgent, ambulatory care settings. Emphasis is placed on (1) synthesis and application of critical thinking, diagnostic reasoning, and scientific knowledge in acute health problems across the lifespan based on current evidence based practice; and (3) collaboration and communication among health care providers in culturally diverse environment. The focus is on the advanced practice nursing role in caring for individuals in the emergency care setting with dermatologic, abdominal, and non-traumatic musculoskeletal disorders.

**Prerequisite:** NU 570 Minimum Grade of C and NU 571 Minimum Grade of C

**Corequisite:** NU 573

**NU 573 Emergency NP Practicum II 1-3 cr**

This course is the second course in a series of three practicum courses for the Emergency Nurse Practitioner student that will provide intensive study into clinical specialty. The purpose this practicum course is to provide the Emergency Nurse Practitioner student the opportunity to apply and integrate knowledge acquired through coursework. Development and refinement of clinical expertise in advanced emergency nursing is expected throughout the four clinical courses. The focus is on advanced practice nursing role in caring for individuals of all ages in the emergency care setting.

**Prerequisite:** NU 570 Minimum Grade of C and NU 571 Minimum Grade of C

**Corequisite:** NU 572

**NU 574 Emergency NP III 2 cr**

This course is the third course in a series of four didactic courses for the Emergency Nurse Practitioner student. The purpose of the didactic courses is to prepare Emergency Nurse Practitioner students to assess, diagnose, and manage the health care needs of patients across the lifespan in emergent, urgent, ambulatory care settings. Emphasis is placed on (1) synthesis and application of critical thinking, diagnostic reasoning, and scientific knowledge in the development of differential diagnosis as a basis for care management; (2) the treatment of acute health problems across the lifespan based on current evidence based practice; and (3) collaboration and communication among health care providers in a culturally diverse environment. The focus is on the advanced practice nursing role in caring for individuals in the emergency care setting with renal, genitourinary, endocrine, nervous, and head, eye, ear, nose, and throat system disorders.

**Prerequisite:** NU 570 Minimum Grade of C and NU 571 Minimum Grade of C and NU 572 Minimum Grade of C and NU 573 Minimum Grade of C  
**Corequisite:** NU 575

**NU 575 Emergency NP Practicum III 1-3 cr**

This course is the third course in a series of four practicum courses for the Emergency Nurse Practitioner student that will provide intensive study into clinical specialty. The purpose of this practicum course is to provide the Emergency Nurse Practitioner student the opportunity to apply and integrate knowledge acquired through coursework. Development and refinement of clinical expertise in advanced emergency nursing is expected throughout the four clinical courses. The focus is on advanced practice nursing role in caring for individuals of all ages in the emergency care setting.

**Prerequisite:** NU 570 Minimum Grade of C and NU 571 Minimum Grade of C and NU 572 Minimum Grade of C and NU 573 Minimum Grade of C  
**Corequisite:** NU 574

**NU 576 Emergency NP IV 2 cr**

This course is the final course in a series of four didactic courses for the Emergency Nurse Practitioner student. The purpose of the didactic courses is to prepare Emergency Nurse Practitioner students to assess, diagnose, and manage the health care needs of patients across the lifespan in emergent, urgent, and primary care settings. Emphasis is placed on (1) synthesis and application of critical thinking, diagnostic reasoning, and scientific knowledge in the development of differential diagnosis as a basis for care management; (2) the treatment of acute health problems across the lifespan based on current evidence based practice; and (3) collaboration and communication among health care providers in a culturally diverse environment. The focus is on advanced practice nursing role in caring for individuals in the emergency care setting with traumatic and psychiatric disorders.

**Prerequisite:** NU 570 Minimum Grade of C and NU 571 Minimum Grade of C and NU 572 Minimum Grade of C and NU 573 Minimum Grade of C and NU 574 Minimum Grade of C and NU 575 Minimum Grade of C  
**Corequisite:** NU 577

**NU 577 Emergency NP Practicum IV 1-3 cr**

This course is the final course in a series of four practicum courses for the Emergency Nurse Practitioner student that will provide intensive study into clinical specialty. The purpose of this practicum course is to provide the Emergency Nurse Practitioner student the opportunity to apply and integrate knowledge acquired through coursework. Development and refinement of clinical expertise in advanced emergency nursing is expected throughout the four clinical courses. The focus is on the advanced practice nursing role in caring for individuals of all ages in the emergency care setting.

**Prerequisite:** NU 570 Minimum Grade of C and NU 571 Minimum Grade of C and NU 572 Minimum Grade of C and NU 573 Minimum Grade of C and NU 574 Minimum Grade of C and NU 575 Minimum Grade of C  
**Corequisite:** NU 576

**NU 578 Pharm Adv Practice Nurses 3 cr**

The purpose of this course is to expand the pharmacological knowledge of the advanced practice nurse. The focus is the selection and monitoring of drug therapy for persons throughout the lifespan. Emphasis is on pharmacokinetics and pharmacotherapeutics of major drug classifications.

**Prerequisite:** NU 545 (may be taken concurrently) Minimum Grade of C

**NU 580 Hlth Promo & Ds Prev/FNP/ENP 2 cr**

The purpose of this course is to prepare the emergency nurse practitioner student to identify and implement appropriate and culturally competent health promotion and disease prevention strategies across the lifespan. The focus is on the advanced practice nursing of individuals and families in primary and emergency care settings. Emphasis is placed on health promotion and disease prevention with strategic planning at the primary, secondary and tertiary levels of prevention. Various issues are explored pertinent to the advanced practice nurse role.

**NU 581 Family/Emergency NP I 5 cr**

This course is the first course in a series of four didactic courses for the emergency nurse practitioner student. The purpose of this didactic course is to prepare emergency nurse practitioner students to assess, diagnose, and manage the health care needs of patients across the lifespan in emergent, urgent, and primary care settings. Emphasis is placed on (1) synthesis and application of critical thinking, diagnostic reasoning, and scientific knowledge in the development of differential diagnosis as a basis for care management; (2) the treatment of acute health problems across the lifespan based on current evidence-based practice; and (3) collaboration and communication among health care providers in a culturally diverse environment. The focus of this course is on the advanced practice nursing role in caring for individuals in the primary and emergency care setting with disorders of selected body systems.

**Corequisite:** NU 582

**NU 582 Family/Emerg NP Practicum I 2 cr**

This course is the first course in a series of four practicum courses for the emergency nurse practitioner student that will provide intensive study into the family nurse practitioner role and the emergency nurse practitioner specialty. The purpose of this practicum course is to provide the emergency nurse practitioner student the opportunity to apply and integrate knowledge acquired through coursework. Development and refinement of clinical expertise in primary and emergency care is expected throughout the four clinical courses.

**Prerequisite:** NU 578 Minimum Grade of C

**Corequisite:** NU 581

**NU 583 Family/Emergency NP II 5 cr**

This course is the second course in a series of four didactic courses where the Emergency Nurse Practitioner student will continue to develop and define assessment, diagnostic, and management skills needed to care for patients across the lifespan in emergent, urgent, and primary care settings. Emphasis is placed on (1) synthesis and application of critical thinking, diagnostic reasoning, and scientific knowledge in the development of differential diagnosis as a basis for care management; (2) the treatment of acute and chronic health problems across the lifespan based on current evidence-based practice; and (3) collaboration and communication among health care providers in a culturally diverse environment. The focus of this course is on the advanced practice nursing role in caring for individuals in the primary and emergency care setting with disorders of selected body systems.

**Prerequisite:** NU 581 Minimum Grade of C and NU 582 Minimum Grade of C

**Corequisite:** NU 584

**NU 584 Family/ Emerg NP Practicum II 4 cr**

This course is the second course in a series of four practicum courses for the emergency nurse practitioner student that will provide intensive study into the family nurse practitioner role and the emergency nurse practitioner specialty. The purpose of this practicum course is to provide the emergency nurse practitioner student the opportunity to apply and integrate knowledge acquired through coursework. Development and refinement of clinical expertise in primary and emergency care is expected throughout the four clinical courses.

**Prerequisite:** NU 581 Minimum Grade of C and NU 582 Minimum Grade of C

**Corequisite:** NU 583

**NU 585 Family/Emergency NP III 5 cr**

This course is the third course in a series of four didactic courses where the emergency nurse practitioner student will continue to develop and define assessment, diagnostic, and management skills needed to care for patients across the lifespan in emergent, urgent, and primary care settings. Emphasis is placed on (1) synthesis and application of critical thinking, diagnostic reasoning, and scientific knowledge in the development of differential diagnosis as a basis for care management; (2) the treatment of acute and chronic health problems across the lifespan based on current evidence-based practice; and (3) collaboration and communication among health care providers in a culturally diverse environment. The focus of this course is on the advanced practice nursing role in caring for individuals in the primary and emergency care setting with disorders of selected body systems.

**Prerequisite:** (NU 583 Minimum Grade of C and NU 584 Minimum Grade of C)

**Corequisite:** NU 586

**NU 586 Family/Emerg NP Practicum III 4 cr**

This course is the third course in a series of four practicum courses for the emergency nurse practitioner student that will provide intensive study into the family nurse practitioner role and the emergency nurse practitioner specialty. The purpose of this practicum course is to provide the emergency nurse practitioner student the opportunity to apply and integrate knowledge acquired through coursework. Development and refinement of clinical expertise in primary and emergency care is expected throughout the four clinical courses.

**Prerequisite:** (NU 583 Minimum Grade of C and NU 584 Minimum Grade of C)

**Corequisite:** NU 585

**NU 587 Family/Emergency NP IV 5 cr**

This course is the final course in a series of four didactic courses where the Emergency Nurse Practitioner student will continue to develop and define assessment, diagnostic, and management skills needed to care for patients across the lifespan in emergent, urgent, and primary care settings. Emphasis is placed on (1) synthesis and application of critical thinking, diagnostic reasoning, and scientific knowledge in the development of differential diagnosis as a basis for care management; (2) treatment of acute and chronic health problems across the lifespan based on current evidence-based practice; and (3) collaboration and communication among health care providers in a culturally diverse environment. The focus of this course is on the advanced practice nursing role in caring for individuals in the primary and emergency care setting with disorders of selected body systems.

**Prerequisite:** NU 585 Minimum Grade of C and NU 586 Minimum Grade of C

**Corequisite:** NU 588

**NU 588 Family/Emerg NP Practicum IV 4 cr**

This course is the final course in a series of four practicum courses for the emergency nurse practitioner student that will provide intensive study into the family nurse practitioner role and the emergency nurse practitioner specialty. The purpose of this practicum course is to provide the emergency nurse practitioner student the opportunity to apply and integrate knowledge acquired through coursework. Development and refinement of clinical expertise in primary and emergency care is expected throughout the four clinical courses.

**Prerequisite:** NU 585 Minimum Grade of C and NU 586 Minimum Grade of C

**Corequisite:** NU 587

**NU 589 Family/Emerg NP CI Progression 1-4 cr**

This course is a practicum progression course for the emergency nurse practitioner student that will provide intensive study into the family nurse practitioner role and the emergency nurse practitioner specialty. The purpose of this practicum course is to provide the emergency nurse practitioner student the opportunity to apply and integrate knowledge acquired through coursework. Development and refinement of clinical expertise in primary and emergency care is expected throughout the four clinical courses. At the discretion of the Emergency Nurse Practitioner track coordinator, satisfactory completion of this course may be required.

**Prerequisite:** NU 582 Minimum Grade of C

**NU 590 Special Topics - 9 cr**

Study of significant topics or problems in nursing and the health professions. Content will vary. May be repeated.

**NU 594 Directed Studies 1-11 cr**

Directed study under the direction of a member of the graduate faculty.

**NU 595 Study Abroad Cultural Exp 9 cr**

The purpose of this course for the graduate student is to develop an improved understanding of the culture, Leininger's theory of Diversity and Universality, to recognize any cultural practices that affect health care and to incorporate this understanding into the provision of care. Culture will be examined through writing cultural experiences, and through collaboration. The course is underpinned by Dr. Leininger's definition of culture and her theory of culture care.

**NU 596 Service Abroad Hlth Related Ex 0 cr**

This is a service learning course that will culminate in select communities in the international setting. Emphasis is providing culturally competent care by providing an immersion experience.

**NU 597 Intro to Scholarly Writing 3 cr**

The purpose of the course is to enhance scientific writing skills and provide a review of basic and advanced grammar, and development of rhythm, voice, and purpose in writing. There will be a focus on developing skills to utilize bibliographic search methodology and the American Psychological Association (APA) editorial format.

**NU 607 Scientific Underpinnings Adv Nsg 3 cr**

The purpose of this course is for the MSN/DNP student to explore the scientific underpinnings that define the nature of health and healthcare delivery and to provide the basis for practice at the highest level of nursing. The focus of this course is to explore the structure and nature of nursing science as it relates to advanced nursing practice. The course emphasis is on the exploration of a clinically relevant phenomena of interest that will be examined from the philosophical, theoretical, ethical, and conceptual context.

**NU 608 EBP & Quality Improvement HCS 3 cr**

The purpose of this course is to provide the MSN/DNP student with the foundational components required for effective utilization of evidence based practice within the scope of advanced nursing practice. The course focuses on the use of analytic methods to critically appraise existing literature and other evidence to determine and implement the best evidence for practice. The course emphasis is on the application of quantitative, qualitative, and quality improvement methodologies to promote safe, effective care within healthcare systems.

**NU 610 Healthcare Policy & Finance 3 cr**

The purpose of this course for the MSN/DNP student is to develop advanced nursing leaders who have the knowledge and skills to design, analyze, influence, and implement policies that frame health care financing, practice regulation, access, safety, quality, and efficacy. The course focuses on major contextual factors and policy triggers that influence health policy making at various levels. Principles of finance, business, and health care economics will be presented. The course emphasis is on developing essential competencies in health care policy advocacy and health care financing.

**NU 611 Translat Evidence Practice Sys 3 cr**

The purpose of this course for the DNP student is to provide the methodological basis for translating evidence into practice systems in a variety of healthcare settings. The course focuses on locating, evaluating, synthesizing, channeling, applying, and explaining appropriate findings from laboratory and experimental settings to improve the efficiency and effectiveness of nursing care. The course emphasis is on the use of applied techniques for evidence translation with an exploration of ethics and the protection of human research subjects.

**Prerequisite:** NU 608 (may be taken concurrently) Minimum Grade of C and NU 607 (may be taken concurrently) Minimum Grade of C

**NU 612 Clinical Prev Population Hlth 3 cr**

The purpose of this course for the DNP student is to explore the multifaceted issues pertaining to population health and health promotion in the local, regional, national, and global populations across the lifespan. The course focuses on health issues and strategies to eliminate health disparities across all population groups. The course emphasizes the use of health surveillance measures and determinants of health to characterize geographical locations and population groups as well as effective health promotion and disease and accident prevention strategies.

**Prerequisite:** NU 608 (may be taken concurrently) Minimum Grade of C and NU 607 (may be taken concurrently) Minimum Grade of C

**NU 613 Organizational & Sys Leadrshp 3 cr**

The purpose of this course for the MSN/DNP student is to synthesize leadership and organizational theory within the context of complex healthcare systems. The course focuses on the exploration and application of principles of advanced communication, collaboration, and team building to the process of systems change to prepare the student for advanced roles in leading change. Emphasis within the course is placed on assessment of organizational culture as a basis for improvement of individual and aggregate healthcare outcomes; models of quality improvement and project planning, implementation, and evaluation are also examined.

**NU 615 Qual Improv & Outcomes Assmnt 3 cr**

The purpose of this course is to build on the foundation established in NU 608 Evidence Based Practice and Quality Improvement in Healthcare Systems to provide the DNP student with additional knowledge and skills to develop, implement, and evaluate programs that improve health outcomes. The course focuses on the design, implementation, and evaluation of quality improvement methodologies. The course places emphasis on applying quality improvement processes to evaluate outcomes of practice against national benchmarks to determine variances in practice outcomes and population trends.

**Prerequisite:** NU 607 (may be taken concurrently) Minimum Grade of C and NU 608 (may be taken concurrently) Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C

**NU 616 Data & Dec Mknng Healthcare Sys 3 cr**

The purpose of this course is to prepare the DNP student to be proficient in the evaluation and use of technology and information systems appropriate to specialized areas of advanced nursing practice. The course focuses on information systems and current technology in the management of healthcare outcomes. Within the course, emphasis is placed on the use of information systems and technology based resources to support clinical and administrative decision making.

**Prerequisite:** (NU 611 Minimum Grade of C and NU 615 Minimum Grade of C)

**NU 620 Prin Teach/Learn/Assess Nu Ed 3 cr**

The purpose of this course is to provide a foundation of principles of teaching and learning, including theories, styles, and application to the diverse learner. Emphasis is on analysis of teaching in the classroom and clinical setting, assessment techniques, and implementation of technology, all while incorporating evidence-based teaching practices

**NU 621 Curr Design/Outcome Eval Nu Ed 3 cr**

Analysis and synthesis of theories and concepts related to systematic curriculum development and outcomes evaluation in nursing education. Emphasis is on institutional purposes, goals, nursing curricula design, and outcomes evaluation that supports the requirements of the institution, the program, and accrediting agencies.

**NU 622 Current Topics in Nu Education 2 cr**

The purpose of this course is to engage the student in an analysis of concepts and theories basic to the nurse educator role in academic and in practice settings. Emphasis is on current issues and trends in nursing education, the role of the academic nurse educator, and professional, social, political, legal, cultural, and other issues related to nursing education.

**NU 623 Nsg Educ Synthesis Practicum 3 cr**

The purpose of this course is the synthesis of nursing education theory in practicum experience. Focus is on the application of nursing education theory in developing, teaching, and evaluating an education unit, exemplifying the nurse educator role, and adhering to institutional and legal guidelines.

**Prerequisite:** NU 620 Minimum Grade of C and NU 621 (may be taken concurrently) Minimum Grade of C and NU 622 (may be taken concurrently) Minimum Grade of C

**NU 656 Nursing Informatics PP&D 3 cr**

This course assists the Nursing Informatics DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the Nursing Informatics students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C)

**NU 657 Nursing Informatic Residency I 3-6 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The Nursing Informatics student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the Nursing Informatics student will work with the primary faculty advisor to complete projects and advance their selected practice area. The Nursing Informatics student will have access to and authority for expanded scope of practice to master the DNP competencies. Residency sites will depend upon the Nursing Informatics student's career trajectory and approval by collaborating faculty. During the residency semester, student must participate in scheduled scholarly seminars online.

**Prerequisite:** NU 656 Minimum Grade of S and NU 615 (may be taken concurrently) Minimum Grade of C

**NU 658 NU Informatics Residency II 3-6 cr**

Provides Nursing Informatics students the opportunity to fully express all DNP competencies. The Nursing Informatics student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

**Prerequisite:** NU 657 Minimum Grade of C and NU 616 (may be taken concurrently) Minimum Grade of C

**NU 659 NU Informatics Residency III 3-6 cr**

Final course in residency series as Nursing Informatics student continues to implement and evaluate project plan. Provides Nursing Informatics student the opportunity to fully express all DNP competencies. The Nursing Informatics student, guided by the core faculty and advisor completes quality improvement evidence-based system's change project.

**Prerequisite:** NU 612 (may be taken concurrently) Minimum Grade of C and NU 658 Minimum Grade of C

**NU 661 Executive Nsg Admin PP&D 3 cr**

This course assists the Nurse Executive Administration DNP student to learn the processes embedded in developing a doctoral synthesis project. The course will address all aspects of project planning and development as a preliminary step to the Nurse Executive Administration students' selection of a topic or phenomenon of interest for the project and will incorporate well-built questions, search strategies and outcomes, identification of resources needed, plan for evaluation and dissemination.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C)

**NU 662 Nurse Exec Admin Res I 3-6 cr**

Theories of leadership, motivation, power, and change are used to influence change in health care organizations. This course will implement evidence-based clinical models and evaluate their effectiveness in health outcomes. The Nurse Executive Administration student will synthesize, critique, and apply evidence to support quality clinical or organizational practices. In this mentored and supervised experience, the Nurse Executive Administration student will work with the primary faculty advisor to complete projects and advance their selected practice area. The Nurse Executive Administration student will have access to and authority for expanded scope of practice to master the DNP competencies. Residency sites will depend upon the student's career trajectory and approval by collaborating faculty. During the residency semester, the Nurse Executive Administration student must participate in scheduled scholarly seminars online. Clinical hours of direct practice/management is required.

**Prerequisite:** NU 661 Minimum Grade of S and NU 615 (may be taken concurrently) Minimum Grade of C

**NU 663 Nurse Exec Admin Res II 3-6 cr**

Provides Nurse Executive Administration students the opportunity to fully express all DNP competencies. The student, guided by the faculty facilitator, will implement the scholarly doctoral system's change project.

**Prerequisite:** NU 662 Minimum Grade of C and NU 616 (may be taken concurrently) Minimum Grade of C

**NU 664 Nurse Exec Admin Res III 3-6 cr**

Final course in residency series as the Nurse Executive Administration student continues to implement and evaluate project plan. Provides the Nurse Executive Administration student the opportunity to fully express all DNP competencies. The student, guided by the core faculty and advisor, completes quality improvement evidence-based system's change project.

**Prerequisite:** NU 663 Minimum Grade of C and NU 612 (may be taken concurrently) Minimum Grade of C

**NU 680 Family/Emergency NP PP&D 3 cr**

In this course, students will begin a systematic investigation of a clinically based topic relevant to the practice of the emergency nurse practitioner. Integration of scientific underpinnings, human caring values, ethical principles, and cultural competencies is expected. Emphasis is placed on developing a proposal for the Doctor of Nursing Practice scholarly project. Students will select and analyze strategies, models, and theories to plan, implement, and evaluate the scholarly project.

**Prerequisite:** (NU 607 Minimum Grade of C and NU 608 Minimum Grade of C and NU 610 Minimum Grade of C and NU 613 Minimum Grade of C and NU 611 (may be taken concurrently) Minimum Grade of C)

**NU 681 Family/Emerg NP Residency I 3 cr**

This course is the first course in a progressive sequence of three residency courses that will develop the Emergency Nurse Practitioner student into a practice scholar. The purpose of the residency course is to integrate the application of leadership, theoretical, and specialty knowledge to improve patient and population health outcomes in the emergency care setting. The focus of this residency course is to provide the Emergency Nurse Practitioner student with faculty supervised and preceptor mentored experiences to begin the development and implementation of the Doctor of Nursing Practice scholarly project.

**Prerequisite:** (NU 680 Minimum Grade of C and NU 615 (may be taken concurrently) Minimum Grade of C)

**NU 682 Family/Emerg NP Residency II 3 cr**

This course is the second course in a progressive sequence of three residency courses that will develop the Emergency Nurse Practitioner student into a practice scholar. The purpose of the residency course is to integrate the application of leadership, theoretical, and specialty knowledge to improve patient and population health outcomes in the emergency care setting. The focus of this residency course is to provide the Emergency Nurse Practitioner student with faculty supervised and preceptor mentored experiences to implement the Doctor of Nursing Practice scholarly project.

**Prerequisite:** (NU 681 Minimum Grade of C and NU 616 (may be taken concurrently) Minimum Grade of C)

**NU 683 Family/Emerg NP Residency III 3 cr**

This course is the final course in a progressive sequence of three residency courses that will develop the Emergency Nurse Practitioner student into a practice scholar. The purpose of the residency course is to integrate the application of leadership, theoretical, and specialty knowledge to improve patient and population health outcomes in the emergency care setting. The focus of this residency course is to provide the Emergency Nurse Practitioner student with faculty supervised and preceptor mentored experiences to evaluate the effectiveness of and disseminate the findings of the Doctor of Nursing Practice scholarly project.

**Prerequisite:** (NU 682 Minimum Grade of C and NU 612 (may be taken concurrently) Minimum Grade of C)

**NU 690 Sp Top - 1-9 cr**

Selected topics in Nursing Science and/or Nursing Education. Requires special permission.

**NU 692 NU DNP Incomplete Extension 3 cr**

Students will register for this course to complete residency course work under the supervision of faculty. Students must remain continuously enrolled until all residency requirements are completed.

**NU 694 Directed Study and Research 1-6 cr**

Directed study and research facilitated by a member of the graduate faculty. Requires special permission.

## Obstetrics/Gynecology - MD (OGY)

**OGY 311 Obstetrics-Gynecology 6 cr**

During the rotation, the student is exposed to obstetrical and gynecological patients in the department outpatient offices, the labor and delivery suite, and on the hospital wards. In addition, the student will spend time in the maternal-infant care project and family planning clinics located in the Mobile County Health Department. During this time, the student will encounter a panoramic view of the physiology and pathology of human reproduction and considerable practical experience in the management of normal and abnormal pregnancy and in the pre- and post-operative care of the gynecologic patient.

**OGY 400 OB/Gyn Externship 4 cr**

To be determined.

**OGY 444 Spec Elec-OB/GYN 4 cr**

To be prepared by the student in conjunction with the Course Director and approved by the Vice Dean before course can be added to schedule. This course is designed to offer students and faculty/clinical faculty an opportunity to develop electives which are not offered in the Elective Manual. Such as elective may be made permanent and printed in the next edition of the Elective Manual at the request of the Course Director and with the approval of the Curriculum Committee. At the discretion of the Vice Dean, this elective may count as the required "in-house" elective.

**OGY 450 Acting Intern - Obstetrics 4 cr**

This course is for the student who is interested in obstetrics and gynecology as a career, but is open to any student regardless of future career plans, and who wishes to gain additional experience in Labor and Delivery. The student will work primarily in the labor and delivery and postpartum area as an acting intern. The student will work side-by-side with the residents assigned to L&D. Three nights of call will be required during the rotation.

**OGY 451 Acting Intern - Gyn Oncology 4 cr****OGY 460 Reproductive Endocrinology 4 cr**

This course allows an in-depth exposure to basic and clinical reproductive endocrinology. The setting is primarily ambulatory, with the student working closely with the faculty and the endocrine resident in the evaluation and treatment of infertility, hormonal imbalance, menstrual disorders, hirsutism, PCOS and other endocrine disorders, and male factor infertility. The student participates in the In Vitro Fertilization (IVF), Gamete Intra Fallopian Tube Transfer (GIFT) Intracytoplasmic Sperm Injection, and operative laparoscopy procedures. Half a day every week, the student works with patients to become familiar with the evaluation and management of osteoporosis. The diagnosis and management of male infertility and assisted conception is studied during half day sessions. The student learns to perform ultrasounds for following patients with ovulation induction, hysterosalpingograms. There may also be an opportunity to work in a private practice reproductive endocrinology practice.

**OGY 461 Acting Intern - High Risk OB 4 cr**

This course allows an in-depth exposure to basic and clinical reproductive endocrinology. The setting is primarily ambulatory, with the student working closely with the faculty and the endocrine resident in the evaluation and treatment of infertility, hormonal imbalance, menstrual disorders, hirsutism, and male factor infertility. The student participates in the In Vitro Fertilization (IVF), Gamete Intra Fallopian Tube Transfer (GIFT), Introcytoplasmic Sperm Injection, and operative laparoscopy procedures. The student also attends organized lectures in the Division, resident endocrine clinic, faculty surgery, hysterosalpingograms and presents one seminar session on a topic of his/her choice.

**OGY 462 Acting Internship/Obstetrics 1-4 cr**

During this rotation the student will serve as an acting intern on the high-risk service. He/she will function side-by-side with regularly assigned interns and assume similar responsibilities under the supervision of the resident and attending physician.

**OGY 463 High-Risk Obstetrics 1-4 cr**

The student will be involved in many aspects of perinatology including; High-Risk Pregnancy Consultation - high-risk clinic, high-risk antepartum rounds; Special Procedures - observation of antepartum tests, ultrasound, amniocentesis; Education - attendance at fetal monitoring teaching, perinatal morbidity, genetics, and perinatal conferences; Normal Obstetric Care - rotation in labor and delivery unit with responsibility for supervised patient management.

**OGY 464 Ultrasound 1-4 cr**

The student will be based in the perinatal unit and will become proficient in performing and interpreting obstetric and gynecologic ultrasound examinations. The student will become familiar with computer applications and techniques in obstetric ultrasound. The student will attend daily rounds and all conferences, seminars, journal clubs, and core curriculum presentations. The student will be expected to review the literature of a chosen pertinent ultrasound topic in depth and present findings as a scientific paper.

**OGY 465 Gynecologic Surgery 4 cr****OGY 470 Screening Room 4 cr**

This elective will provide robust training in Ob/Gyn triage skills in the USACW Screening Room (SR). The student would be involved in the evaluation and management of obstetric and gynecologic patients presenting with acute complaints to our hospital which includes potential emergencies such as anaphylaxis, placental abruption, eclampsia, etc. The clinical conditions will include both the common/rare and the routine/urgent/emergent. Anticipated procedures would include speculum exams, microscopy, biopsies, I&Ds, ultrasound, and deliveries.

**OGY 480 Ultrasound 4 cr**

The student will be based in the perinatal unit. This elective is designed for students who have chosen obstetrics and gynecology as a career and wish to gain knowledge in the indications, uses and limitations of obstetric ultrasound. Exposure to targeted ultrasound, fetal echocardiography, Doppler studies, color flow prenatal screening and invasive prenatal diagnosis will occur.

**OGY 481 Obstetrics and Gynecology 1-4 cr**

This course is for the senior student who is interested in gaining additional experience in the area of women's health. The course is designed to be flexible to meet the needs and interests of the student. The course will involve both inpatient and ambulatory care of both obstetrics and gynecology patients. Four nights of call will be required during the rotation.

**OGY 482 OB/GYN Research 4 cr**

This course will introduce the student to current, on-going research in the OB/GYN department at University of South Alabama. The student will participate in an existing project by conducting literature review including how to analyze and summarize the data. The literature review will then be turned into a draft Introduction for the eventual manuscript. The last portion of the course will focus on data collection.

**OGY 483 Gynecology Oncology 1-4 cr**

The student will serve on the OB/GYN oncology service of the USA Mitchell Cancer Institute. He/she will be offered a broad educational opportunity pertaining to the care of patients requiring surgical management of malignancies. The student will function as an assistant under the direct supervision of the surgical oncology faculty.

## Occupational Therapy (OT) (OT)

**OT 201 Intro to Occupational Therapy 3 cr**

An introduction to the occupational therapy profession and the scope of occupational therapy practice. Includes self assessment and development strategies to enhance students' readiness for the professional component of the occupational therapy curriculum. Familiarizes students with the functions, policies and services of the University, College and Department and includes an exploration of related allied health professions.

**OT 499 Senior Honors Project - H - W 3-6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project relevant to the field of Occupational Therapy study that will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty members chaired by the honors mentor. This course is required for Honors recognition and may be repeated for up to 6 credit hours.

**OT 500 Occupation in Context 3 cr**

An in depth study of human occupation in context with emphasis on analysis of the person, the environment, and the task utilizing official occupational therapy documents. Includes an introduction to the evidence-based occupational science literature and discussion of the impact of occupation on health and wellbeing.

**OT 501 Occupational Development 4 cr**

This course will include the study of typical human development throughout the life span with emphasis on best practice screening and assessment, theories of development, and normative and non-normative influences on development.

**OT 504 Neurosci Basis of Occ Perform 3 cr**

Study of the neural development, chemistry, structure, function and pathology of the nervous system. Emphasizes the application of basic science knowledge as it relates to human occupational performance.

**OT 505 Scientific Inquiry I 2 cr**

An introduction to qualitative and quantitative research concepts and statistical methods with emphasis on evidence-based practice and outcomes research. Includes library search strategies, critical analysis of scientific literature, application of statistical methods and research designs, and scientific writing skills.

**OT 506 Research Design 1 cr**

An introduction to writing a research design proposal. Students will work in small groups and be mentored by faculty to complete a research proposal.

**OT 507 ADL/IADL Eval & Intervention 2 cr**

Occupational therapy best practice assessment and evidence-based interventions to improve participation in ADL/IADL skills in children and adolescence.

**OT 508 Experiential Learning-Peds 2 cr**

This course will consist of experiential learning activities focused on occupational therapy evaluation and interventions for ADL and IADL participation in children and adolescence.

**OT 509 OT Foundations 3 cr**

This course will promote student knowledge of the theories, frames of reference, historical and sociopolitical influences, and professional documents guiding the profession of occupational therapy. Active participation in OT professional organizations will be encouraged.

**OT 511 Neuromusculoskeletal Assessment 1 cr**

This course is a study of the structure and function of human body in order to enhance foundational knowledge for evaluation of occupational performance. Instruction include an emphasis on biomechanical assessment of limb range of motion and manual muscle testing.

**OT 513 Neuromusculoskeletal Experience 2 cr**

This course will provide experiential learning of the structure and function of the human body and assessment of limb range of motion and muscle strength. Students will learn to administer assessments of client factors using appropriate and safe procedures and protocols.

**OT 515 Psychosocial Eval & Intervent 3 cr**

This course will promote OT best practice evaluation and evidence-based psychosocial interventions for individual and groups to promote occupational performance in various environments.

**OT 517 Occupational Evaluation I 3 cr**

An overview of the evaluation process in occupational therapy. Includes the theoretical basis of evaluation, selection of appropriate data gathering methods, use of standardized and non-standardized assessment tools, interpretation of results and documentation of evaluation findings.

**OT 521 Practicum I 1 cr**

Observation and limited participation in clinical and community-based settings. Emphasis on assessment and intervention in performance of occupations.

**OT 525 Documentation 3 cr**

Overview of basic professional writing skills including: reporting evaluation data, intervention plans, progress notes, and discharge summaries. Includes understanding the varied purposes of documentation as well as legal and ethical issues in documentation.

**OT 526 OT for Adults 2 cr**

This course explores conditions and provides instruction on occupational therapy assessments and interventions for adults with acquired impairments and disabilities affecting self-care, ADL, and IADL skills.

The course will take a life span approach with emphasis on occupational performance components and context. Therapeutic interventions will emphasize current evidence and student problem-solving, critical reasoning, and performance synthesis to enhance occupational performance and adaptation.

**OT 528 Adult Experiential Learning 2 cr**

This course will consist of hands on experiences with student reflection focusing on occupational therapy assessments and interventions for adults with acquired impairments and disabilities affecting ADLs and IADLs. This course will require students to synthesize information and apply evidence-based interventions to enhance occupational performance and adaptation.

**OT 529 Profess Developmt Seminar II 1 cr**

Seminar preparing the student for group work in fieldwork settings. The role of fieldwork in education, the role of the student and fieldwork supervisor will be discussed. Problem-solving strategies will be used to facilitate professional growth. Group dynamics will be emphasized.

**OT 531 Practicum II 1 cr**

Observation and limited participation in clinical and community-based settings. Emphasis on assessment and intervention in performance of occupations.

**OT 535 Foundations Low Vision Rehab 2 cr**

An in-depth examination of conditions causing low vision and the assessment and evidence-based intervention planning in low vision rehabilitation. Includes the conditions causing low vision, assessments used in the evaluation, interpretation of assessment results and documentation of evaluation findings in intervention planning of low vision rehabilitation.

**OT 539 Professional Dev Seminar 1 cr**

Designed to facilitate students' transition from didactic and part-time fieldwork components of the curriculum to the required full-time fieldwork experience. Emphasizes professional behavior, clinical reasoning and ethical issues.

**OT 545 Scientific Inquiry II 2 cr**

The application of qualitative and quantitative research concepts and statistical methods in the development and implementation of a scholarly project. Includes data collection and preliminary analysis.

**OT 547 Research Implementation 1 cr**

Students will work in small groups with faculty mentor to conduct research study and collect data. The focus will be seeking participants, obtaining informed consent, and conducting data collection. It will include creation of spreadsheets and conducting preliminary data analysis based on data collected to date.

**OT 548 Advanced Technology in OT 2 cr**

An introduction to microcomputer utilization in Occupational Therapy. Includes an examination of software, hardware and peripheral devices that facilitate computer access and productivity. Uses of computer technology in Occupational Therapy evaluation, treatment and administration will be explored. Special fee.

**OT 549 Profess Developmt Seminar IV 1 cr**

Designed to facilitate students' transition from didactic and part-time fieldwork components of the curriculum to the required full-time fieldwork experience.

**OT 550 Level II Fieldwork - A 6 cr**

A directed experience in evaluation, planning and implementing occupational therapy services under the supervision of an experienced, certified occupational therapist. Designed to emphasize clinical reasoning, entry-level skill acquisition and integration of didactic knowledge with practice.

**OT 551 Pract. IV Psych/Soc 1 cr**

Observation and limited participation in clinical and community-based settings serving clients with psychosocial and behavioral needs. Students will study evidence-based interventions that promote performance of various age appropriate and culturally relevant occupations. Emphasis will be placed on the behavioral, psychological and/or social factors promoting or hindering performance.

**OT 552 OT School-Based Practice 3 cr**

This course will focus on Occupational Therapy in School-Based Practice Settings. Emphasis will be on evidence-based practices to enhance occupational performance in the context of school. Therapeutic interventions will emphasize problem-solving, critical reasoning, and occupational performance synthesis to enhance occupational performance and adaptation. This course will explore current legislation impacting the role of OT in the schools, the evaluation process and assessment tools for this environment and populations, working within various educational team models, transition planning, and promotion of life skill development.

**OT 553 OT and the Older Adult 2 cr**

This course focuses on the practice of occupational therapy with the older adult. Course content includes conceptual foundations in gerontology, age-related changes affecting occupational performance, evidence-based interventions, the gerontological continuum of care and the intradisciplinary and interprofessional collaborations that impact the delivery of services to this population.

**OT 554 OT & the Older Adult Exp Learn 2 cr**

This course focuses on the practice of occupational therapy with the older adult. Course content includes demonstration and analysis of assessments and evidence-based interventions used with the older adult population. This course also applies the OT process inside the gerontological continuum of care and emphasizes the intradisciplinary and interprofessional collaborations that impact the delivery of services to this population.

**OT 555 Level II Fieldwork - B 6 cr**

A directed experience in evaluation, planning and implementing occupational therapy services under the supervision of an experienced, certified occupational therapist. Designed to emphasize clinical reasoning, entry-level skill acquisition and integration of didactic knowledge with practice.

**OT 557 OT for the Young Child 3 cr**

This course will provide the best practice knowledge regarding occupational therapy for children birth to 5 years of age. Emphasis will be on early intervention and preschool services. Focus will be placed on client- and family- centered, occupation-based practice, which includes current and emerging practice areas for this population. Emphasis will be on OT evaluations and intervention planning.

**OT 558 Tech & Environ Interven in OT 3 cr**

An introduction to technology and environmental intervention (TEI; including but not limited to assistive, electronic, information, and rehabilitative) strategies used to increase, maintain or improve functional capabilities of individuals with disabilities and/or to design and implement accessible environments to support full participation in life activities. This course is designed to meet the basic level of competency in TEI for the entry level occupational therapist.

**OT 560 Professional Issues 3 cr**

A discussion of a variety of issues of professional concern including, but not limited to: OT's role in non-traditional practice arenas; professional ethics; implications of cultural diversity for health care service delivery; credentialing; health care reform; and current controversies in the field.

**OT 565 Scientific Inquiry III 3 cr**

Completion of a scholarly project and preparation of the results for presentation in professional formats.

**OT 566 Leadership 3 cr**

Explores concepts and theories of leadership, profiles occupational therapy leaders throughout history, and provides training in leadership skills needed by future professionals. Emphasizes the importance of leadership in context, interdisciplinary teaming and the nature of change processes and diffusion of innovations.

**OT 567 OT for UE Injuries and Work 2 cr**

Occupational therapy assessments and intervention for persons with developmental and acquired impairments and disabilities with emphasis on UE impairments impacting daily life skills and work. Emphasis will be placed specifically on UE and hand injuries and appropriate interventions. Therapeutic interventions will emphasize problem-solving, critical reasoning, and occupational performance synthesis to enhance occupational performance and adaptation.

**OT 568 UE Injuries & Work Experientia 2 cr**

This course will consist of hands-on experiences with student reflection that focuses on occupational therapy assessments and interventions for persons with developmental and acquired impairments and disabilities. This course emphasizes UE conditions and impairments impacting daily life skills and work.

**OT 571 Interprofessional Collaboratio 1 cr**

This course will provide in depth knowledge on OT best practice for working collaboratively with a variety of interprofessional teams. Content will include examination of IPEC competencies as well as experiential practice sessions with other disciplines.

**OT 572 Eval and Intervention Child an 2 cr**

This course will provide in depth knowledge on best practices OT evaluation and intervention for middle childhood to adolescence. Emphasis will be on outpatient settings and include both individual and group interventions. Content will include transition planning, community mobility, and best practice evidence based evaluations and interventions.

**OT 573 OT in Acute Care 2 cr**

Occupational therapy assessments and intervention for persons in the acute hospital setting with acquired impairments and/or disabilities affecting self-care and functional mobility skills. This course will have emphasis on physical rehabilitation, occupational performance components and context. Therapeutic interventions will emphasize problem-solving, critical reasoning, and occupational performance synthesis to enhance occupational performance and adaptation.

**OT 574 OT and Wellness 3 cr**

This course will provide in depth knowledge on OT best practice for prevention, health promotion, and wellness. Focus will be on development of prevention/improvement for high-risk, high-need population based interventions.

**OT 575 Advanced Professional Writing 2 cr**

Covers a variety of types of professional writing useful to occupational therapists including: grant proposals; journal articles; books; client education materials; and presentation proposals and papers. Includes both the form and content of a range of technical documents as well as the processes of writing, peer review and critique.

**OT 576 Res Analysis and Presentation 1 cr**

Students will work in small groups with faculty mentor to conduct research study and collect data. Students will complete the data analysis started in previous research classes and then complete a poster presentation of their research.

**OT 577 Management and Supervision 3 cr**

Explores the application of the principles of organizational management and supervision to the development and administration of occupational therapy programs and occupational therapy personnel.

**OT 578 Intervention Competencies 2 cr**

This course will provide an overview of evaluation and interventions to promote student clinical reasoning and hands on practice in preparation for clinical fieldwork. Content will be comprehensive of previous courses with emphasis on case-based clinical reasoning skills and appropriate selection and accurate and safe demonstration of OT evaluations and interventions. Three comprehensive practical competency exams are required. One comprehensive written exam is required. Students must pass with grade B or better to proceed to fieldwork.

**OT 580 Level II Fieldwork - C 4 cr**

A directed experience in evaluation, planning and implementing occupational therapy services under the supervision of an experienced, certified occupational therapist. Designed to emphasize clinical reasoning, entry-level skill acquisition and integration of didactic knowledge with practice.

**OT 581 Clinical Practice I 2 cr**

Explores concepts and theories of leadership and emphasizes the importance of leadership in context, interdisciplinary teaming and the nature of change processes and diffusion of innovations. Also includes a focus on clinical practice and preparing for the board exam.

**OT 582 Clinical Practice II 2 cr**

Explores concepts and theories of leadership and emphasizes the importance of leadership in context, interdisciplinary teaming and the nature of change processes and diffusion of innovations. Also includes a focus on clinical practice and preparing for the board exam. This course is a continuation of OT 581 Clinical Practice I.

**OT 585 Level II Fieldwork - D 4-12 cr**

A directed experience in evaluation, planning and implementing occupational therapy services under the supervision of an experienced, certified occupational therapist. Designed to emphasize clinical reasoning, entry-level skill acquisition and integration of didactic knowledge with practice.

**OT 590 Special Topics - 1-6 cr**

A variable topics course covering areas not available in other occupational therapy courses. A subtitle identifying the topic will be entered on the student's record.

**OT 598 Independent Study in OT 1-6 cr**

Special studies directly relevant to the practice of occupational therapy. The student will select an area of interest in which they wish to become more proficient. A faculty member will provide guided study, supervision and assistance in developing appropriate learning experiences.

## Oncology - MD (ONC)

**ONC 201 Hematology and Oncology System 5 cr**

The Hematology and Oncology Systems Module is designed to provide the scientific and clinical principles necessary to provide care to patients with hematologic and oncologic diseases. Since these diseases involve and affect many organ systems, the module utilizes an integrative approach to reinforce many core concepts from previous modules. In the current healthcare environment, oncologic care is dependent upon the interprofessional collaboration of multiple clinical specialties and disciplines. As a result, teaching methods will focus on small group case-based activities, independent learning activities, and experiences promoting the development of the knowledge, skills, and attitudes necessary to work in interprofessional teams. The hematology section of the course will focus on diseases associated with malignant hematology such as the leukemias. Students will be introduced to the physiology, pathology, and pharmacology associated with these disorders. The oncology portion of the module will expose students to the cellular mechanisms, genetics, and pathophysiologic processes critical to the development of common malignancies. Students will also develop an understanding of nutrition and metabolism associated with the pathogenesis and management of these disorders. Strategies for screening and prevention of the common malignancies will also be highlighted in the small group learning sessions.

## Orthopaedics - MD (OPD)

**OPD 311 Orthopedics 4 cr****OPD 400 Orthopedics Externship 1-4 cr**

To be determined.

**OPD 421 Orthopedic Sugery 1-4 cr**

To introduce the student to the study of the musculoskeletal system and its diseases. Acute and chronic orthopaedic management, all phases, with emphasis on fracture care. Weekly conference in Pathology, Radiology, Structural and Cellular Biology and Pediatric Orthopaedics are held.

**OPD 444 Spec Elec-Orthopedic Surgery 1-4 cr**

To be prepared by the student in conjunction with the Course Director and approved by the Vice Dean before course can be added to schedule. This course is designed to offer students and faculty/clinical faculty an opportunity to develop electives which are not offered in the Elective Manual. Such an elective may be made permanent and printed in the next edition of the Elective Manual at the request of the Course Director and with the approval of the Curriculum Committee. At the discretion of the Vice Dean, this elective may count as the required "in-house" elective.

**OPD 450 Acting Intern - Orthopaedics 1-4 cr**

This is a 4-week orthopaedic surgery rotation during which the senior student will serve as a PGY1 orthopaedic surgery resident. The student will function side-by-side with orthopaedic surgery residents and assume similar responsibilities under the supervision of senior orthopaedic surgery resident and attending physician. Senior students will be assigned to spend one week on any of four subspecialty rotations they choose.

**OPD 460 Orthopedic Surgery 1-4 cr**

Acute and chronic orthopaedic management, all phases, with emphasis on fracture care. Weekly conferences in Pathology, Radiology, Structural and Cellular Biology and Pediatric Orthopaedics are held.

## Passage USA (PSG) (PSG)

**PSG 001 Adult Development Seminar I 0 cr**

A learner-centered approach to developing self-advocacy, academic/career, independent living, and community integration skills is used. Seminar I focuses on personal safety and prevention, campus navigation, learning with technology, and personal care.

**PSG 002 Internship/Work Experiences I 0 cr**

Individualized instruction focused on career exploration and soft skill development. Students will explore different job and career options during the semester as well as develop skills related to employment.

**PSG 003 Adult Dev Sem II 0 cr**

A holistic instructional approach addresses individual learning goals in areas of functional skills and knowledge, application, integration, caring, and learning to learn is used. Seminar II focuses on goal setting, self-care, well-being, budgeting, and learning strategies.

**Prerequisite:** PSG 001 Minimum Grade of S

**PSG 004 Intern/Wrk Exp II 0 cr**

Individualized instruction focused workplace documentation, characteristics of good employees and employment development. Students will explore different job and career options while practicing skills they have learned in class in supervised work experiences.

**Prerequisite:** PSG 002 Minimum Grade of S

**PSG 005 Adult Dev Sem III 0 cr**

Students will participate in valuable and diverse learning experiences generalized to multiple environments. Seminar III focuses on transportation to and from campus, managing personal finances, interpersonal skills development, and citizenship responsibilities.

**Prerequisite:** PSG 003 Minimum Grade of S

**PSG 006 Intern/Wrk Exp III 0 cr**

Students will be placed in supervised internship/work placements and receive on job training. Individual job training will address Adult Education Program goals as well as a student's needs.

**Prerequisite:** PSG 004 Minimum Grade of S

**PSG 007 Adult Dev Sem IV 0 cr**

Through individualized instructions students will refine self-advocacy, academic/career, independent/daily living, and community integration skills. Seminar IV focuses on advanced transportation, budgeting and finances, interpersonal, well-being, and self-care skills.

**Prerequisite:** PSG 005 Minimum Grade of S

**PSG 008 Intern/Wrk Exp IV 0 cr**

Students will have a supervised internship/work experience. Instruction will focus on the skills needed to gain and/or maintain paid employment. Individualized instruction will be provided.

**Prerequisite:** PSG 006 Minimum Grade of S

**PSG 009 Work Pract I 0 cr**

Students will engage in supervised work-based experience in a practicum setting(s) for a minimum of 6 hours a week.

**PSG 010 Work Pract II 0 cr**

Students will engage in supervised work-based experience in a practicum setting(s) for a minimum of 6 hours a week.

**Prerequisite:** PSG 009 Minimum Grade of S

**PSG 011 Work Pract III 0 cr**

Students will engage in supervised work-based experience in a practicum setting(s) for a minimum of 10 hours a week.

**Prerequisite:** PSG 010 Minimum Grade of S

**PSG 012 Work Pract IV 0 cr**

Students will engage in supervised work-based experience in a practicum setting(s) for a minimum of 10 hours a week.

**Prerequisite:** PSG 011 Minimum Grade of S

**PSG 020 Job and Career Skills 1 0 cr**

An individualized approach is taken toward identifying and mastering the skills that will be needed for jobs and career. Contents include workplace advocacy, on-site generic and specific work skills, workplace hazards, and specific work skills for employment sectors.

**PSG 021 Adv Ind Liv Skills 1 0 cr**

An individualized approach is taken toward identifying and mastering the skills that will be needed for independent living. Focus areas will include budgeting, hygiene, home upkeep, personal safety and prevention, community engagement, social skills and other skills.

**PSG 022 Job and Career Skills 2 0 cr**

An individualized approach is taken toward identifying and mastering the skills that will be needed for jobs and career: workplace advocacy, on-site work skills, workplace hazards, and specific work skills for employment sectors.

**Prerequisite:** PSG 020 Minimum Grade of S

**PSG 023 Adv Ind Liv Skills 2 0 cr**

An individualized approach is used to develop needed independent living skills. Personal, financial, nutritional, safety, and community skills will be assessed and taught using a strengths-based approach.

**Prerequisite:** PSG 021 Minimum Grade of S

**PSG 024 Job and Career Skills 3 0 cr**

An individualized approach is taken toward identifying and mastering the skills that will be needed for jobs and career in fields of interest. Specific and general skills needed in related employment sectors will also be taught.

**Prerequisite:** PSG 022 Minimum Grade of S

**PSG 025 Comm Res Exper 1 0 cr**

Individualized supports and direct instruction will be provided to help students master the skills they need to live as independently as possible in their community residence.

**Prerequisite:** PSG 023 Minimum Grade of S

**PSG 026 Job and Career Skills 4 0 cr**

An individualized approach is taken toward identifying and mastering the skills needed for jobs and career in fields of interest. Specific and general skills needed in related employment sectors will also be taught.

**Prerequisite:** PSG 024 Minimum Grade of S

**PSG 027 Comm Res Exper 2 0 cr**

Individualized supports and direct instruction will be provided to help students master the skills they need to live as independently as possible in their community residence. Person-centered planning will be used to identify strengths and needs.

**Prerequisite:** PSG 025 Minimum Grade of S

**PSG 029 Comm R 0 cr**

Individualized community-based supports and direct instruction will be provided to help students master the skills they need to live as independently as possible in their community residence. Person-centered planning will be used to identify strengths and needs.

**Prerequisite:** PSG 027 Minimum Grade of S

**PSG 031 Career Practicum 1 0 cr**

Students will engage in supervised work-based experience in a competitive employment setting. The practicum setting will be related to students' job and career goals.

**PSG 032 Career Practicum 2 0 cr**

Students will engage in supervised work-based experience in a competitive employment setting. The practicum setting will be related to students' job and career goals.

**Prerequisite:** PSG 031 Minimum Grade of S

**PSG 033 Career Employ Pract 1 0 cr**

Students will engage in supervised work-based experience in a competitive employment setting in the community.

**Prerequisite:** PSG 032 Minimum Grade of S

**PSG 034 Career Employ Pract 2 0 cr**

Students will engage in extended-length, supervised work-based experience in a competitive employment setting in the community.

**Prerequisite:** PSG 033 Minimum Grade of S

**PSG 035 Career Employ Pract 3 0 cr**

Students will engage in extended-length, supervised work-based experience in a competitive employment setting in the community.

**Prerequisite:** PSG 034 Minimum Grade of S

**PSG 090 Special Topics 0 cr**

Guided study topics of specific interest to the student. Students will participate in inclusive classes that are part of the USA undergraduate curriculum.

**PSG 091 Passage Special Topics 6 cr**

This course is co-listed with a course that is part of the USA undergraduate curriculum. The instructor has provided special permission to students in PASSAGE USA to enroll in the class. Individualized expectations for course completion will be developed by the course instructor, the student, and PASSAGE USA staff.

## Pathology - MD (PAT)

**PAT 211 Pathology-Laboratory Medicine 15 cr**

The course is designed to introduce the student to multiple facets of pathology as it is practiced in a modern clinical setting. These include current concepts of the pathogenesis of disease, a 'systemic' approach to the gross and microscopic abnormalities found in various disease status and correlation of these findings with clinical manifestations. Contained within the course is an introduction to the principles of laboratory medicine, including a survey of current techniques and cost effective use of the laboratory. These objectives are met through a series of lectures, laboratories, case studies, and small group discussions.

**PAT 311 Pathology 4 cr****PAT 400 Pathology Externship 1-4 cr**

To be determined.

**PAT 416 Diagnostic Electron Microscopy 1-4 cr**

The attending pathologist will explain the operation of the electron microscopes and review cases with the student. Typical cases include anaplastic neoplasms, renal biopsies, brushings for ciliary fine structure and endomyocardial biopsies. In addition to the diagnostic cases, independent study of normal and/or abnormal tissues by the student is encouraged. The rotation also provides exposure to scanning electron microscopy with microprobe analysis.

**PAT 417 Pediatric-Perinatal Pathology 1-4 cr**

Working closely with pathology faculty, the student will interface with pediatricians, pediatric surgeons, obstetricians, and neonatologists. Through clinicopathologic correlations the student will learn pathogenesis of diseases and contribute to the care of patients. The student will assist with examination and/or dissection of clinical, surgical and/or autopsy specimens, review of medical records, and evaluation of current literature. Interesting cases offer opportunities for detailed investigations that can be tailored to the interest and skills of the student.

**PAT 418 Surgical Pathology 1-4 cr**

The student will be actively involved with all aspects of specimen handling and processing, from gross examination to routine histologic examination to special techniques.

**PAT 419 Lab Med for Practicing Phys 1-4 cr**

The student will work closely with each Section Director of Chemistry, Hematology, Microbiology, and Blood Bank/ Hemostasis for a one or two week period. During each rotation, the student will learn the type of testing and work flow pattern for the section. Weekly conferences with reading lists will be held with each Section Director and/or Supervisor. Topics to be covered include appropriate use and interpretation of commonly performed laboratory tests, expected turn-around-times and the logistics of Stat testing, laboratory cost efficiency and quality of care, factors determining whether a test will be offered in-house or sent to a reference lab, important considerations in the choice of a reference lab for a medical practice, standard of analytical performance to expect from the laboratory, and how to utilize a Laboratory Information System to retrieve patient or test information.

**PAT 424 Forensic Pathology 1-4 cr**

This is an introductory course designed to acquaint the student with a broad spectrum of activities encompassed by forensic pathology and death investigation. The emphasis on the course will be that of death investigation including scene attendance and correlating the scene background information and autopsy material to determine the cause and manner of death. Ancillary laboratory results such as toxicology and firearms examination will be incorporated into the analysis in appropriate cases.

**PAT 428 Medicine and Literature 1-4 cr**

The elective will consist of study of diverse sources of literature related to the practice of medicine. Such sources will cover the spectrum from classical, medieval, renaissance, up to and including contemporary literature. The specific sources will be drawn from publications such as the annotated bibliography of Trautmann and Pollard, published by the Society for Health and Human Values\*\* as well as the twelve volumes of Literature and Medicine published by Johns Hopkins University Press. A particular effort will be made to identify genre of literature with which the student is unfamiliar and thereby serve as an introduction. An effort will also be made to relate the reading material to the career goals of the student. \*\*Literature and Medicine: Topics, Titles and Notes. Published by the Department of Humanities, Milton Hershey, etc. 209 pages.

**PAT 444 Spec Elec-Pathology 1-4 cr**

To be prepared by the student in conjunction with the Course Director and approved by the Vice Dean before course can be added to schedule. This course is designed to offer students and faculty/clinical faculty an opportunity to develop electives which are not offered in the Elective Manual. Such an elective may be made permanent and printed in the next edition of the Elective Manual at the request of the Course Director and with the approval of the Curriculum Committee. At the discretion of the Vice Dean, this elective may count as the required "in-house" elective.

**PAT 480 Diagnostic Electron Microscopy 1-4 cr**

The attending pathologist will explain the operation of the electron microscopes and review diagnostic cases with the students. Typical cases will include anaplastic neoplasms, renal biopsies, brushings for ciliary fine structure, and endomyocardial biopsies. Supplemental reading and case study materials, including journal articles and online material, will be assigned to augment the experience, and presentation of material to the other students and/or submission of summaries to the instructor will be required. The student will also participate in all aspects of the renal pathology service, including histologic examination and immunofluorescence microscopy. The rotation will also provide exposure to scanning electron microscopy with microprobe analysis.

**PAT 481 Pediatric-Perinatal Pathology 1-4 cr**

Working closely with Pathology faculty, the student will interface with Pediatricians, Pediatric Surgeons, Obstetricians and Neonatologists. Through clinicopathologic correlations, the student will learn pathogenesis of diseases and contribute to the care of patients. The student will assist with examination and/or dissection of clinical, surgical and/or autopsy specimens, review of medical records, and evaluation of current literature. Interesting cases offer opportunities for detailed investigations that can be tailored to the interest and skills of the student.

**PAT 482 Surgical Pathology 1-4 cr**

The student will be actively involved with all aspects of specimen handling and processing, from gross examination to routine histologic examination to special techniques.

**PAT 483 Lab Med for Practicing Phys 1-4 cr**

Laboratory medicine is an area of critical importance to appropriate patient care and yet it is an area in which many graduating medical students feel somewhat unprepared. This is generally due to the large number of laboratory assays available, the vast scope of their uses, and the limited experience medical students have with direct interpretation of these assays in the clinical setting. As the majority of graduating medical students will be ordering and interpreting laboratory studies in their residency training programs, this elective is designed to provide experience with practical and useful concepts of laboratory medicine, including cost-effective laboratory medicine work-ups, utility of specific assays for diagnosis, and effective triage of initial and follow-up laboratory results. Pertinent course information is posted to the PAT 483 eCompanion web site for student use while enrolled on the elective.

**PAT 484 Forensic Pathology 1-4 cr**

By attending autopsy examinations, scene investigations and court proceedings, the students will view the workings of a Medical Examiner's office, learn its role in determining the cause and manner of death and understand its relationship to the medical, law enforcement and public communities. The students will learn the most common causes of sudden, unexpected natural deaths, learn aspects of toxicology-related deaths and view/understand various types of unnatural deaths. Students will also be exposed to normal and pathologic gross anatomy and histology.

**PAT 485 Medicine and Literature 1-4 cr**

The elective will consist of study of diverse sources of literature related to the practice of medicine. Such sources will cover the spectrum from classical, medieval, renaissance, up to and including contemporary literature. The specific sources will be drawn from publications such as the annotated bibliography of Trautmann and Pollard, published by the Society for Health and Human Values\*\* as well as the twelve volumes of Literature and Medicine published by Johns Hopkins University Press. A particular effort will be made to identify genre of literature with which the student is unfamiliar and thereby serve as an introduction. An effort will also be made to relate the reading material to the career goals of the student. \*\*Literature and Medicine: Topics, Titles and Notes. Published by the Department of Humanities, Milton Hershey, etc. 209 pages.

**PAT 486 History & Review of Pathology 1-4 cr**

To review the history of medicine with the emphasis on the development of the concepts and understanding of pathology and review the large teaching collection of gross pathology specimens organ system by organ system.

**PAT 487 Clinical Path Correlation 1-4 cr**

Each student will attend all autopsy conferences, brain-cuttings and tumor boards in the department of Pathology to get regrounded in gross and histologic pathology. They will also attend all other conferences in the department for clinical pathologic correlations. In-depth seminar discussions will be held at least weekly based on the students' independent study of disease processes, expected clinical findings (including laboratory and radiographic results) and gross and histologic correlations. Each student will be expected to give a 30+ minute presentation of a complex fictional patient and the expected pathologic findings at the end of the rotation.

## Patients & Human Structure-MD (PHU)

**PHU 160 Patients & Human Structure 6 cr**

Patients and Human Structure introduces the biopsychosocial model approach to medicine and a general overview of the structure of the human body in a clinical context. It provides students with a patient-centered approach for clinical activities that incorporates multiple components of the patient including biological factors, psychological elements, and social influences. Students begin to develop skills required to identify and evaluate patterns of normal development over the lifespan. Basic structure of the human body is explored through physical observation, anatomical dissection, and common modes of medical imaging. Psychological and social aspects of medicine and patient care are explored through content and application of principles of diversity, equity, inclusion and anti-racism in healthcare. This builds the foundation for practicing culturally responsive medicine. These topics are integrated into forming an initial approach to interactions and communication with the patient, as well as other colleagues. The knowledge and skills introduced in this module help prepare students for future modules of the curriculum. Throughout the module the students engage in lectures, independent learning, reflection, small group activities, and clinical experiences. Medical science knowledge is applied using authentic situations presented in the context of clinical cases and virtual patients. During these activities the learner begins to develop communication skills with both the patient and fellow colleagues aligned with the professional expectations of a physician. At the conclusion of this module, the students have developed some initial foundational knowledge and basic clinical approaches that will be applied at deeper levels throughout their medical education and career as a physician.

## PE-Activity Courses (PE) (PE)

**PE 101 PE Activity - 1 cr**

Instruction and practice of basic sport and activity skills. A varying content course that gives students choices from designated semester offerings. May be repeated for credit.

**PE 102 Weight Training 1 cr**

A progressive resistance training course designed to improve muscular strength and endurance. May be repeated for credit.

**PE 103 PE Activity - 1 cr**

Instruction and practice of sport and activity skills. A varying content course that gives students choices from designated semester offerings. May be repeated for credit. An additional fee will be charged for these activities.

**PE 104 PE Activity - 1 cr**

Instruction and practice of basic sport and activity skills. A varying content course that gives students choices from designated semester offerings. May be repeated for credit. An additional fee will be charged for these activities.

**PE 105 PE Activity - 1 cr**

Instruction and practice of basic sport and activity skills. A varying content course that gives students choices from designated semester offerings. May be repeated for credit. An additional fee will be charged for these activities.

**PE 106 Gymnastics 1 cr**

Instruction and practice in gymnastic skills. A varying content course treating different skill levels in gymnastics. May be repeated for credit.

**PE 107 PE Activity - 1 cr**

Instruction and practice of basic sport and activity skills. A varying content course that gives students choices from designated semester offerings. May be repeated for credit. An additional fee will be charged for these activities.

**PE 108 Ballroom Dancing 1 cr**

Knowledge, skills, and techniques associated with various forms of ballroom dancing through demonstration, practice and partnering.

**PE 109 Swing Dancing 1 cr**

Knowledge, skills, and techniques associated with various forms of swing dancing through demonstration, practice, and partnering.

**PE 110 Dance - 1 cr**

Instruction and practice in dance. A varying content course treating different types of dance such as but not limited to social, folk, square, and dance performance. May be repeated for credit.

**PE 112 Latin Dancing 1 cr**

Knowledge, skills, and techniques associated with various forms of Latin dancing through demonstration, practice, and partnering.

**PE 113 Creative Dance 1 cr**

An introduction to dance as an art form; the vocabulary for movement as a means of self-expression. May be repeated for credit.

**PE 114 Aerobics 1 cr**

Aerobic exercise is a physical fitness program that offers complete and effective conditioning. It involves jogging, jumping, lunging, kicking, and stretching to music.

**PE 115 Ballroom and Swing Dancing 1 cr**

Knowledge, skills, and techniques associated with various forms of ballroom and swing dancing through demonstration, practice and partnering.

**PE 116 Cajun and Swing Dancing 1 cr**

Knowledge, skills, and techniques associated with various forms of Cajun and Swing dancing through demonstration, practice, and partnering.

**PE 117 Ballet 1 cr**

Instruction and practice in ballet. A varying content course treating the different skill levels of ballet with emphasis on correct body placement through barre and centre exercises. May be repeated for credit.

**PE 118 Jazz Dancing 1 cr**

Instruction and practice in jazz dancing. A varying content course treating the various skill levels of jazz with emphasis on correct body placement through isolation and locomotor techniques. May be repeated for credit.

**PE 119 Modern Dance 1 cr**

Instruction and practice in modern dance. A varying content course with exposure to various skill levels and modern dance styles. May be repeated for credit.

**PE 120 Tennis - Basic 1 cr**

Instruction and practice in beginning and intermediate tennis. May be repeated for credit.

**PE 121 Golf - Basic 1 cr**

Instruction and practice in beginning golf. May be repeated for credit.

**PE 122 Bowling 1 cr**

Instruction and practice in beginning bowling. Requires special fee. May be repeated for credit.

**PE 123 Archery 1 cr**

Instruction and practice in beginning archery. May be repeated for credit.

**PE 124 Latin and Swing Dancing 1 cr**

Knowledge, skills, and techniques associated with various forms of Latin and Swing dancing through demonstration, practice, and partnering.

**PE 125 Badminton 1 cr**

Instruction and practice in beginning and intermediate badminton. May be repeated for credit.

**PE 126 Ballroom and Latin Dancing 1 cr**

Knowledge, skills, and techniques associated with various forms of Ballroom and Latin dancing through demonstration, practice, and partnering.

**PE 127 Country West/Partner Dancing 1 cr**

Knowledge, skills, and techniques associated with various forms of Country Western/Partner dancing through demonstration, practice, and partnering.

**PE 128 Dance Performance 1 cr**

Knowledge, skills, and techniques associated with various forms of Dance Performance through demonstration and practice.

**PE 129 Folk and Square Dancing 1 cr**

Knowledge, skills, and techniques associated with various forms of Folk and Square dancing through demonstration, practice, and partnering.

**PE 130 Beginning Swimming 1 cr**

Instruction and practice in beginning swimming and water safety. Participation fee required. May be repeated for credit.

**PE 131 Intermediate Swimming 1 cr**

Instruction and practice in intermediate swimming and water safety. Participation fee required. May be repeated for credit.

**PE 132 Step Aerobics 1 cr**

A physical activity class which includes the instruction and practice of step aerobics. The course is designed to improve cardiovascular and muscular endurance and improve coordination.

**PE 133 Muscle Toning and Conditioning 1 cr**

Muscle Toning and Conditioning is a physical activity course in which the student, through active participation, will develop knowledge and skills sufficient to tone the body and improve cardiorespiratory fitness using weights, body bars, resistance tubes, and other equipment.

**PE 134 Karate I 1 cr**

A beginning course in Karate designed to develop physical fitness, self-discipline, the fundamentals and techniques of blocking, punching, striking, kicking, and stances.

**PE 135 Karate II 1 cr**

An intermediate course in Karate designed as a continuation of Karate I with the introduction of additional blocks, kicks, and footwork. Self-discipline and physical fitness continue to be stressed.

**PE 136 Karate III 1 cr**

An advanced course in Karate designed as a continuation of Karate II with the addition of more advanced and versatile concepts of speed, distance, timing, and footwork. Vigorous training methods are used and self-discipline is stressed.

**PE 138 Tai Chi 1 cr**

Tai Chi training presents basic concepts and techniques to enhance physical fitness and develop mental discipline for stress reduction and personal wellness.

**PE 139 Yoga 1 cr**

The purpose of this course is to introduce the basic concepts of yoga theory, to teach safe yoga posture, and to help participants in developing balance and fitness, as well as manage stress wisely.

**PE 141 Softball 1 cr**

Instruction and practice in softball. May be repeated for credit.

**PE 142 Volleyball 1 cr**

Instruction and practice in volleyball. May be repeated for credit.

**PE 143 Basketball 1 cr**

Instruction and practice in basketball. May be repeated for credit.

**PE 144 Soccer 1 cr**

Instruction and practice in soccer. May be repeated for credit.

**PE 145 Jogging 1 cr**

Instruction and practice in the activity of jogging designed to improve cardiovascular endurance.

**PE 146 Bicycling 1 cr**

An introductory course to bicycling for leisure and fitness emphasizing the selection and care of bicycles, safety concerns, apparel, route selection, bike handling skills, and development of a bicycle fitness program.

**PE 147 Racquetball 1 cr**

Instruction and practice in racquetball. May be repeated for credit.

**PE 148 Intermediate Golf 1 cr**

Instruction and practice in intermediate golf. Demonstrable beginner golf skills necessary.

**PE 149 Ultimate Frisbee 1 cr**

Fundamental skills, rules, and strategies with frisbees with opportunities for participation.

**PE 155 Martial Arts - 1 cr**

Instruction and practice in various forms of Martial Arts. A varying-content course treating different skill levels of karate, judo, kung-fu etc. Requires special fee. May be repeated for credit.

**PE 157 ICA - Varsity Sports 1 cr**

Restricted to members of South Alabama intercollegiate athletic teams by special permission of the respective coaches. Includes but not limited to basketball, soccer, baseball, track, golf, tennis, and volleyball. May be repeated for credit with exception of Education majors.

**PE 158 Life Skills - Student Athletes 1 cr**

This course is designed to help the student acquire specific tools and life skills necessary to be a successful student-athlete on the field, in the classroom, and in life. Modeled after the NCAA Champs/Life Skills program, the course explores and develops proficiency in the areas of: academic excellence, athletic excellence, personal development, career development, and community service. The structure will be a combination of class lectures, group discussions, speakers, and activities. Prerequisites: Students enrolled in PE 158 must be an NCAA varsity student-athlete at the University of South Alabama.

## Pediatrics - MD (PED)

**PED 099 Pediatric Emergency Medicine 3 cr**

The students will assist the attending physician and/or PGY 2-3 resident in evaluating and treating acute emergency patients presenting to USA Children's & Women's Emergency Department.

**PED 311 Pediatrics 8 cr**

The clinical clerkship in Pediatrics includes newborn nursery, outpatient and inpatient services. The two week newborn nursery experience includes the intensive care nursery for learning about seriously ill neonates. The two week outpatient experience is designed to allow contact with common diseases seen in pediatric medicine and instruction in their diagnosis and management. During the outpatient rotation, growth, development, and nutrition are stressed. The four week inpatient experience is for learning about the more serious pediatric illnesses.

**PED 400 Pediatrics Externship 4 cr**

To be determined.

**PED 444 Spec Elec-Pediatrics 4 cr**

To be prepared by the student in conjunction with the Course Director and approved by the Vice Dean before course can be added to schedule. This course is designed to offer students and faculty/clinical faculty an opportunity to develop electives which are not offered in the Elective Manual. Such an elective may be made permanent and printed in the next edition of the Elective Manual at the request of the Course Director and with the approval of the Curriculum Committee. At the discretion of the Vice Dean, this elective may count as the required "in-house" elective.

**PED 450 Acting Intern - Pediatrics 4 cr**

The student will be assigned to the pediatric inpatient service along with the pediatric residents. The student will be assigned patients in rotation with first year level pediatric residents. Direct supervision will be given by the senior resident. Instruction will be given by the attending faculty member.

**PED 451 Acting Intern - Ped Crit Care 4 cr**

To provide clinical experience in the care of critically ill infants and children. The senior student will function as an intern in the Pediatric Intensive Care Unit (PICU) to build up the experience required in the junior clerkship.

**PED 452 Acting Intern - Neonatology 4 cr**

To provide clinical experience in care of sick neonates. The senior student will function as an acting intern in the Newborn Intensive Care Nursery to build upon the experience acquired in the junior clerkship.

**PED 453 Acting Intern - Ped Emer Med 4 cr**

This is a four-week Pediatric Emergency Care rotation during which the senior student will serve as an acting intern in the Evaluation Center (EC) at USA Children's and Women's Hospital. The acting intern will function along side regularly assigned pediatric and Med/Peds interns and will have the same responsibility for the initial assessment of pediatric and adolescent patients presenting to the EC under the supervision of the attending physician and senior resident. The acting intern will perform the initial history and physical examination and will develop a differential diagnosis and initial management plan which will be carried out after discussion with the attending physician or senior pediatric resident. As a result of this clinical experience, the acting intern will learn to identify and manage acute medical problems and injuries in children and adolescents. The acting intern will also gain experience in decision making regarding the indications for hospitalization versus outpatient management in certain cases. As a part of the evaluation of these children, the acting intern will gain experience in a number of procedures including venipuncture, arterial puncture, initiation of intravenous fluids, airway management, laceration repair/wound management, lumbar puncture and splinting/fracture management. The acting intern will also gain experience in ordering and interpreting arterial and venous blood gases, laboratory studies, radiology studies (plain films, CT scans, ultrasounds), and EKG's. The acting intern will participate in management of children in cardiopulmonary arrest and in resuscitations due to medical or trauma-related causes. Direct supervision will be given by the attending physician or senior pediatric resident.

**PED 460 Pediatric Cardiology 4 cr**

The student will (1) work up all new patients and new consultations (under the supervision of the attending); (2) write daily cardiology progress notes on all patients; (3) present patients to the pediatric cardiology attending on rounds; (4) participate in the Pediatric Cardiology Clinics; (5) read and review with the attending all pediatric ECG's; (6) attend pediatric case/teaching conferences; (7) help with emergency care, cardiac catheterization, and pediatric exercise tests as needed. On an average, the student will work 40 hours per week. A comprehensive "handout" will be given to the student at the beginning of the rotation. This contains useful normal-value tables for ECG as well as detailed description of heart murmurs and articles pertaining to common symptoms referred to the cardiologist. A self-instruction audio tape is available on loan for learning cardiac auscultation. The student will make daily pediatric cardiology rounds, see consults, attend Pediatric Cardiology Clinic five half-days weekly, and review all pediatric ECG's with the attending.

**PED 461 Pediatric Hematology/Oncology 4 cr**

The student will be assigned to the pediatric inpatient service along with the pediatric residents. The student will be assigned patients in rotation with first year level pediatric residents. Direct supervision will be given by the senior resident. Instruction will be given by the attending faculty member.

**PED 462 Pediatric Subspecialty Clinic 4 cr**

The patient population served by pediatric hematology/ oncology includes patients with sickle cell disease, and other hemoglobinopathies, hemophilia, coagulation disorders, and childhood malignancies. Multi-disciplinary programs exist for patients with such chronic conditions. Researchers are involved in studies of hemoglobin gene expression and switching mechanism, and clinical investigations on sickle cell disease and cancer.

**PED 463 Pediatric Critical Care 1-4 cr**

The student will be responsible for attending admissions to the PICU. He/she will do initial workup and evaluation. He/she will be responsible for planning patient care, presenting patients on rounds and will be responsible for doing those procedures assigned to him/her by the attending/ resident in the unit. The student will do independent library research on selected topics concerning PICU care. The student will take night call every 4th night with the resident (7 calls per rotation). There should be adequate admissions during one month to provide sufficient patient material for learning. Supervision will be by the senior resident in the PICU and by the attending pediatric intensivist in charge at the time.

**PED 464 Pediatric Ambulatory Care 4 cr**

The student will evaluate all assigned patients and present them to the Attending Pediatrician. The student will be responsible for coordinating all diagnostic testing and treatment and arranging follow-up for patients. The student will complete the medical record in a satisfactory manner.

**PED 465 Gastroenterology & Nutrition 4 cr**

The student will be responsible for attending admissions to the Newborn Intensive Care Nursery. He/she will do initial workups and evaluations. He/she will be responsible for planning patient care and will be responsible for doing those procedures assigned to him/her by the resident in the unit. The students will do independent library research on selected topics concerning newborn care. The student will take night call every 4th night with the resident. There should be 60 - 65 admissions during one month to provide adequate patient material for learning. Supervision will be by the senior resident in the nursery and by the attending neonatologist in charge at the time.

**PED 466 Pediatric Emergency Medicine 4 cr**

The student will select a number of different Pediatric Subspecialty Clinics to make up a full time elective. A wide range of different subspecialties should be chosen. The student will attend all selected clinics and evaluate all patients designated by the Attending Physician. The student will then present the patients to the attending physician. The student will be responsible for satisfactory completion of the medical record. The student can gain clinical experience by interacting with all patients presenting to the Subspecialty Clinics. From time to time the faculty may give reading assignments to the student or request that the student research the medical literature on the topic.

**PED 467 Ambulatory Care 1-4 cr**

The student will evaluate all assigned patients and present them to the attending pediatrician. The student will be responsible for coordinating all diagnostic testing and treatment and arranging follow-up for patients. The student will complete the medical record in a satisfactory manner. The student will be assigned patients with a wide variety of pediatric problems and will learn by discussion with the attending pediatrician and by reading assigned to complement particular clinical experiences.

**PED 468 Gastroenterology and Nutrition 1-4 cr**

The student will make daily rounds with the attending physician, will see all consults to the GI/Nutrition service, will attend weekly pediatric GI clinic, and will attend all elective procedures (e.g. upper and lower endoscopies).

**PED 469 Pediatric Emergency Medicine 1-4 cr**

The student will be assigned to the Evaluation Center (EC) at USA Children's and Women's Hospital along with the pediatric residents assigned to that area. The student will have initial contact with patients taking the history and performing the physical examination. These results, together with a differential diagnosis and proposed management plan will then be reported to an attending physician or senior pediatric resident. As a result of this clinical experience, the student will learn to identify and manage acute medical problems in children. The student will also get experience in decision making regarding the necessity of hospitalization for certain cases. As a part of the evaluation of these children, the student will be instructed in the performance of a number of procedures including venipuncture, starting intravenous fluids, lumbar puncture, arterial blood gas, laceration repair and splint/ cast placement. The student will also assist in management of children with cardiorespiratory arrest. Direct supervision will be given by the attending physician or senior resident.

**PED 470 Pediatric Infectious Diseases 4 cr**

The elective in Pediatric Infectious Diseases is designed around the consultation service and the outpatient clinics. Consultations are seen from the general pediatric and surgical services, pediatric intensive care unit, neonatal intensive care unit, pediatric hematology-oncology service and other pediatric subspecialties. A wide ranging spectrum of disease is seen including congenital and neonatal infections, vaccine preventable diseases, infections in pediatric patients with Acquired Immunodeficiency Syndrome or with primary immunodeficiencies. In addition to daily hospital rounds, students spend one-half day per week in the USA Family Specialty Clinic caring for patients affected by HIV infection, and two one-half sessions per week in the outpatient Pediatric Infectious Diseases clinic. Additional educational activities include weekly lectures in pediatric infectious diseases by faculty, participation in the joint Infectious Diseases at the USA Medical Center Conference room on Thursdays at 9:00 and participation in the presentation of the monthly pediatric infectious disease conference at USA CWH.

**PED 471 Obesity & the Pediatric Patient 4 cr**

Overall, the medical students will attend the Pediatric Healthy Life Center clinic from Monday morning to Friday afternoon. A comprehensive package of guidelines and information will be provided to them. Resources for values of blood pressure, BMI, biochemical testing will be available.

**PED 472 Pediatric Endocrinology 4 cr**

The course objectives are as follows: 1. Learn to do a thorough history and physical examination on children with endocrine problems. 2. Learn to interpret a wide variety of endocrine function tests. 3. Understand the pathophysiology of common problems in pediatric endocrinology. 4. Understand the management of common problems in pediatric endocrinology.

**PED 473 The Adolescent Patient 4 cr**

Describe the Adolescence developmental phases ( physical, psychological, cognitive and sociological) and Summarizes the specific pathology associated with Adolescence: (such as but not limited to: Gender Identity, Sexual development and contraception, Sexually transmitted diseases, Sport injury, Behavior disorders, Drug Use, Menstrual disorders, Eating disorders, Cardio-Metabolic risk.) Develop a professional approach to the Adolescent Patient (confidentiality, respect, and therapeutic alliance) through independent learning with reflective writing on peer reviewed papers dedicated to adolescent ethical issues. Differentiate access to care for adolescent in the low Socioeconomic Strata on the basis of insurance coverage and age. Demonstrate specific patient plan incorporating the chronic medical care model.

## Pharmacology (PHA) (PHA)

**PHA 540 Medical Pharmacology 7 cr**

This course is designed to provide the student with a basic understanding of the actions of drugs and their clinical uses. Basic principles, including dose-response relationships and receptor theory, are emphasized. Current concepts of drug effects, mechanisms, and sites of action are explored in detail with respect to major classes of drugs. Important considerations are also given to drug interactions and the toxicology of therapeutic agents, chemicals in the environment, and other biologically active substances.

**PHA 546 Pharmacology Lit Reports 1 cr**

Students and faculty participate in a supervised reading of the current literature and meet periodically (usually once a week) to interact in a discussion of the selected article or topic. The goal of this course is to maintain the faculty's and students' level of information at a "state of the art" in both methods and theory in the discipline and to develop critical skills in reviewing the literature. Student presentation is required to receive credit.

**PHA 547 Dir St in Pharmacology 1-6 cr**

Students participate in research under the direction of a graduate faculty member. The student may pursue independent research or participate in a literature project. This course should be taken by students who have completed their laboratory rotations, but have not yet submitted a formal research proposal.

**PHA 548 Physiological Pharmacology 6 cr**

This course covers both cellular and organ system physiology. It is designed to prepare graduate students for Medical Pharmacology (PHA 540), and for research in pharmacology.

**PHA 590 Sp Top - 1-3 cr**

Each course provides in-depth tutorial exposure to specific areas in the discipline. Student and/or faculty presentations followed by group discussions (usually in the Socratic mode), examine the subject matter in an area of current interest either to one student or to a group of students. Credit and title are arranged with an individual faculty member.

**PHA 640 Molecular-Cellular Pharmacology 3 cr**

This course consists of presentations and literature discussions. The central themes of signal transduction from cellular receptor to amplified response, structure-activity relationships, and drug design are studied comprehensively. Specific topics include receptor-ligand interactions, receptor structure and coupling mechanisms, the biochemical and molecular aspects of G-proteins, protein phosphorylation mechanisms, molecular modeling and protein crystallography. A comprehensive course in biochemistry is prerequisite for this course.

**PHA 643 Molecular-Cellular Toxicology 3 cr**

This course is concerned with the mechanisms by which toxic substances exert their effects at the molecular and cellular level. Detailed analysis of the processes by which toxic materials are metabolized to toxic intermediates is addressed. The mode of action of how toxic compounds interact with structural proteins and other macromolecules, enzymes and receptors, and the genome is included. Examples of toxicity of the heart, liver, lung, pancreas, brain, including teratogenic, mutagenic and carcinogenic effects are discussed at the mechanistic level.

**PHA 646 Cell Signaling Seminar 1 cr**

Students present a research topic for discussion before members of the department. The presentations are usually on a rotational basis. The student may present research data for critique by the faculty.

**PHA 799 Research Dissertation 1-6 cr**

Independent research by the student under the sponsorship of the graduate faculty in individual departments in the Basic Medical Sciences. Students are required to submit a research project description form before enrolling in this course. Progress reports of the work accomplished are required every six months.

**Pharmacology - MD (PHM)****PHM 221 Medical Pharmacology 9 cr**

The core course in medical pharmacology is designed to provide the student with a basis for the clinical use of drugs. Current concepts of the sites and mechanism of action of the major classes of drugs are emphasized and are integrated with problem-solving workshops concerning their clinical use. Basic principles of drug absorption, distribution, metabolism, and elimination are central to understanding drug interactions and the toxicology of therapeutic agents and chemicals in the environment.

**PHM 400 Pharmacology Externship 1-4 cr**

To be determined.

**PHM 410 Research in Pharmacology 1-4 cr**

The objective of this elective is to provide the student the opportunity to experience basic medical research including experimental design, utilization of scientific literature and methods for evaluation and interpretation of experimental data.

**PHM 422 Clinic Pharm and Therapeutics 1-4 cr**

Students will be expected to attend each of the scheduled lectures and presentations. In general, lectures will be scheduled for 6 hours per day, five days per week. The remainder of the scheduled time each day will be for self-study, literature analyses, and preparation for presentations. Each student is expected to make two presentations to the class.

**PHM 441 Research in Pharmacology 1-4 cr**

A study of various pharmacological techniques employed in research. This will be accomplished by student rotation through various research laboratories in the Department of Pharmacology. Program designed to offer the student the opportunity to develop and appreciation of the correct techniques of experimental design and evaluation of experimental data. Students will be given the option of spending the entire period in full-time research within the laboratory of a member of the faculty working on a project of interest to them.

**PHM 480 Clinical Pharm & Step 2CK Revi 4 cr**

This course is directed toward integrating fundamental principles of clinical pharmacology with the clinical skills and knowledge gained during the third and fourth years of medical school. The overall objective is to provide a solid foundation for the rational and practical approach to the appropriate clinical use of medications. Specific topics will include, but not be limited to: Taking medication histories; Patient compliance; Interpretation of Drug Literature and Clinical Drug Trials; Over-the-counter Products; Clinical Pharmacokinetics and Therapeutic Drug Monitoring; Drug Interactions; Drug-Induced Diseases; Effects of Underlying Diseases on Drug Therapy; and Geriatric Drug Therapy. In addition, the rational therapeutic approach to common specific diseases will be discussed (e.g., hypertension, CHF, hyperlipidemias, COPD, asthma, diabetes, chronic pain and headaches, infectious diseases, etc.). Discussions will be oriented to a primary care focus.

**Pharmacy (PHR) (PHR)****PHR 600 Pharmacy Doctoral Program 0 cr**

Course used to register students enrolled in Auburn University Harrison School of Pharmacy

**Philosophy (PHL) (PHL)****PHL 110 Introduction to Philosophy 3 cr**

An introduction to philosophical analysis and criticism through a survey of the major branches of philosophy. Topics may include, but are not limited to: the mind/body problem, theory of knowledge, skepticism, ethics, political philosophy, aesthetics, and philosophy of religion. Fulfills the General Education Requirement.

**PHL 120 Critical Thinking 3 cr**

This course will examine complex types of reasoning, including statistical judgment, decision making, and causal and analogical thinking. Emphasis will be placed on the analysis of concrete examples of reasoning in various fields, including science, religion and theology, politics, law as well as alternative medicine and other non-traditional disciplines. Students will be encouraged to improve their own judgment and decision making by learning how to evaluate arguments and by learning about fallacies, common errors and biases in reasoning and decision making. There will also be extensive discussion on the relation between how people do reason and how they ought to reason. Fulfills the General Education Requirement.

**Cross-Listed:** ARG 120

**PHL 121 Introduction to Logic 3 cr**

Studies arguments: what they are, how to identify them, and how to judge their quality; and examines inductive and deductive arguments in both their informal and formal aspects. Fulfills the General Education Requirement. MA 110 or equivalent is recommended.

**PHL 131 Introduction to Ethics 3 cr**

Examines ideas about good and bad, right and wrong, and moral obligation through a survey of major ethical systems in western philosophy. The course includes consideration of how these ideas apply to moral problems and issues. Fulfills the General Education Requirement.

**PHL 220 Medical Reasoning 3 cr**

This course will examine complex types of reasoning, including statistical judgment, decision making and causal and analogical reasoning. Emphasis will be placed on the analysis of concrete examples of reasoning in the medical field. Students will learn how to evaluate arguments, fallacies, common errors, and biases in medical reasoning and decision making.

**PHL 231 Social Ethics 3 cr**

Readings and analyses of ethical issues in society. Topics may include euthanasia, sexual equality, sexual morality, censorship, world hunger, animal rights, the environment, and capital punishment. Fulfills the General Education Requirement.

**PHL 233 Phil of Love-Friendship - W 3 cr**

Love and friendship are investigated by a philosophical analysis of concepts embraced by the terms. Examples of the concepts are drawn from common life, religion, history, and literature.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**PHL 240 Western Philosophy: Classical 3 cr**

Survey of classical Greek philosophy. The philosophers surveyed may include Presocratic philosophers, Socrates, Plato, Aristotle, and Hellenistic philosophers. Fulfills the General Education Requirement. Identical with CLA 240. Credit cannot be received for both PHL 240 and CLA 240.

**Cross-Listed:** CLA 240

**PHL 242 Western Philosophy - Medieval 3 cr**

A survey of Medieval Western Latin, Jewish and Islamic philosophers. Identical with REL 242. Credit cannot be received for both REL 242 and PHL 242.

**Cross-Listed:** REL 242

**PHL 245 Renaissance-Enlightnmt - W 3 cr**

Survey of Western philosophy from F. Bacon to Kant with emphasis on the empiricists, rationalists, and Kant.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**PHL 251 Philosophy and Cognitive Sci 3 cr**

A survey of central concepts and issues in cognitive science, including an informal introduction to automata theory, intelligent systems architecture, and the philosophical issues arising out of computational models of language and cognition.

**PHL 290 Special Topics - 1-3 cr**

Different themes and issues of philosophical significance will be studied as announced. May be repeated for a maximum of 9 hours.

**PHL 301 Skepticism in Media-Philosophy 3 cr**

This course examines some of the most fundamental questions about human knowledge, belief and rationality and compares the treatment of such issues in philosophical discussions and contemporary media, especially film. Identical with CA 301. Credit cannot be received for both CA 301 and PHL 301.

**Prerequisite:** EH 102 Minimum Grade of D or EH 105 Minimum Grade of D

**Cross-Listed:** CA 301

**PHL 310 Classical Mythology 3 cr**

Through the disciplines of English and Philosophy, this course will provide an introduction to myths and to the literature that recounts the myths, legends, and folktales of ancient Greece and Rome. This course will also look at how different writers treat the material and why their treatments vary. Credit cannot be received for both PHL 310 and either EH 310 or REL 310 or CLA 310.

**Prerequisite:** (A01 27 or S01 610 or USEH P or EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** CLA 310, EH 310, REL 310

**PHL 311 Classical Political Thought 3 cr**

The course examines the central themes of classical Western political philosophy through the reading and discussing of the primary works of such thinkers as Plato, Aristotle, Augustine, and Aquinas. (Cross-listed as CLA 311 and PSC 311)

**Cross-Listed:** CLA 311, PSC 311

**PHL 312 Renaissance Political Thought 3 cr**

The course examines central themes of Renaissance and modern Western political philosophy through the reading and discussing of the primary works of such thinkers as Machiavelli, Hobbes, Locke, and Rousseau. (Cross-listed as PSC 312)

**Prerequisite:** PSC 130 Minimum Grade of C

**Cross-Listed:** PSC 312

**PHL 313 Modern Political Thought - W 3 cr**

The course examines central themes of modern Western political philosophy through the reading and discussing of the primary works of such thinker as Hegel, Mill, Marx, and Nietzsche. (Cross-listed as PSC 313)

**Prerequisite:** PSC 130 Minimum Grade of C

**Cross-Listed:** PSC 313

**PHL 321 Symbolic Logic 3 cr**

A study of sentential and predicate logics and related topics.

**Cross-Listed:** ARG 321

**PHL 327 Philosophy of Science 3 cr**

Studies such topics as method and explanation in the sciences; the demarcation between science and pseudoscience; realist and anti-realist views about scientific theories; the logic of scientific change; confirmation; reduction; laws of nature; underdetermination; and society, science, values and also explores the intellectual, social and cultural history of science, mathematics and philosophy. This course is designed to meet needs of students in Philosophy, Biology, and Mathematics and students in pre-service education programs..

**PHL 331 Constitutional Law 3 cr**

The study of the principles of constitutional powers and liberties examined through an analysis of decisions and opinions by the U.S. supreme Court. (Cross-listed as CJ 331 and PSC 331)

**Cross-Listed:** CJ 331, PSC 331

**PHL 333 Biomedical Ethics - W 3 cr**

Ethical analyses of problems and issues in the biomedical and health-related fields. Topics may include genetic research and technology, abortion, health care, experimentation, and death and dying.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** BLY 333

**PHL 334 Man and Technology 3 cr**

Examines the most common impacts that technology is envisioned to have on both the spirit of the human person and the environment in which that person lives. Both the technologist and anti-technologist arguments will be explored.

**PHL 336 The Law and Legal Theory 3 cr**

Explores issues and problems in the area of law, including the nature and rule of law, the aims and roles of legal systems, morality, and law, obligations to obey the law, and systematic injustices related to race, ethnicity, gender. (Cross-listed as PSC 336 and CJ 336)

**Cross-Listed:** CJ 336, PSC 336

**PHL 337 Liability and Punishment 3 cr**

Explores theoretical issues and problems in the areas of law—especially criminal law—concerning liability and punishment. Topics to be examined include diminished capacity, theories of punishment, and capital punishment. (Cross-listed as PSC and CJ 337)

**Cross-Listed:** CJ 337, PSC 337

**PHL 339 Philosophy of Culture 3 cr**

Acquaints students with Cassirer's philosophy of culture, with emphasis on the unity of human experience as ramified into myth, language, religion, art, history, science, and politico-social life.

**PHL 345 Post-Kant Anglo-American 3 cr**

An examination of selected themes and issues in Anglo-American philosophy since 1800. Topics may include pragmatism, ideal language philosophy, and ordinary language philosophy.

**Prerequisite:** PHL 121 Minimum Grade of C or (PHL 321 Minimum Grade of C or PHL 324 Minimum Grade of C)

**PHL 348 19th C Cntl Phl-Lit Theory 3 cr**

An examination of selected themes and issues in 19th Century Continental Philosophy and Literary Theory. Topics may include Idealism, Romanticism, Existentialism, Marxism, Freudianism. Identical with EG 348 and LG 348. Credit cannot be received for both PHL 348 and either EH 348 or LG 348. (For LG credit, students will be required to do some coursework in their language of concentration.)

**Cross-Listed:** EH 348, LG 348

**PHL 349 20th C Cntl Phl-Lit Theory 3 cr**

An examination of selected themes and issues in 20th Century Continental Philosophy and Literary theory. Topics may include Phenomenology, Existentialism, Hermeneutics, Structuralism, and Post-Structuralism. Identical with EH 349. Credit cannot be received for both PHL 349 and either EH 349 or LG 349. (For LG credit, students will be required to do some coursework in their language of concentration.)

**Cross-Listed:** EH 349, LG 349

**PHL 351 Philosophy of Religion - W 3 cr**

Investigates the nature of religion, including religious experience, religious language, arguments for the existence of God, and the problems of evil. Identical with REL 351. Credit cannot be received for both PHL 351 and REL 351.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**PHL 352 World Religions 3 cr**

This course is an introduction to the religions of the world. It is divided into three basic units: Indigenous Religions (of Africa, North America, and Oceania); Eastern Religions (Hinduism, Buddhism, Daoism, Confucianism, Jainism) and Western Religions (Judaism, Christianity, Islam). The emphasis is on grasping the core principles of each tradition, seeing the ways in which religion meets basic human needs, and religion as a cultural artifact that borrows, adapts, and changes over time. Course is identical with REL 352 and SY 352. Credit cannot be received for both PHL 352 and REL 352 or SY 352.

**Cross-Listed:** REL 352, SY 352

**PHL 354 Philosophies of India 3 cr**

Introduces the major religions and philosophies of India by way of the classical Realist/Anti-Realist debate in India. Study of the major religious doctrines of theistic and non-dualist Vedanta, Buddhism, and Jainism, and their philosophical articulation in the Nyaya, Advaita Vedanta, Madhyamaka, and other schools. Identical with REL 354. Credit cannot be received for both PHL 354 and REL 354.

**PHL 355 Chinese Philosophy 3 cr**

Introduces the major classical religious and philosophical systems of China by way of an examination of early Confucianism, Mohism, Yangism, Legalism, Taoism, and Chinese Buddhism. Particular emphasis will be placed upon the role of these schools in the development of Chinese religion, morality, and political organization. Identical with REL 355. Credit cannot be received for both PHL 355 and REL 355.

**PHL 361 Philosophy of Mind 3 cr**

A study of the concept of consciousness and related concepts (e.g., mind, self, thinking) as applied to man, other animals, non-terrestrials, and machines.

**PHL 370 Philosophy of Art 3 cr**

Acquaints students with main issues in aesthetics. Includes such issues as the nature and function of art and the criteria of aesthetic judgment. Identical with ARH 370. Credit cannot be received for both PHL 370 and ARH 370.

**Cross-Listed:** ARH 370

**PHL 390 Special Topics - 1-3 cr**

Different figures or topics of philosophical significance will be studied as announced. May be repeated for a maximum of 9 hours.

**PHL 418 American Political Thought-W 3 cr**

This course examines the central themes, issues, and evolution of American political thought, including how we understand our role and responsibilities in contemporary democracy. (Cross-listed as PSC 418)

**Prerequisite:** PSC 130 or PHL 110 or PHL 120 or PHL 121 or PHL 131

**Cross-Listed:** PSC 418

**PHL 421 Literary Criticism to 1900 - W 3 cr**

Classical, Neoclassical, Romantic, and Victorian literary theory. Identical with EH 421. Credit cannot be received for both PHL 421 and EH 421.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** EH 421

**PHL 422 Literary Criticism Sn 1900 - W 3 cr**

Modern and Contemporary Literary Theory. Identical with EH 422.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** EH 422

**PHL 431 Advanced Ethical Theory 3 cr**

Problems in traditional and recent value theory and ethics.

**PHL 441 Theory of Knowledge 3 cr**

Examines knowledge, its scope and limits. Topics may include the conditions, criteria, and grounds for knowledge, and theories of truth and meaning.

**Prerequisite:** PHL 110 Minimum Grade of C or PHL 121 Minimum Grade of C

**PHL 461 Metaphysics - W 3 cr**

Studies philosophical theories about the nature of reality, including such topics as what is real, change, the nature of things, universals, and such views as monism, materialism, realism, and idealism. Capstone course for all philosophy concentrations.

**Prerequisite:** (PHL 240 (may be taken concurrently) Minimum Grade of C or CLA 240 (may be taken concurrently) Minimum Grade of C or PHL 241 (may be taken concurrently) Minimum Grade of C) and (PHL 243 (may be taken concurrently) Minimum Grade of C or PHL 245 (may be taken concurrently) Minimum Grade of C) and (PHL 321 (may be taken concurrently) Minimum Grade of C or PHL 324 (may be taken concurrently) Minimum Grade of C)

**PHL 467 Mathematical Logic 3 cr**

An introduction to formal first-order logic, first-order metatheory, and its extensions. Topics include axiom systems and their models, completeness, compactness, and recursive sets and functions. Identical with MA 467. Credit cannot be received for both PHL 467 and MA 467.

**Prerequisite:** (PHL 321 Minimum Grade of C or MA 320 Minimum Grade of C)

**Cross-Listed:** MA 467

**PHL 490 Special Topics 3 cr**

An investigation of issues and concepts in philosophy for advanced undergraduates and graduate students. May be repeated, when content varies, for a total of six hours. Prerequisites: junior, senior, or graduate standing.

**PHL 492 Seminar - 1-3 cr**

An investigation of issues and concepts in philosophy for advanced undergraduates and graduate students. May be repeated, when content varies, for a total of 6 hours.

**PHL 494 Directed Studies 1-3 cr**

Directed research in philosophy under the guidance of a member of the department. Credit according to the magnitude of the individual project. May be repeated, if content varies, for a total of 6 hours. Prerequisites: Junior or senior standing and approval of directing professor and department chair. Prerequisites: Junior, senior, or graduate standing.

**PHL 499 Honors Thesis - H (W) 3-6 cr**

Extended research paper prepared under direction of thesis advisor plus two-person committee selected by advisor in consultation with student. Prerequisites: The student must have developed a proposal for the thesis in consultation with the advisor, and received permission for the work from the committee. In addition, the student must be a senior major or minor, have completed the logic and history of philosophy requirements, have at least two courses at the 300-level or higher, and have at least a 3.3 GPA in the Philosophy Concentration of the Philosophy major. Credit for this course is only given as an addition to the hours required for the major.

**PHL 590 Special Topics - 1-3 cr**

Study of individuals or topics of philosophical significance. May be repeated for credit when content varies. Enrollment is limited to students in disciplines other than philosophy. May be repeated, if content varies, for a total of 6 hours.

**PHL 594 Directed Studies 3 cr**

Directed research in philosophy under the guidance of a member of the department. May be repeated, if content varies, for a total of six hours. Prerequisite: Graduate Student in Department conferring a Graduate Degree (hence not open to Philosophy majors in any Concentration in Philosophy).

**Cross-Listed:** CLA 594, REL 594

## Physical Therapy (PT) (PT)

**PT 101 Orientation to PT 1 cr**

An orientation to the physical therapy profession, college life and the physical therapy department.

**PT 490 Special Topics 1-3 cr**

Directed study of topics of interest related to human movement and physical therapy.

**PT 499 Senior Honors Project-H-W 3-6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project relevant to the field of Physical Therapy study that will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty members chaired by the honors mentor. This course is requires permission of the department chair and completion of an approved project prospectus.

**PT 520 Clinical Kinesiology 3 cr**

A study of human movement as it relates to clinical physical therapy practice with a emphasis on biomechanical principles of movement and normal gait. Include laboratory study.

**Cross-Listed:** PT 620

**PT 521 Introductory PT Skills 4 cr**

A introduction to the principles and techniques of patient care utilized in physical therapy practice. These basic therapeutic skills include, but are not limited to, positioning, draping, patient transfers, assistive gait devices, wheelchair use and basic examination. Techniques including assessment of joint range of motion, muscle strength and length testing, massage, and soft tissue mobilization are presented. Include laboratory study.

**Cross-Listed:** PT 621

**PT 525 Therapeutic Intervention 4 cr**

A study of specific techniques of therapeutic intervention in physical therapy practice including electrophysical agents and manual therapy techniques. The electrophysical agents unit will include the physical principles, physiological effects, therapeutic uses and clinical applications of thermal, mechanical, electrical, and photic energy. The intervention unit will include therapy techniques including soft tissue massages, include laboratory study.

**Cross-Listed:** PT 625

**PT 527 Medical Screening 2 cr**

A course focusing on the use of screening tests and clinical tools to enhance the therapist role as a independent practitioner with the ability to identify medical conditions of concerns that require referral to an appropriate health care provider.

**Cross-Listed:** PT 627

**PT 590 Sp Tp- 1-3 cr**

Directed study of topics of interest to human movement and physical therapy.

**PT 600 Human Anatomy I 3 cr**

A comprehensive study of human anatomy concentrating on the nervous, skeletal, arthroial, muscular and circulatory systems of the superficial back, upper extremities, head, neck, and face. Lab consists of prosected material and dissection of aforementioned body parts. Skeletal models and diagnostic imaging will be introduced of each area of dissection. Labs also include surface palpation on live human subjects. Special fee.

**PT 601 Human Anatomy II 3 cr**

A comprehensive study of human anatomy concentrating on the nervous, skeletal, arthroial, muscular and circulatory systems of the deep back, trunk, pelvis, and lower extremity. Lab consists of prosected material and dissection of the aforementioned body parts. Skeletal models and diagnostic imaging will be introduced for each area of dissection. Labs also include surface palpation on live human subjects. Special fee.

**Prerequisite:** PT 600 (may be taken concurrently) Minimum Grade of C

**PT 602 Life Span Human Development 2 cr**

A study of the process of typical human development and aging across the life span, including neuromotor development in childhood and changes associated with aging.

**Prerequisite:** PT 682 Minimum Grade of S

**PT 603 Neuroscience in Phys Therapy 3 cr**

A survey of the structure and function of the nervous system, with emphasis on principles related to physical therapy practice. Includes laboratory study of anatomic specimens. Special fee.

**Prerequisite:** PT 601 Minimum Grade of C and PT 682 Minimum Grade of S

**PT 604 Pathophysiology I 2 cr**

A physiological approach to the study of pathological changes in the human body brought about by trauma or disease, including cell injury, inflammation, immunopathology, neoplasia, infections, and the musculoskeletal and endocrine systems.

**Prerequisite:** PT 601 Minimum Grade of C

**PT 605 Human Learning 1 cr**

This course incorporates application of the principles of human learning to patient/client management including patient, family/caregivers, and community education. Roles of the physical therapist as a clinical educator and academician are discussed as well as opportunities/responsibilities for lifelong learning and professional development.

**Prerequisite:** PT 673 Minimum Grade of C

**PT 606 Pharmacology in Rehabilitation 2 cr**

A study of pharmacological principles in relation to rehabilitation, with emphasis on the possible benefits and side-effects of chemotherapeutic agents on patients receiving physical therapy treatment.

**Prerequisite:** PT 607 Minimum Grade of C and PT 682 Minimum Grade of S

**PT 607 Pathophysiology II 2 cr**

A physiological approach to the study of pathological changes in the human body brought about by trauma or disease, including vascular, hematopoietic, nutritional, neurologic, urogenital, GI and hepatobiliary systems.

**Prerequisite:** PT 604 Minimum Grade of C

**PT 610 Principles of Research & EBP 2 cr**

An introduction to evidence-based practice as it relates to physical therapy, including basic understanding of research designs and research statistics, formulating appropriate clinical questions based on patient/client, accessing current evidence using databases and other resources to answer clinical/practice issues, and summarizing evidence for clinical case application.

**PT 611 Applied Research in Physical Therapy 1 cr**

This course prepares students with essential skills and knowledge required to excel in conducting and critically evaluating clinical research within the field of physical therapy. Students will develop a comprehensive understanding of key concepts, methodologies and statistical analyses relevant to contemporary research in physical therapy.

**PT 612 Advanced Healthcare Analytics: Statistical Methods and Health Informatics 2 cr**

In today's data-driven world, the intersection of statistical methods and health informatics plays a crucial role in shaping healthcare research and decision-making. This research course is designed to equip students with the skills and knowledge needed to conduct cutting-edge research in the field of healthcare analytics.

**Prerequisite:** PT 611 Minimum Grade of P

**PT 613 Clinical Case Report 2 cr**

This course allows the student to develop a clinical case report based on a patient the student has treated during a full-time internship, an administrative/education process or a clinical risk management situation. An in-depth analysis of research from recent publications related to the case is required. The student will prepare a written case report and a presentation in seminar format.

**Prerequisite:** PT 612 Minimum Grade of C and PT 674 Minimum Grade of C

**PT 620 Clinical Kinesiology 3 cr**

A study of human movement as it relates to clinical physical therapy practice, with an emphasis on biomechanical principles.

**Prerequisite:** (PT 600 Minimum Grade of C and PT 601 Minimum Grade of C)

**PT 621 Introductory PT Skills 4 cr**

An introduction to the principles and techniques of patient care utilized in physical therapy practice. These basic therapeutic skills include, but are not limited to, positioning, draping, patient transfers, assistive gait devices, wheelchair use, and basic examination. Techniques including assessment of joint range of motion, muscle strength and length testing, massage, and soft tissue mobilization are presented. Includes laboratory study.

**PT 622 Clinical Exercise Physiology 4 cr**

A study of the effect of physical activity on human physiology with an emphasis on the musculoskeletal, cardiovascular, and endocrine systems. Modes of exercise, environmental considerations, and selected clinical populations are also covered in this course. Includes laboratory study.

**PT 623 Movement Analysis 1 cr**

This course is designed as an introduction to motor control and movement analysis focusing on normal postural control and gait in adult populations.

**Prerequisite:** PT 601 Minimum Grade of C

**PT 624 Movement Analysis II 1 cr**

This course is designed to expose students to concepts of motor control and movement analysis for various functional tasks in adult populations.

**PT 625 Therapeutic Intervention 4 cr**

A study of specific techniques of therapeutic intervention in physical therapy practice including electrophysical agents and manual therapy techniques. The electrophysical agents unit will include the physical principles, physiological effects, therapeutic uses and clinical application of thermal, mechanical, electrical and photic energy. The manual intervention unit will include manual therapy techniques including soft tissue massage. Includes laboratory study. Special fee.

**Prerequisite:** PT 621 Minimum Grade of C

**PT 626 Health Prom & Prev in PT 2 cr**

A course to identify disablement risk factors and provide educational intervention to prevent certain diseases and facilitate a positive change in the health behavior of patients.

**Prerequisite:** PT 622 Minimum Grade of C

**PT 627 Medical Screening 2 cr**

A course focusing on the use of screening tests and clinical tools to enhance the therapist's role as an independent practitioner with the ability to identify medical conditions of concern that require referral to an appropriate health care provider.

**Prerequisite:** PT 607 Minimum Grade of C

**PT 628 Mobility Ortho & Prosthetics 2 cr**

**Prerequisite:** PT 620 Minimum Grade of C

**PT 631 Musculoskeletal Disorders I 3 cr**

Etiology, pathophysiology, medical management, and physical therapy examination of selected musculoskeletal disorders. Includes laboratory studies.

**Prerequisite:** (PT 601 Minimum Grade of C and PT 600 Minimum Grade of C and PT 620 Minimum Grade of C and PT 621 Minimum Grade of C and PT 622 Minimum Grade of C)

**PT 632 Musculoskeletal Disorders II 4 cr**

A continuation of PT 631 that emphasizes physical therapy examination, diagnostic procedures, and radiology associated with select musculoskeletal disorders. Includes laboratory study.

**Prerequisite:** PT 631 (may be taken concurrently) Minimum Grade of C

**PT 633 Musculoskeletal Disorders III 2 cr**

A continuation of PT 632 that includes emphasizes physical therapy intervention of selected musculoskeletal disorders. Includes laboratory study.

**Prerequisite:** PT 632 Minimum Grade of C

**PT 634 Musculoskeletal Disorders IV 3 cr**

A continuation of PT 633 that includes etiology, diagnostic procedures and radiography, medical management, physical therapy examination, evaluation, and intervention of selected musculoskeletal disorders with an emphasis on the cervical and thoracic spine. Includes laboratory study.

**Prerequisite:** PT 633 (may be taken concurrently) Minimum Grade of C

**PT 635 Musculoskeletal Disorders V 2 cr**

Special topics in the management of musculoskeletal conditions including, but not limited to, industrial medicine, sports physical therapy, and chronic musculoskeletal issues. Includes laboratory study.

**Prerequisite:** PT 634 Minimum Grade of C

**PT 640 Neuromusc PT Exam/Eval 4 cr**

This course includes study of the principles and concepts of normal human movement and PT examination/evaluation in patients with disorders of the neuromuscular systems. The course will focus on examination (patient/client history, systems review, tests and measurements), evaluation of examination data (clinical decision-making), with formulation of problem list, functional goals and PT plan of care. Includes laboratory study.

**Prerequisite:** PT 602 Minimum Grade of C and PT 603 Minimum Grade of C

**PT 641 Ped Neuromusc PT Exam/Eval 2 cr**

This course prepares the student to provide services to children with special health care needs/disabilities and their families in a manner consistent with family-centered care; includes patient/family history, systems review, and tests and measures and opportunities for clinical decision-making and establishing a plan of care based on examination data with emphasis on prognosis for a wide variety of pediatric diseases, conditions, and syndromes impacting typical development. Review of pediatric practice settings and legislation, medical management, pharmacologic treatment, radiographic imaging and other diagnostic testing related to neuromuscular disorders and developmental delay are included.

**PT 642 Neuromuscular PT Intervention 4 cr**

A course to follow PT 640 with added emphasis on principles and concepts of physical therapy intervention in patients with disorders of the neuromuscular systems. Includes laboratory study.

**Prerequisite:** PT 640 Minimum Grade of C

**PT 643 Physical Therapy in Neuromuscular Case Applications 2 cr**

This course includes the application of current neuromuscular physical therapy principles in developing a client centered physical therapy examination, evaluation, and intervention plan. The course will focus on developing clinical reasoning through application to patient cases.

**Prerequisite:** PT 642 Minimum Grade of C

**PT 644 PT Pediatric Interventions 2 cr**

This course is the second in a sequence of two courses that provides an in-depth exploration of assessment and intervention procedures used with pediatric patient populations. The focus of this course will be on conditions present from birth or acquired in childhood. Clinical competence in the treatment of children with movement dysfunction is to be developed.

**Prerequisite:** (PT 641 Minimum Grade of C)

**PT 645 Physical Therapy for Aging Adults 1 cr**

The course will focus on primary and secondary aging processes and their impact on the physical therapy management of aging adults.

The course will include an overview of physiological changes and psychosocial aspects of aging, as well as consideration of the aging process in the evaluation and treatment of this population.

**PT 650 PT in Integumentary Disorders 4 cr**

A study of the practice of physical therapy in management of skin disorders and underlying disease with an emphasis on the patient with open wounds, including burns. Includes laboratory study.

**Prerequisite:** PT 604 Minimum Grade of C

**PT 660 PT Cardio/Pulmonary Disorders 4 cr**

A study of the principles and practice of physical therapy for patients with cardiovascular and pulmonary disease, including radiography, and medical and surgical management. Includes laboratory study.

**Prerequisite:** PT 607 Minimum Grade of C and PT 622 Minimum Grade of C and PT 682 Minimum Grade of S

**PT 671 Clinical Case Studies I 1 cr**

A case-based course providing opportunities to develop clinical judgment as part of patient management including establishment of differential diagnosis, patient prognosis, and development of a plan of care for patients with musculoskeletal disorders of peripheral joints. Students will also analyze cases involving ethical, legal and psychosocial concerns for which professional decisions and interprofessional practice or referrals are necessary.

**PT 672 Clinical Case Studies II 1 cr**

A case-based seminar designed to provide opportunities to develop clinical reasoning and communication skills as part of patient management. Students will develop skills in communicating with the healthcare team, recognizing and ameliorating barriers to patient outcomes, and developing plans of care for patients with complex health and psychosocial issues.

**Prerequisite:** PT 671 Minimum Grade of C and PT 682 Minimum Grade of S

**PT 673 Clinical Case Studies III 1 cr**

A case-based course to provide opportunities to apply clinical reasoning to promote evidence-based physical therapy practice by integrating best available evidence for patient management and to challenge the status quo of practice to raise it to the most effective level of care.

**Prerequisite:** PT 672 Minimum Grade of C

**PT 674 Clinical Synthesis & Pat Mgmt 1 cr**

A review and synthesis of physical therapy examination, evaluation, and development of a plan of care in patient management for specific clinical disorders, emphasizing clinical decision-making based on clinical experience and evidence.

**Prerequisite:** PT 627 Minimum Grade of C and PT 635 Minimum Grade of C and PT 642 Minimum Grade of C

**PT 675 Comprehensive Capstone 1 cr**

A comprehensive review of didactic material covered within the curriculum that prepares students for taking the National Physical Therapy Examination. All students must pass the final capstone exam to be awarded the DPT degree.

**PT 676 Advanced Topics in PT 1 cr**

This elective course involves advanced study (beyond entry level) of selected topics within physical practice, research, education and leadership. Topics vary from year to year.

**Prerequisite:** PT 673 Minimum Grade of S and PT 635 Minimum Grade of C and PT 642 Minimum Grade of C and PT 650 Minimum Grade of C and PT 660 Minimum Grade of C

**PT 677 Physical Therapy Licensure Board Preparation 0 cr**

This course will provide additional preparation to the physical therapy licensure exam.

**PT 680 Professional PT Practice 2 cr**

A study of physical therapy as a profession with emphasis on the history of physical therapy; role and scope of practice; professional, ethical, and legal responsibilities; licensure; physical therapy education; contemporary practice issues; and professional communication.

**PT 681 Clinical Practice Issues - W 2 cr**

This course is designed to prepare the student for clinical practice by incorporating the patient management model, clinical decision-making models, health care systems, patient documentation including electronic health records, cultural competence, universal precautions, and risk management.

**Prerequisite:** PT 680 Minimum Grade of C

**PT 682 PT Internship I 6 cr**

A planned learning experience of clinical education designed to integrate previous didactic knowledge in a full time, supervised clinical internship in Physical Therapy practice settings.

**Prerequisite:** PT 620 Minimum Grade of C and PT 625 Minimum Grade of C and PT 632 Minimum Grade of C

**PT 683 PT Internship II 8 cr**

A continuation of PT 682, providing another planned learning experience, designed to integrate previous knowledge in a full time, supervised clinical internship in Physical Therapy practice settings. Good Academic Standing with no required course retakes pending.

**Prerequisite:** PT 635 Minimum Grade of C and PT 642 Minimum Grade of C and PT 650 Minimum Grade of C and PT 660 Minimum Grade of C and PT 682 Minimum Grade of S

**PT 684 PT Internship III 6 cr**

A continuation of PT 682 and 683, providing another planned learning experience, designed to integrate previous knowledge in a full time, supervised clinical internship in Physical Therapy practice settings. Good Academic Standing with no required course retakes pending.

**Prerequisite:** (PT 683 Minimum Grade of C

**PT 685 Management of PT Practice 3 cr**

A study of current organizational and management principles and issues related to health care delivery systems with special emphasis on the current and future roles of Physical Therapy.

**Prerequisite:** PT 687 Minimum Grade of C

**PT 686 PT Internship IV 6 cr**

A continuation of PT 682, 683 and 684, providing another planned learning experience, designed to integrate previous knowledge in a full time, supervised clinical internship in physical therapy practice settings. Good academic standing with no required retakes pending.

**Prerequisite:** (PT 684 (may be taken concurrently) Minimum Grade of S

**PT 687 Collaborative Practice in Physical Therapy 1 cr**

This course offers an in-depth exploration of collaborative practice within the profession of physical therapy, emphasizing interprofessional teamwork, effective communication strategies, and person- and family-centered care. Students will examine the importance of collaboration in optimizing patient outcomes and promoting holistic care. Through interactive case studies, guest lectures, and class discussions, students will develop essential skills for effective collaboration, such as shared decision-making, role delineation, and cultural sensitivity.

**Prerequisite:** PT 681 Minimum Grade of C

**PT 689 Evidence Library Skills 1 cr**

Discussion of evidence-based practice (EBP) and the importance of literature searching and information management skills.

**PT 690 Update in Exercise Physiology 1 cr**

This course reviews the effects of exercise intervention upon human physiology and the acute and chronic adaptations associated with physical activity.

**PT 691 Clinical Reasoning 2 cr**

This course should be one of the first courses taken and will include principles of evidence-based practice, access and evaluation of scientific literature, and application to clinical decision making in specific patient populations.

**PT 692 Applied Human Movement 2 cr**

This course will focus on recent advances in the understanding of human movement with particular emphasis on biomechanics, kinesiology and motor control.

**PT 693 Adv in Musculoskeletal PT 2 cr**

An interactive discussion and exploration of physical therapy practice for populations with orthopedic disorders, including examination, intervention and outcome. The focus will be on evidence-based clinical practice. Course topics will include updated research on operative and non-operative procedures for the peripheral joints and spine, spinal and peripheral joint diagnostic imaging (radiography), pharmacology, therapeutic exercise, clinical reasoning, and lifespan issues with a focus on geriatrics.

**PT 694 Adv in Neuromuscular PT 2 cr**

An interactive discussion and exploration of physical therapy practice for populations with neuromuscular disorders, including examination through intervention and outcomes. The focus will be on clinical practice in this population based on evidence. The course will include diagnostic imaging (radiography), pharmacology, therapeutic exercise, clinical reasoning, and lifespan issues with a focus on geriatrics.

**PT 695 Adv in Integumentary PT 2 cr**

An interactive discussion of new developments in skin and wound care with an emphasis on development of a plan of care that evolves over the episode of care, prevention of recurrence, and the interaction with the patient and other health care providers.

**PT 696 Adv in Cardiovasc/Pulmonary PT 2 cr**

An in-depth, interactive discussion of issues related to the examination, evaluation, and plan of care for patients/clients with primary and secondary cardiovascular and pulmonary disorders across the lifespan. Clinical reasoning, pharmacology and imaging techniques will be emphasized.

**PT 697 DPT Directed Study 1-3 cr**

Directed research or comprehensive review of evidence-based literature completed in a clinical area of interest under the supervision of a faculty mentor. The student will document incorporation of course content into their current clinical practice. This course may be repeated up to two times with a different focus-topic each time.

**PT 698 Professional Issues/Ethics 2 cr**

Discussion of current professional issues including clinical practice, management, legal, ethical/moral and psychosocial topics embedded within the current health care market faced by health care providers. This course will include interactive discussions among students and instructor and will include literature to support discussion topics.

**PT 699 DPT Seminar - 1-8 cr**

An elective seminar to update information in specific areas of study. Course number may be repeated three times.

## Physician Assistant Stds (PA) (PA)

**PA 501 Clinical Preceptorship I 4 cr**

The student is assigned to a clinical setting to obtain knowledge, skills and attitudinal/behaviors professional components, These competencies are to be obtained while engaging in all aspects of patient care through: the medical interview, history and physical exam, critical thinking, knowledge base, diagnosis, treatment plan, and patient education. As well as appropriate health maintenance and disease prevention measures.

**PA 502 Clinical Preceptorship II 4 cr**

The student is assigned to a clinical setting to obtain knowledge, skills and attitudinal/ behavioral professional components. These competencies are to be obtained while engaging in all aspects of patient care through: the medical interview, history, and physical exam, critical thinking, knowledge base, diagnosis, treatment plan, and patient education. As well as appropriate health maintenance and disease prevention measures.

**PA 503 Clinical Preceptorship III 4 cr**

The student is assigned to a clinical setting to obtain knowledge, skills and attitudinal/behavioral professional components. These competencies are to be obtained while engaging in all aspects of patient care through: the medical interview, history and physical exam, critical thinking, knowledge base, diagnosis, treatment plan, and patient education. As well as appropriate health maintenance and disease prevention measures.

**PA 504 Clinical Preceptorship IV 4 cr**

The student is assigned to a clinical setting to obtain knowledge, skills, and attitudinal/behavioral professional components. These competencies are to be obtained while engaging in all aspects of patient care through: the medical interview, history and physical exam, critical thinking, knowledge base, diagnosis, treatment plan, and patient education. As well as appropriate health maintenance and disease prevention measures.

**PA 505 Clinical Preceptorship V 4 cr**

The student is assigned to a clinical setting to obtain knowledge, skills and attitudinal/behavioral professional components. These competencies are to be obtained while engaging in all aspects of patient care through the medical interview, history and physical exam, critical thinking, knowledge base, diagnosis, treatment plan, and patient education. As well as appropriate health maintenance and disease prevention measures.

**PA 506 Clinical Preceptorship VI 4 cr**

The student is assigned the a clinical setting to obtain knowledge, skills and attitudinal/behavioral professional components. These competencies are to be obtained while engaging in all aspects of patient care through: the medical interview, history and physical exam, critical thinking, knowledge base, diagnosis, treatment plan, and patient education. As well as appropriate health maintenance and disease prevention measures.

**PA 507 Clinical Preceptorship VII 4 cr**

The student is assigned to clinical setting to obtain knowledge, skills and attitudinal/behavioral professional components. These competencies are to be blended while engaging all aspects of patient care through medical interview, history and physical exam, critical thinking, knowledge base, diagnosis, treatment plan, and patient education. As well as appropriate health maintenance and disease prevention measures.

**PA 508 Clinical Preceptorship VIII 4 cr**

The student will choose from a variety of available elective rotations in order to engage in all aspects of patient care including: the medical interview, history, and physical exam, critical thinking, knowledge base, diagnosis, and treatment plan, patient education, appropriate health maintenance and disease prevention measures. The goal of elective rotations is to provide the student the opportunity to explore area of interest for further employment and increase knowledge in area of weakness.

**PA 509 Clinical Preceptorship IX 4-8 cr**

The student will choose from a variety of available elective rotations in order to engage in all aspects of patient care including: the medical interview, history, and physical exam, critical thinking, knowledge base, diagnosis and treatment plan, patient education, appropriate health maintenance and disease prevention measures. The goal of elective rotations is to provide the student the opportunity to explore areas of interest for further employment or increase knowledge in areas of weakness.

**PA 510 Clinical Medicine I 4 cr**

Clinical Medicine I (PA 510) is the introductory course in a four part series covering primary care clinical medicine. It is designed to incorporate and integrate topics and content both horizontally and vertically throughout the didactic and clinical curricula. The course is divided into lecture and lab sections that will be graded separately and will provide opportunities for the student to develop critical thinking skills essential to patient evaluation and management. The use of patient simulations is included. Introductory subject matter covered during this first course will include physical examination skills and use of medical instruments, patient history taking, patient counseling, patient education, interpersonal and communication skills, and epidemiology. Additional topics will include an introduction to behavioral medicine, professionalism, interprofessional education, medical research methods, introduction to medical literature, introduction to laboratory diagnosis and introduction to nutrition. Finally, medical and social topics addressed will include the primary care medical home, rural and medically underserved populations, social determinants of health, healthy people 2020, public health issues and community health.

**PA 510L CM I Lab 1 cr**

Clinical Medicine I Lab provides introductory foundational skills in conducting a thorough history and a head to toe physical examination in a systematic manner. Students will learn through standardized patient encounters employing interviewing skills, medical history taking, and clinical note writing. Students will learn and practice physical exam skills with assigned partners from their class cohort. Clinical medicine I lab sets the groundwork so the student will have a successful progression through the entire clinical medicine series.

**PA 511 Human Gross Anatomy 5 cr**

This is a course in gross anatomy of the human body systems utilizing human cadavers and prosections. Emphasis is placed on the relationships between structure and function.

**PA 512 Physiology 6 cr**

Physiology (PA 512) is the scientific basis of medicine. This course will provide the PA student with sufficient in-depth knowledge of cellular and organ physiology necessary for understanding of normal and abnormal human body function and for advancement to courses in pathophysiology, pharmacology, and clinical medicine. This course is divided into six sections which present the basic scientific concepts of human physiology with clinical applications and relevance to disease states: 1) cellular, neuromuscular, autonomic, and cardiac physiology; 2) circulatory physiology; 3) respiratory physiology; 4) renal, electrolyte, and acid-base physiology; 5) gastrointestinal and metabolic physiology; 6) endocrinology.

**PA 514 Intro to Infectious Disease 1 cr**

This course is designed to provide PA students a solid foundation in basic immunology, microbial genetics, structure, nutrition and basic host-parasite relationships. The course will place particular emphasis on the role and application of these subject matters in disease manifestations as well as use/development of diagnostic and treatment modalities. Vulnerability of special populations and interactions between various environmental, social and behavioral factors with the human host in relationship to infection control and treatment will also be emphasized.

**PA 516 Physician Assistant Issues I 2 cr**

Physician Assistant (PA) Issues I is the introductory course in a three part Social Science and Public Health Course Series to integrate the social sciences with the clinical and basic sciences. Health and health problems result from a complex interplay of factors: 1) individual health-related behaviors, 2) physical environment, 3) health care; access and quality, and 4) social and economic environments. This course will also cover commonly encountered clinical practice issues and their impact on physician assistant practice. Patient education across the lifespan and health education in health care are explored in this course series with community outreach and service learning projects utilizing resources from USA Center for Academic Service-Learning and Civic Engagement. This course requires active student participation in all lectures, discussions, readings, group projects, field exercises, presentations, writing assignments, and other methods of instruction.

**PA 517 Clinical Preceptorship X 4 cr**

The student is assigned to a clinical settings to obtain knowledge, skills and attitudinal/behavioral professional components. These competencies are to be obtained while engaging in all aspects of patient care though: the medical interview, history and physical exam, critical thinking, knowledge based, diagnosis, treatment plan, and patient education. As well as appropriate health maintenance and disease prevention on measures.

**PA 518 Clinical Preceptorship XI 4-8 cr**

The student will choose from a variety of available elective rotations in order to engage in all aspects of patient care including: the medical review, history and physical exam, critical thinking, knowledge base, diagnosis and treatment plan, patient education, appropriate health maintenance and disease prevention measures. The goal of elective rotations is to provide the student the opportunity to explore areas of interest for further employment or increase knowledge in areas of weakness.

**PA 520 Clinical Medicine II 6 cr**

Clinical Medicine II (PA 520) is the second course in a four part series covering primary care clinical medicine and surgery topics. It is designed to incorporate and integrate topics and content both horizontally and vertically throughout the didactic and clinical curricula. The course is divided into lecture and lab sections that will be graded separately and will provide opportunities for the student to develop critical thinking skills essential to patient evaluation and management. The use of standardized patients, patient simulations and clinical experiences are included. Topics will include a continuation of physical examination skills, patient history taking, patient counseling, patient education, epidemiology, history of the PA Profession, professionalism, interpersonal and communication skills, interprofessional education, medical research methods, and researching medical literature, the primary care medical home, rural and medically underserved populations, social determinants of health, healthy people 2020, public health issues, and community health care. Specific topics covered in PA 520 include dermatology, ophthalmology, ENT, cardiovascular medicine, EKG, pulmonary medicine, nephrology, and GU medicine. Imbedded in this course will be topics in infectious disease and diagnostic data that will align with the subject matter covered during this semester.

**PA 520L CM II Lab 1 cr**

Clinical medicine II lab (PAS20L) presents a system-oriented and hands-on approach to the physical examination and clinical reasoning skills. This class provides support to the clinical medicine II course. Clinical medicine II lab focuses on the systems of dermatology, EENT (eye, ears, nose and throat), cardiology, pulmonology, nephrology, and genitourinary for clinical reasoning and documentation. Students will learn clinical reasoning skills for differential diagnosis, diagnostic utilization, and treatment plans via faculty-led cases. They will practice writing a full note with problem -focused documentation cases. Students will build upon their knowledge from clinical medicine I lab and continue to practice physical exam skills to perform both a complete and focused physical examination. Students will be utilizing simulation instructors for procedural skills for the systems learned in clinical medicine II. Students will apply insight and judgement with reflection on their interview from the 510 Lab. Clinical judgement and physical exam competency will be evaluated with the culminating problem focused exam and complete physical exam.

**PA 521 Pathophysiology I 4 cr**

Pathophysiology I (PA 521) is the first course in a three-part series that covers the alterations in normal physiology that occur in human disease states. This course will provide the PA student with sufficient in-depth knowledge of pathophysiology necessary for understanding of abnormal human body function and for advancement to subsequent courses in pathophysiology, pharmacology, and clinical medicine. Topics will include an overview of cellular pathophysiology, followed by specific topics that align with the organization of the clinical medicine series: cardiovascular pathophysiology, EKG, pulmonary pathophysiology, and renal/GU pathophysiology.

**PA 522 Pharmacology I 4 cr**

Pharmacology I (PA 522) is the first course in a three-part series that covers the basic scientific concepts of drug classification, mechanism of action, toxicity, and clinical use of drugs. Introductory topics will include the laws and regulations governing the use of pharmaceuticals, prescriptive practices, basic science and properties of drug molecules, drug interactions, and clinical pharmacology of the autonomic nervous system. Specific topics will align with the organization of the clinical medicine series: cardiovascular drugs, pulmonary drugs, drug therapy of renal and genitourinary disease.

**PA 523 Diag Data and Interp I 2 cr**

(Previously PA 524) Interpretation of Diagnostic Data and Studies I, will introduce students to basic concepts of laboratory medicine including different methods of sample gathering and transport, basic phlebotomy, interpretation of blood counts and analysis of the differential blood counts, coagulation studies and anticoagulant monitoring, interpretation of metabolic panels, evaluating electrolyte abnormalities, and ordering and interpreting bacterial culture and susceptibilities. The course will focus on and correlate with laboratory assays and procedures taught during Clinical Medicine II. Syllabi and tentative schedules of lectures for the course are attached.

**PA 524 Interp Diag Data & Studies I 1 cr**

Interpretation of Diagnostic Data and Studies I, will introduce students to basic concepts of laboratory medicine including different methods of sample gathering and transport, basic phlebotomy, interpretation of blood counts, and analysis of the differential blood counts, coagulation studies and anticoagulant monitoring, interpretation of metabolic panels, evaluating electrolyte abnormalities, and ordering and interpreting bacterial culture and susceptibilities. The course will focus on and correlate with laboratory assays and procedures taught during Clinical Medicine II.

**PA 526 Physician Assistant Issues II 2 cr**

This course is the second in a three part series covering commonly encountered issues and their impact on physician assistant practice. Introductory subject matter covered during this second course will include social determinants of health affecting diversity and inclusion; cultural competence; workforce shortage; health disparities; health literacy; public health, primary care medicine with a focus on rural and medically underserved medicine, evidence-based medicine, patient belief systems, health care delivery systems, professionalism, interprofessional education and collaboration, social determinants of healthcare, medical ethics, and population/public health. Equally important is the challenge and significance of patient education across the lifespan and health education in health care. This course requires active student participation in all lectures, discussions, readings, group projects, field exercises, presentations writing assignments, and other methods of instruction.

**PA 530 Clinical Medicine III 6 cr**

Clinical Medicine III (PA 530) is the third course in a four part series covering primary care clinical medicine and surgery topics. It is designed to incorporate and integrate topics and content both horizontally and vertically throughout the didactic and clinical curricula. The course is divided into lecture and lab sections that will be graded separately and will provide opportunities for the student to develop critical thinking skills essential to patient evaluation and management. The use of standardized patients, patient simulations and clinical experiences are included. Topics will include a continuation of complete and focused physical examination skills, patient history taking, patient counseling, patient education, epidemiology, normal and abnormal development, history of the PA Profession, professionalism, interpersonal and communication skills, interprofessional education, medical research methods, and researching medical literature, the primary care medical home, rural and medically underserved populations, social determinants of health, healthy people 2020, public health issues, and community health care. Specific topics covered in PA 530 include neurology, rheumatology, hematology/oncology, orthopedic medicine, gastrointestinal medicine, and psychiatric/behavioral medicine. Included in this course will be topics in infectious disease and diagnostic data that will align with the subject matter covered during this semester.

**PA 530L CM III Lab 1 cr**

Clinical medicine 111 lab (PA 530L) presents a system-oriented and hands-on approach to the physical examination and clinical reasoning skills. This class provides support to the clinical medicine III course. Clinical medicine III lab focuses on the systems of behavioral medicine, gastroenterology, neurology, musculoskeletal (Rheumatology and Orthopedics), endocrinology, and hematology/oncology. Students will learn aspects of clinical diagnosis and problem-solving skills with student-led and documentation cases. Students will build upon their knowledge from clinical medicine I and II lab to continue to master physical exam skills to perform both a complete and focused physical examination. Students will be utilizing simulation instructors for procedural skills for the systems learned in this course. They will apply insight and judgement with reflection on their problem focused standardized patient from the 520 Problem Focused Lab exam. Clinical judgement and physical exam competency will be evaluated with the culminating problem focused exam on the systems taught this semester.

**PA 531 Pathophysiology II 4 cr**

Pathophysiology II (PA 531) is the second course in a three-part series that covers the alterations in normal physiology that occur in human disease states. This course will provide the PA student with sufficient in-depth knowledge of pathophysiology necessary for the understanding of abnormal human body function and for advancement to subsequent courses in pathophysiology, pharmacology, and clinical medicine. Topics will align with the subject matter in Clinical Medicine II (PA 530): neurology, rheumatology, endocrinology, hematology, oncology, gastrointestinal, and psychiatric disorders.

**PA 532 Pharmacology II 4 cr**

This course is the second of a proposed three part pharmacology series that used to be taught in two sections during the spring and summer semesters as PA 532 and PA 542. The course will continue to cover the basic scientific concepts of drug classification, mechanism of action, toxicity, and clinical use of drugs. Other topics will include drug interaction and the properties of drug molecules. Specific topics will align with the organization of the clinical medicine series.

**PA 533 Diag Data & Interp II 2 cr**

Interpretation of Diagnostic Data and Studies II, will focus on ordering and interpretation of laboratory tests and imaging studies associated with diseases of the urinary tract system including basic and advanced urinalysis and their interpretation, laboratory tests and imaging studies associated with diseases of the gastrointestinal tract to include liver, pancreas, small intestine and colorectal regions, basic and advanced immunohematology and imaging to investigate autoimmune disorders, and advanced genetic testing and procedures. This course will advance the students knowledge of laboratory medicine and will focus on those laboratory assays relevant to the topic covered in Clinical Medicine III.

**PA 536 Physician Assistant Issues III 2 cr**

Issues in Healthcare and Population Health is a class that intends to instruct students on the many faces of health care. Healthcare involves different people who have different roles in the patient's healthcare experience. The goal is for the student to gain a deeper understanding of the many aspects of practicing medicine. Issues in Healthcare and Population Health IV (PA 536) is the last in a three part series covering commonly encountered issues and their impact on physician assistant practice. This series is designed to incorporate and integrate topics and content both horizontally and vertically throughout the didactic and clinical curricula. The course will utilize a variety of teaching strategies getting the student involved in the learning process.

**PA 540 Clinical Medicine IV 7 cr**

Clinical Medicine IV (PA 540) is the final course in a four part series covering primary care clinical medicine and surgery topics. It is designed to incorporate and integrate topics and content both horizontally and vertically throughout the didactic and clinical curricula. The course is divided into lecture and lab sections that will be graded separately and will provide opportunities for the student to develop critical thinking skills essential to patient evaluation and management. The use of standardized patients, patient simulations and clinical experiences are included. Topics will include a continuation of complete and focused physical examination skills, patient history taking, patient counseling, patient education, interpersonal and communication skills, epidemiology, normal and abnormal development, history of the PA Profession, professionalism, interprofessional education, medical research methods, and researching medical literature, the primary care medical home, rural and medically underserved populations, social determinants of health, healthy people 2020, public health issues, and community health care. Specific topics covered in PA 540 include geriatric medicine, pediatric medicine, surgery, OB/GYN medicine, emergency medicine, ACLS, and clinical year transition. Included in this course will be topics in infectious disease and diagnostic data that will align with the subject matter covered during this semester.

**PA 540L CM IV Lab 1 cr**

Clinical medicine IV lab (PA 540L) presents a system-oriented and hands-on approach to the physical examination and clinical reasoning skills while preparing them for clinical rotations. This class provides support to the clinical medicine IV course. Clinical medicine IV lab reviews the systems/topics of OB/GYN, emergency medicine, surgery, and extremities of age. Students will apply clinical reasoning, diagnosis and problem-solving skills via case scenarios using standardized patients where they will document the encounter. Students will build upon their knowledge from clinical medicine I, II, and III lab to continue to master and practice physical exam skills to perform both a complete and focused physical examination using standardized patients. Students will be utilizing simulation instructors for procedural skills for the systems learned in this course. Clinical judgement and physical exam competency will be evaluated with the culminating problem focused exam on the systems/topics covered and an evaluation of the complete physical exam.

**PA 541 Pathophysiology III 3 cr**

This course is the third of three sections of pathophysiology that used to be taught during the fall semester as a single course PA 523. The course will provide students with an understanding of abnormal body functions including an overview of cellular pathophysiology followed by specific topics that align with the organization of the clinical medicine series.

**PA 542 Pharmacology III 3 cr**

This course is the third of a proposed three part pharmacology series that used to be taught in two sections during the spring and summer semesters as PA 532 and PA 542. The course will continue to cover the basic scientific concepts of drug classification, mechanism of action, toxicity, clinical use of drugs, drug interaction and the properties of drug molecules. Specific topics will align with the organization of the clinical medicine series.

**PA 544 Diagn Data and Interp III 2 cr**

(Previously PA 541) Interpretation of Diagnostic Data and Studies III, will introduce students to basic radiology concepts by teaching fundamentals of radiology, basic imaging techniques (ultrasound, vascular imaging, advanced imaging techniques (CT Scan and MRI with and without contrast), and PET scan. The course will hone student knowledge of all diagnostic modalities through intensive case-based approach to the interpretation of laboratory assays.

**PA 595 Summative Evaluation 4 cr**

PA 595 is designed to evaluate student learning at the end of the 27 month PA training program. The assessments used in this course will help determine the level at which students achieved the expectations for their learning as prescribed and to identify instructional areas that may need additional attention. The summative assessments include: 1) comprehensive examination, 2) OSCE with standardized patient, 3) on-line board review and 4) Capstone Project. A comprehensive written examination will be administered as a final evaluation of the student's progress. This test is also designed to prepare the graduate for the NCCPA exam.

## Physics (PH) (PH)

### PH 101 Introduction to Astronomy 4 cr

This is a descriptive survey course of elementary astronomy with laboratory intended for both non-science and science majors. Topics covered include a description of the celestial sphere, a tour of the Solar System, techniques for measuring and classifying stars, stellar evolution, white dwarfs, black holes, neutron stars, galaxies, and Big Bang cosmology. Students must take PH 101L concurrently and pass the lab. The PH 101L grade is a component of the PH 101 course grade. Core course.

**Corequisite:** PH 101L

### PH 101L Introduction to Astronomy Lab 0 cr

Laboratory course for the Introduction to Astronomy course. Student must pass this laboratory course to receive a passing grade in the PH 101 course. Students must take PH 101L concurrently with PH 101 and pass the lab. The PH 101L grade is a component of the PH 101 course grade.

**Corequisite:** PH 101

### PH 104 Concepts of Physics 4 cr

A descriptive overview of the entire field of physics with laboratory, including the concepts of scalars and vectors. Newton's law, momentum and energy conservation, rotational motion, fluids, heat and thermodynamics, sound, electricity and magnetism, optics, atomic and nuclear physics, relativity, and elementary particle physics. This course is intended to provide the non-scientist with substantial insight into the physical behavior of matter and energy. Extensive demonstrations accompany the presentation of material to illustrate key concepts. Students must take PH 104L concurrently and pass the lab. The PH 104L grade is a component of the PH 104 course grade. Core course.

**Corequisite:** PH 104L

### PH 104L Concepts of Physics Laboratory 0 cr

Laboratory course for the Concepts of Physics course. Student must pass this laboratory course to receive a passing grade in the PH 104 course. Students must take PH 104L concurrently with PH 104 and pass the lab. The PH 104L grade is a component of the PH 104 course grade.

**Corequisite:** PH 104

### PH 107 Contemporary Topics in Physics 1 cr

Intended for physics majors in their first year or others interested in physics as a possible major. This course will survey current "hot topics" in physics, basic useful techniques in physics problem-solving, physics as a career, and research in physics at USA. This course is not intended to satisfy the science requirements within the College of Arts & Sciences.

### PH 114 Physics with Algebra-Trig I 5 cr

First semester of a two-semester introductory course in algebra/trigonometry-based physics with laboratory and recitation. This course covers mechanics and thermodynamics: one- and two-dimensional motion, vectors, Newton's laws of motion, work and energy, momentum and collisions, circular motion, rotational motion, properties of solids and fluids, the laws of thermodynamics, kinetic theory of matter, simple harmonic motion, and wave motion. The laboratory uses computerized data acquisition and analysis for most of the experiments. Students must take PH 114L concurrently and pass the lab. The PH 114L grade is a component of the PH 114 course grade. Core course.

**Prerequisite:** A02 25 or MA 113 Minimum Grade of D or MA 115 Minimum Grade of D or MA 125 Minimum Grade of D or MA 120 Minimum Grade of D

**Corequisite:** PH 114L

### PH 114L Alg-Trig Based Physics I Lab 0 cr

Laboratory course for the first semester of a two-semester introductory sequence in algebra/trigonometry-based physics. Student must pass this laboratory course to receive a passing grade in the PH 114 course. Students must take PH 114L concurrently with PH 114 and pass the lab. The PH 114L grade is a component of the PH 114 course grade.

**Corequisite:** PH 114

### PH 115 Physics with Algebra -Trig II 5 cr

Second semester of a two-semester introductory course in algebra/trigonometry-based physics with laboratory and recitation. This course covers electrostatics, DC circuits, RC circuits, magnetic fields and forces, Faraday's Law, AC circuits, geometrical optics, interference and diffraction of light, the special theory of relativity, quantum physics, and atomic and nuclear physics. The laboratory uses computerized data acquisition and analysis for most of the experiments. Students must take PH 115L concurrently and pass the lab. The PH 115L grade is a component of the PH 115 course grade. Core course.

**Prerequisite:** PH 114 Minimum Grade of D

**Corequisite:** PH 115L

### PH 115L Alg-Trig Based Physics II Lab 0 cr

Laboratory course for the second semester of a two-semester introductory sequence in algebra/trigonometry-based physics. Student must pass this laboratory course to receive a passing grade in the PH 115 course. Students must take PH 115L concurrently with PH 115 and pass the lab. The PH 115L grade is a component of the PH 115 course grade.

**Corequisite:** PH 115

### PH 194 Dir St - Variable Content Lab 1 cr

A directed studies course to substitute for a laboratory credit for students who have successfully completed an introduction to astronomy or concepts of physics course at another university without the laboratory. Students taking this course must get the approval of the Physics Department Chair. This course may be taken up to two times (once for each course).

### PH 201 Calculus-Based Physics I 4 cr

First semester of a two-semester introductory course in calculus-based physics with recitation and laboratory. This course covers: one and two-dimensional motion, vectors, Newton's laws of motion and their applications, work and energy, momentum and collisions, circular motion, rotational motion, properties of materials, simple harmonic motion, wave motion and topics in thermodynamics. The laboratory uses computerized data and analysis for most of the experiments. Core course.

**Prerequisite:** MA 125 Minimum Grade of C and (EH 101 Minimum Grade of C or A01 27 or S01 610 or S13 33)

**Corequisite:** MA 126, PH 201L

### PH 201L Calculus-Based Physics I Lab 0 cr

Laboratory course for the first semester of a two-semester introductory sequence in calculus-based physics. Student must pass this laboratory course to receive a passing grade in the PH 201 course. Students must take PH 201L concurrently with PH 201 and pass the lab. The PH 201L grade is a component of the PH 201 course grade.

**Corequisite:** PH 201

**PH 202 Calculus-Based Physics II 4 cr**

Second semester of a two-semester introductory course in calculus-based physics with laboratory. This course covers electrostatic fields and Gauss' law, electric potential, electric circuits, magnetic fields, Ampere's law, Faraday's law, inductance, Maxwell's equations, electromagnetic waves and optics. The laboratory uses computerized data acquisition and analysis for most of the experiments. Students must take PH 202L concurrently and pass the lab. The PH 202L grade is a component of the PH 202 course grade. Core course.

**Prerequisite:** PH 201 Minimum Grade of D and MA 126 Minimum Grade of C and (EH 101 Minimum Grade of C or A01 27 or S01 610)

**Corequisite:** PH 202L

**PH 202L Calculus-Based Physics II Lab 0 cr**

Laboratory course for the second semester of a two-semester introductory sequence in calculus-based physics. Student must pass this laboratory course to receive a passing grade in the PH 202 course. Students must take PH 202L concurrently with PH 202 and pass the lab. The PH 202L grade is a component of the PH 202 course grade.

**Corequisite:** PH 202

**PH 290 Special Topics- 1-4 cr**

Topics of current interest but not available in regularly scheduled sophomore level courses. This course may be repeated once for credit when the content varies and may be taken twice for up to eight hours.

**PH 294 Dir St - Variable Content Lab 1 cr**

A directed studies course to substitute for a laboratory credit for students who have successfully completed a calculus or algebra-based physics lecture course at another university without the laboratory. Students taking this course must get the approval of the Physics Department Chair. This course may be taken up to two times (once for each of the missing laboratories). Prerequisite: Permission of the Department Chair

**Prerequisite:** EH 101 Minimum Grade of C

**PH 301 Introductory Astrophysics 3 cr**

Application of the principles of physics to the study of astronomical phenomena. Topics include celestial mechanics, stars and stellar evolution, the Milky Way and other galaxies, and cosmological models. Prior knowledge of astronomy is not required.

**Prerequisite:** PH 115 Minimum Grade of D or PH 202 Minimum Grade of D and MA 125 Minimum Grade of C

**PH 303 Modern Physics 4 cr**

This course, with laboratory, surveys physics of the twentieth century. Topics covered include special relativity, wave-particle concepts, the Schrodinger equation and quantum theory of the hydrogen atom, atomic spectra and structure, molecular spectra, the solid state, nuclear structure, radioactivity, and elementary particles. The accompanying laboratory includes experimental investigations of important topics in the subject of Modern Physics. Computerized numerical and graphical analysis of data is extensively used in the laboratory. Laboratory reports are written with word processors and submitted in a format consistent with articles submitted to student research journals. Students must take PH 303L concurrently and pass the lab. The PH 303L grade is a component of the PH 303 course grade.

**Prerequisite:** PH 303L (may be taken concurrently) and MA 125 Minimum Grade of C and PH 202 Minimum Grade of D or PH 115 Minimum Grade of D

**Corequisite:** PH 303L

**PH 303L Modern Physics Lab 0 cr**

Laboratory course for the Modern Physics Course. Students must take PH 303L concurrently with PH 303 and pass the lab. The PH 303L grade is a component of the PH 303 course grade.

**Corequisite:** PH 303

**PH 311 Condensed Matter Physics 3 cr**

This is an introductory course which covers modern condensed matter physics. Topics include crystal structure and properties; electronic structure of insulators, semiconductors and metals; and phenomena of current research interest and technological relevance. Methods used to measure and analyze these phenomena will also be discussed.

**Prerequisite:** PH 303 Minimum Grade of D

**PH 346 Classical and Modern Optics 3 cr**

Wave motion, reflection, refraction, dispersion, diffraction, interference phenomena, Fourier spectroscopy, lasers and other modern applications of optics.

**Prerequisite:** PH 202 Minimum Grade of D and MA 125 Minimum Grade of C

**PH 348 Electricity and Magnetism I 3 cr**

First of two-semester sequence in electromagnetism. Topics include a review of vector analysis, Coulomb's law, Gauss' law, calculation of the scalar potential, electric fields in matter, the Biot-Savart law, Ampere's law, the vector potential, magnetostatics in matter, electrodynamics, Faraday's law, inductance, Maxwell's correction to Ampere's law and Maxwell's equations.

**Prerequisite:** MA 227 Minimum Grade of C and PH 202 Minimum Grade of D or PH 115 Minimum Grade of D

**PH 349 Electricity and Magnetism II 3 cr**

Second of two-semester sequence in electromagnetism. Topics include electromagnetic wave propagation in free space, electromagnetic wave propagation in materials, reflection and transmission at interfaces, wave guides, electromagnetic radiation, optical dispersion, and electrodynamics extended to the special theory of relativity

**Prerequisite:** PH 348 Minimum Grade of D

**PH 354 Electronics 3 cr**

This course is intended to provide a theoretical and practical background in electronics. Topics include AC circuits, diode circuits, single-stage amplifiers, op-amps and feedback, and digital electronics. This course is not intended to satisfy the technical elective requirements for Electrical Engineering. The course will include periodic laboratory work.

**Prerequisite:** MA 126 Minimum Grade of C and PH 202 Minimum Grade of D or PH 115 Minimum Grade of D

**PH 366 Physical Mechanics I 3 cr**

First course in a two-semester sequence in classical mechanics. Topics include motion of particles in one-dimension, one-dimensional motion theorems, harmonic oscillations, damped oscillations, forced oscillations, kinematics in multiple dimensions, momentum and energy theorems, the central force problem, motion under inverse square law forces, planetary orbital motion, Rutherford scattering, conservation theorems for multi-particle systems and their applications, collisions, coupled-harmonic oscillators, and rigid body rotation about a fixed axis.

**Prerequisite:** MA 227 Minimum Grade of D and PH 202 Minimum Grade of D

**PH 367 Physical Mechanics II 3 cr**

Second course in a two-semester sequence in classical mechanics. Topics include: moving and rotating coordinate systems. Lagrange's equation and applications, Hamiltonian formulation, inertia and stress tensors, rotations of rigid bodies and the theory of small oscillations.

**Prerequisite:** PH 366 Minimum Grade of D

**PH 385 Experimental Physics - W 3 cr**

A course in the methods and techniques of experimental physics. A number of experiments in the area of classical mechanics, atomic physics, molecular physics, and nuclear physics will be performed and analysis is required. Computerized numerical and graphical analysis of data is extensively used in the laboratory. Laboratory reports are written with word processors and submitted in a format consistent with articles submitted to a student research journal.

**Prerequisite:** PH 385L (may be taken concurrently) and PH 303 (may be taken concurrently) Minimum Grade of D

**Corequisite:** PH 385L

**PH 385L Experimental Physics Lab 0 cr**

Laboratory course for the Experimental Physics course. Students must take PH 385L concurrently with PH 385 and pass the lab. The PH 385L grade is a component of the PH 385 course grade.

**Corequisite:** PH 385

**PH 390 Special Topics - 1-3 cr**

Topics of current interest not available in a regularly scheduled course. This course may be repeated once for credit and may be taken for up to six hours credit.

**PH 411 Computational Methods in Phys 3 cr**

Use of computers in physics research (industrial, applied, or basic) is now common. This course will introduce advanced undergraduate physics students to computer solutions of physics problems. Particular attention will be paid to problems that have no analytic solutions and may only be solved numerically. This course will introduce several numeric methods and apply them to specific problems from quantum mechanics, electrodynamics, and mechanics. Students will write a series of programs in the Fortran or the C programming language and use them to solve undergraduate level physics problems.

**Prerequisite:** (PH 303 Minimum Grade of D and MA 238 Minimum Grade of C and CPE 260 Minimum Grade of D)

**PH 448 Elementary Quantum Mechanics I 3 cr**

The first course of a two-semester sequence in Quantum Mechanics. Topics include an introduction to Hilbert space and operators, the quantum state and observables, the Heisenberg uncertainty principle, time evolution of the quantum state, application of the Schrodinger equation to one-dimensional systems, and the solution of the hydrogen atom.

**Prerequisite:** MA 238 Minimum Grade of C and PH 303 Minimum Grade of D or CH 302 Minimum Grade of D

**PH 449 Elementary Quantum Mechanic II 3 cr**

The second course of two-semester sequence in Quantum Mechanics. Topics include a continuation in the mathematical formulation of quantum mechanics, angular momentum, perturbation theory, identical particles and spin, collision theory, and the semi-classical treatment of radiation. This course is recommended for students anticipating graduate study in physics.

**Prerequisite:** PH 448 Minimum Grade of D

**PH 463 Thermodynamics-Stat Mechanics 3 cr**

An in-depth course in thermodynamics and statistical mechanics. Topics include simple thermodynamics systems, work, heat and the first law of thermodynamics, ideal gases, the second law of thermodynamics, entropy, enthalpy, Helmholtz and Gibbs functions, TdS equations, heat capacity, partition function, equipartition of energy, statistical distribution of molecular speeds, thermal properties of solids, higher order phase transitions, chemical equilibrium, Thomson effect, Bose-Einstein statistics, Nuclear Magnetism, and the third law of thermodynamics.

**Prerequisite:** PH 202 Minimum Grade of D and MA 227 Minimum Grade of C

**PH 494 Directed Studies - 1-3 cr**

PH 494 Directed Studies 1-3 cr Directed research under the supervision of a faculty member. Topics generally coincide with the research interest of the supervising faculty member. Pre-requisite: Permission of the Physics department chair. May be taken three times for up to 9 hours.

**PH 499 Senior Thesis-Honors - H 3 cr**

A written thesis that is part of the Honors Senior Project which is submitted to partially satisfy the requirements for a Degree in Physics with distinction. The Senior Thesis will be written on research done in collaboration with an Honors Physics Faculty member in the Junior/Senior year. The Senior Thesis will be reviewed by a committee of Honors Physics Faculty. Upon approval by the committee the Senior Honors candidate will present the Senior Thesis at Honors Student Colloquium. This course may be repeated once for credit. Prerequisite: The Honors candidate must have developed in the last semester of the previous year a prospectus with the Physics Faculty Mentor and presented this prospectus at the Annual Honors Student Colloquium, also permission of the Department Chair.

**Prerequisite:** EH 102 Minimum Grade of C

## Physiology (PHS) (PHS)

**PHS 550 Medical Physiology 8 cr**

This course includes lectures and labs which introduce the student to the basic functions of the heart, circulation, lung, and kidney, as well as the endocrine, nervous, and gastrointestinal systems. Fundamental mechanisms are stressed with the intent of providing the student with the basic knowledge of organ function necessary for the understanding and treatment of disease. Overall integrated response of body to various stresses is discussed in detail.

**PHS 556 Literature Reports 1 cr**

Students and faculty participate in a supervised reading of the current literature and meet periodically to interact in a discussion of selected article or topic. The goal of this course is to maintain the faculty's and students' level of information at a "state of the art" in both methods and theory in the discipline and to develop critical skills in reviewing the literature. Student presentation is required to receive credit.

**PHS 557 Dir St Physiology 1-6 cr**

Students participate in research under the direction of a graduate faculty member. Student may pursue independent research or participate in a literature project. This course should be taken by students who have completed their lab rotations, but have not yet submitted a formal research project.

**PHS 590 Special Topics - 1-3 cr**

Each course provides in-depth tutorial exposure to specific areas in the discipline. Student and/or faculty presentations followed by group discussions (usually in the Socratic mode), examine the subject matter in an area of current interest either to one student or to a group of students. Credit and title are arranged with an individual faculty member.

**PHS 651 Adv Cardiovascular Physiology 5 cr**

This is an advanced course covering cardiac function and metabolism, peripheral circulation, and microcirculation. The objective is to provide the student with a thorough understanding of cardiovascular physiology at both the organ and cellular level.

**PHS 654 Transport Physiology Barriers 2 cr**

This course is designed to present a detailed analysis of physiological membranes and the physical principles governing the movement of solute and water across these barriers.

**PHS 656 Cell Signaling Seminar 1 cr**

Students present a research topic for discussion before members of the department. The presentations are usually scheduled on a rotational basis. The student may present research data for critique by the faculty.

**PHS 799 Research-Dissertation 1-6 cr**

Independent research by the student under the sponsorship of the graduate faculty in individual departments in the Basic Medical Sciences. Students are required to submit a research project description form before enrolling in this course. Progress reports of the work accomplished are required every six months.

## Physiology - MD (PHY)

**PHY 121 Medical Physiology 8 cr**

The core course in medical physiology provides the student with an understanding of the normal function of the major organ systems of the body that is necessary to understand and treat disease. Normal control and homeostatic mechanisms are emphasized with frequent examples of the body's integrative responses to stress. The course includes sections in general physiology as well as blocks oriented to the major organ systems.

**PHY 400 Physiology Externship 1-4 cr**

To be determined.

**PHY 410 Research in Physiology 1-4 cr**

To provide an opportunity for senior students to become involved in ongoing research in one of the various laboratories within the Physiology Department. This rotation is highly recommended for the student contemplating a career in research or academic medicine. Subjects include metabolic cardiovascular and pulmonary research. Instruction may include the use of computer analysis and modeling as applied to ongoing research. Interested students should contact Dr. Lincoln or individual faculty for descriptions of specific projects and their availability.

**PHY 451 Research in Physiology 1-4 cr**

To provide an opportunity for senior students to become involved in ongoing research in one of the various laboratories within the Physiology Department. This rotation is highly recommended for the student contemplating a career in research or academic medicine. Subjects include cardiovascular, pulmonary, gastrointestinal, and neurophysiology. Instruction may include the use of computer analysis and modeling as applied to ongoing research. Interested students should contact Dr. Taylor or individual faculty for descriptions of specific projects and their availability.

## Political Science (PSC) (PSC)

**PSC 130 Intro to US Government 3 cr**

Examines the principles of the United States Constitution and roles of Congress, the President, and the courts, the mass media, interest groups, and more in our U.S. political system. PSC majors and minors must pass with a grade of 'C' or better.

**PSC 250 Comparative Politics 3 cr**

This course examines government systems across the globe, including both democracies and authoritarian systems. It analyzes strategic interactions between political actors in a diverse set of contexts, as well as the key theories that helps us to understand politics.

**PSC 270 International Relations 3 cr**

This introductory course in the theory and practice of International Relations includes topics such as IR's importance and principal actors, as well as causes of conflict and war, conflict resolutions, international law, globalization, global events, issues, and problems.

**PSC 301 Public Policy 3 cr**

This course provides an overview of policy and the policymaking process in the United States. Topics include what issues rise to the public agenda; how politicians, groups, and citizens shape and implement policy; and how political scientists can analyze public policy.

**Prerequisite:** PSC 130 Minimum Grade of C

**PSC 310 Research Methods-W 3 cr**

This course examines research methodologies in the social sciences, covering the tools and techniques for designing and conducting research, including collecting and analyzing data, and presenting findings. (Cross-listed as CJ 310).

**Prerequisite:** (PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** CJ 310

**PSC 311 Classical Political Thought 3 cr**

The course examines the central themes of classical Western political philosophy through the reading and discussing of the primary works of such thinkers as Plato, Aristotle, and Aquinas. (Cross-listed as PHL 311 and CLA 311)

**Prerequisite:** PSC 130 Minimum Grade of C

**Cross-Listed:** CLA 311, PHL 311

**PSC 312 Renaissance Political Thought 3 cr**

The course examines central themes of Renaissance and modern Western political philosophy through the reading and discussing of the primary works of such thinkers as Machiavelli, Hobbes, Locke, and Rousseau. (Cross-listed as PHL 312)

**Prerequisite:** PSC 130 Minimum Grade of C

**Cross-Listed:** PHL 312

**PSC 313 Modern Political Thought-W 3 cr**

The course examines central themes of modern Western political philosophy through the reading and discussing of the primary works of such thinkers as Hegel, Mill, Marx, and Nietzsche. (Cross-listed as PHL 313).

**Prerequisite:** PSC 130 Minimum Grade of C

**Cross-Listed:** PHL 313

**PSC 330 Judicial Process 3 cr**

The study of the U.S. judicial process at both federal and state court levels. (Cross-listed as CJ 330)

**Prerequisite:** (PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C)

**Cross-Listed:** CJ 330

**PSC 331 Constitutional Law 3 cr**

The study of the principles of constitutional powers and liberties examined through an analysis of decisions and opinions by the U.S. Supreme Court. (Cross-listed as CJ 331 and PHL 331)

**Prerequisite:** (PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C)

**Cross-Listed:** CJ 331, PHL 331

**PSC 332 U.S. State and Local Government and Politics 3 cr**

An overview of what constitutes crime and of the body of law governing the punishment of crime. (Cross-listed with CJ 332.)

**Prerequisite:** PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C

**Cross-Listed:** CJ 332

**PSC 336 The Law and Legal Theory 3 cr**

Explores issues and problems in the area of law, including the nature and rule of law, the aims and roles of legal systems, morality and law, obligations to obey the law, and systematic injustices related to race, ethnicity, and gender. (Cross-listed as CJ 336 and PHL 336)

**Prerequisite:** PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C

**Cross-Listed:** CJ 336, PHL 336

**PSC 337 Liability and Punishment 3 cr**

Explores theoretical issues and problems in the areas of law—especially criminal law—concerning liability and punishment. Topics to be examined include diminished capacity, theories of punishment, and capital punishment. (Cross-listed as CJ 337 and PHL 337)

**Prerequisite:** PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C

**Cross-Listed:** CJ 337, PHL 337

**PSC 340 Race, Gender, & Politics 3 cr**

This course examines the role of race and gender in shaping political outcomes, experiences, and institutions.

**Prerequisite:** PSC 130 Minimum Grade of C or GS 101 Minimum Grade of C or AFR 101 Minimum Grade of C

**PSC 345 Women and Politics 3 cr**

This course examines gender as a conceptual construct in the study of politics.

**Prerequisite:** PSC 130 Minimum Grade of C or GS 101 Minimum Grade of C

**PSC 347 Public Opinion and Polit Part 3 cr**

The formation, composition, distribution, and measurement of public opinions and its effect upon public policy.

**PSC 354 Media and Politics 3 cr**

Examining the role and influence of mass media in politics, exploring how and why the media contribute to and shape democracy.

**Prerequisite:** (PSC 130 Minimum Grade of C or CA 100 Minimum Grade of C or CA 101 Minimum Grade of C)

**Cross-Listed:** CA 354

**PSC 360 Politics of Europe 3 cr**

The course provides an overview of the political systems, institution, public policies, and actors in European Politics. Countries covered may include Germany France, Great Britain, and Russia.

**Prerequisite:** PSC 130 Minimum Grade of C or PSC 250 Minimum Grade of C or IS 100 Minimum Grade of C

**PSC 363 Crime and Politics in LatinAm 3 cr**

An examination of the violent crime epidemic affecting many parts of Latin America, with specific focus on the themes of democratic transition, political economy, and foreign relations with the United States. Same as CJ 363 and IS 363.

**Prerequisite:** (PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or IS 100 Minimum Grade of C)

**Cross-Listed:** CJ 363, IS 363

**PSC 365 Politics of the Middle East 3 cr**

The course focuses on the current politics, and the political history and political development, of several countries in the Middle East.

**Prerequisite:** (PSC 130 Minimum Grade of C or PSC 250 Minimum Grade of D or PSC 270 Minimum Grade of D or IS 100 Minimum Grade of C)

**PSC 368 Politics of South Asia 3 cr**

This course focuses on the political histories and current politics of India, Pakistan, Bangladesh, and Afghanistan.

**Prerequisite:** (PSC 130 Minimum Grade of C or PSC 250 Minimum Grade of D or PSC 270 Minimum Grade of D or IS 100 Minimum Grade of C)

**PSC 372 American Foreign Policy 3 cr**

This course examines the political development and theories of U.S. foreign policy, from the Cold War to the present. Topics include power; nationalism; trade; defense; security and terrorism and other threats; and prospects and challenges in today's global society.

**Prerequisite:** PSC 130 Minimum Grade of C or PSC 250 Minimum Grade of C or PSC 270 Minimum Grade of C or IS 100 Minimum Grade of C

**PSC 390 Special Topics - 3 cr**

Study of a significant topic or problem in political science. May be repeated up to two times when content varies.

**Prerequisite:** PSC 130 Minimum Grade of C

**PSC 401 Public Administration 3 cr**

The study of the implementation of public policy at the national, state, and local levels, and the study of the planning, organization and coordination of government operations.

**Prerequisite:** PSC 130 Minimum Grade of C

**Cross-Listed:** PSC 501

**PSC 411 Criminal Justice Admin 3 cr**

This course applies management and organization theories to a broad range of criminal justice institutions, actors, and agencies—including police, courts, and corrections, treatment centers, drug traffickers, and homeland security. (Cross-listed as CJ 411)

**Prerequisite:** PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C

**Cross-Listed:** CJ 411, PSC 511

**PSC 418 American Political Thought-W 3 cr**

The course examines the central themes, issues, and evolution of American political thought, including how we understand our role and responsibilities in contemporary democracy. (Cross-listed as PHL 418)

**Prerequisite:** PSC 130 Minimum Grade of C

**Cross-Listed:** PHL 418

**PSC 430 Criminal Procedure 3 cr**

An overview of the processes used by criminal investigators and the roles of those involved in the judicial process, as well as the interaction that occurs between the police, prosecutors, defense attorneys and the judiciary. (Cross-listed as CJ 430)

**Prerequisite:** (PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of C)

**Cross-Listed:** CJ 430

**PSC 432 State and Local Government 3 cr**

An overview of U.S. state and local government systems, including an analysis of the politics, public policy, and administration within the U.S. states and localities.

**Prerequisite:** PSC 130 Minimum Grade of C

**Cross-Listed:** PSC 232, PSC 332

**PSC 436 Politics of Urban Govt 3 cr**

A study of urban growth with an analysis of the major problems facing large cities in this country. Political, administrative, social, and economic aspects will be covered

**PSC 437 US Congress and Policymaking 3 cr**

An inside view of the U.S. Congress centered on the process for passing laws and policymaking, including an examination of influential legislation.

**Prerequisite:** PSC 130 Minimum Grade of C

**Cross-Listed:** PSC 537

**PSC 438 US Presidency 3 cr**

A study of the U.S. presidency covering the political development and organization of the office; executive powers and responsibilities; elections and campaigns; and presidential communication.

**Prerequisite:** PSC 130 Minimum Grade of C

**PSC 440 Adv Studies in Pub Policy 3 cr**

Advanced study in the field of public policy.

**Prerequisite:** PSC 130 Minimum Grade of C

**PSC 450 Adv Study Comparative Pol 3 cr**

Advanced study in the field of comparative politics.

**Prerequisite:** PSC 250 Minimum Grade of C or PSC 130 Minimum Grade of C or IS 100 Minimum Grade of C

**PSC 453 Campaign and Election Comm. 3 cr**

Focuses on political communication in the context of U.S. campaigns and elections, Same as CA 453.

**Prerequisite:** (PSC 130 Minimum Grade of C or CA 100 Minimum Grade of C or CA 101 Minimum Grade of C)

**Cross-Listed:** CA 453

**PSC 456 Social Media and Politics 3 cr**

An examination of how and why digital information technologies are used by citizens, activists, journalists, and politicians to shape and influence individual's political participation and engagement and public policy and society.

**Prerequisite:** (PSC 130 or CA 100 or CA 101)

**Cross-Listed:** CA 456

**PSC 469 Criminal Justice Policies 3 cr**

This course examines how public policy has shaped both the criminal justice system and its results, with particular emphasis on crime control.

**Prerequisite:** CJ 105 Minimum Grade of C or PSC 130 Minimum Grade of C

**Cross-Listed:** CJ 370, CJ 469

**PSC 470 Adv Study Intl Relations 3 cr**

Advanced study in the field of international relations.

**Prerequisite:** PSC 270 Minimum Grade of C or PSC 130 Minimum Grade of C or IS 100 Minimum Grade of C

**PSC 473 International Law 3 cr**

The course covers major issues, cases and topics in public and private international law. Course coverage includes individuals and corporations, diplomatic relations, jurisdiction, human rights, economic relations, treaties, environmental law, and more.

**Prerequisite:** (PSC 130 Minimum Grade of C or CJ 105 Minimum Grade of D or CJ 205 Minimum Grade of C or IS 100 Minimum Grade of C)

**Cross-Listed:** CJ 473, IS 473

**PSC 481 Public Policy and Aging 3 cr**

This course examines government responses to the growing number of older Americans. Topics include retirement and pensions, health care, housing, social services, intergenerational issues, and policy advocacy for the elderly.

**Prerequisite:** PSC 130 Minimum Grade of C

**Cross-Listed:** PSC 581

**PSC 484 Healthcare Around the World 3 cr**

This course examines global connections within healthcare. Objectives include understanding health, its impact on populations, and how policy shapes healthcare. These objectives are studied within a global framework with emphasis on improving health and health equity.

**Prerequisite:** PSC 130 Minimum Grade of C or PSC 250 Minimum Grade of D or IS 100 Minimum Grade of C

**Cross-Listed:** PSC 584

**PSC 488 Armed Conflict 3 cr**

The study of armed conflict from an interdisciplinary perspective incorporating criminology, political science, security studies, conflict and peace studies, and international law.

**Prerequisite:** (PSC 130 Minimum Grade of C or PSC 270 Minimum Grade of D or CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or IS 100 Minimum Grade of C)

**Cross-Listed:** CJ 488

**PSC 490 Special Topics 3 cr**

Study of a significant topic or problem in political science. May be repeated up to two times when the content varies.

**Prerequisite:** PSC 130 Minimum Grade of C

**PSC 491 Seminar on Terrorism 3 cr**

This course will introduce students to the meaning, characteristics, typology, history, and causes of terrorism. The course will also summarize the biographies of the most prominent terrorists, past and present, and conclude, with a discussion of counter-terrorism strategies. Cross-listed with IS 491.

**Prerequisite:** CJ 105 Minimum Grade of C or CJ 205 Minimum Grade of C or PSC 130 Minimum Grade of C or IS 100 Minimum Grade of C

**Cross-Listed:** CJ 491, IS 491

**PSC 492 PSC Capstone Seminar-W 3 cr**

The Capstone course brings together key components from across political science. As part of the course, students will write a research paper, present their research, and take a comprehensive exam. PSC majors must earn a grade of C or better for graduation.

**Prerequisite:** PSC 130 Minimum Grade of C and PSC 250 Minimum Grade of D and PSC 270 Minimum Grade of D and (PSC 310 Minimum Grade of D or CJ 310 Minimum Grade of D) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**PSC 493 Study Abroad 3 cr**

This course is an advanced Political Science course taught as part of a faculty-led study abroad program. Topics and credit hours vary. May be repeated when content varies. Up to 6 hours may be applied toward the PSC major or minor.

**Prerequisite:** PSC 130 Minimum Grade of C or PSC 250 Minimum Grade of D or PSC 270 Minimum Grade of D

**PSC 494 Directed Studies 1-3 cr**

Students will pursue directed research or readings on an approved topic in political science.

**Prerequisite:** PSC 130 Minimum Grade of C

**PSC 496 Internship 3 cr**

An opportunity to gain experiential learning through a supervised internship offered by a variety of political science and government related agencies.

**Prerequisite:** PSC 130 Minimum Grade of C

**PSC 497 Practicum in Polling 3-6 cr**

Supervised experience in all aspects of the survey research process including but not limited to literature review, research design, questionnaire development, sampling, techniques, interviewing, data analysis, & interpretation & presentation of findings. Prerequisite: Permission of professor

**PSC 498 Practicum Policy Studies 3-9 cr**

Students will be exposed to a variety of experiences associated with the operations of a fully operational research center, including in-service and management training, consulting, sponsored research, organizational assessments, strategic and programming planning, program evaluations, intergovernmental fiscal processes, including the research for funding, and grant writing. Research assignments will include basic research design, survey and focus group instrument development, administration of surveys, handling focus groups, curriculum preparation, data manipulation and analysis, and report writing. Only three hours apply to the political science curriculum at the University of South Alabama. Prerequisite: PSC 130, PSC 310, or permission of professor. Pass/Fail grading only.

**Prerequisite:** PSC 130 Minimum Grade of C and PSC 310 Minimum Grade of C

**PSC 499 Honors Thesis - W 3-6 cr**

The research and writing of a major paper in the field of political science. Registration is open to political science majors in the Honors College or those pursuing Department Honors.

**Prerequisite:** PSC 130 Minimum Grade of C

**PSC 500 Organization Theory Public Mgt 3 cr**

This course provides a comprehensive overview of the field of organization theory. The course exposes students to seminal works in the field as well as covering more recent developments.

**Prerequisite:** PSC 130 (may be taken concurrently) Minimum Grade of C or PSC 501 (may be taken concurrently) Minimum Grade of C or PSC 401 (may be taken concurrently) Minimum Grade of C

**PSC 501 Public Administration 3 cr**

The study of the implementation of public policy at the national, state and local levels, and the study of the planning, organization, and coordination of government operations.

**Prerequisite:** PSC 130 Minimum Grade of C

**Cross-Listed:** PSC 401

**PSC 510 Intergov-Interorg Relations 3 cr**

A review of the political, fiscal, and administrative relationships between various levels of government in America. In addition, the emerging nexus to 3d sector non-profit organization will be examined.

**PSC 511 Crim. Justice Admin. 3 cr**

This course applies classical and modern management and organization theories to a broad range of institutions, actors, and agencies, including police, courts, and corrections, as well as drug traffickers, sexual offender treatment centers, and homeland security agencies.

**PSC 520 Research Methods and Design 3 cr**

Social science research methodologies will be used to help students develop skills for policy analysis and decision making in the public service. Stresses the understanding of research methods and data collection in a Public Administration setting. Theoretical development and elaboration, and an overview of the variety of research designs used in social science research will be included.

**PSC 530 Quantitative Analysis 3 cr**

Focus is on application of statistical analysis techniques to Public Administration problems and issues. Computer analysis and interpretation of descriptive statistics will be emphasized. Topics will include fundamentals of probability, sampling, hypothesis testing, point estimation, association, correlation, and multi variate analysis.

**PSC 532 State and Local Government 3 cr**

An overview of U.S. state and local government systems, including an analysis of the politics, public policy, and administration within the U.S. states and localities.

**Prerequisite:** PSC 130 Minimum Grade of C

**PSC 537 Legislative Process in the US 3 cr**

Principles, procedures, and problems of law making, with special attention to the U.S. Congress.

**PSC 540 Human Resource Management 3 cr**

This course will cover contemporary topics in public administration, including public-employee unionization, relevance of the traditional civil-service approach, the challenge of employee productivity and motivation, equal opportunity, and public service ethics.

**PSC 541 Leadership Theory and Practice 3 cr**

The course will provide the analytical and intellectual thought, careful examination and reflection of the core issues in the practice of leadership. Models and influence on leadership will be critically examined.

**PSC 550 Public Budgeting 3 cr**

This course emphasizes the political management and public-policy implications of budget reform, maintenance, and development. It explores the conceptual framework for program and performance budgeting and the increasing congressional role of Congress in federal budget policy.

**PSC 560 Comparative Public Admin 3 cr**

A study of the operation of government systems throughout the world-their history, features, similarities, and differences.

**PSC 569 Criminal Justice Policies 3 cr**

This course examines how public policy has shaped both the criminal justice system and its results, with particular emphasis on crime control

**PSC 570 Administrative Law 3 cr**

Course teaches the fundamentals of administrative law.

**PSC 572 Environmental Law 3 cr**

This course will introduce the student to some of the fundamental concepts of environmental law. It will utilize the philosophy and history of environmental law as it has developed from the Common Law of England to provisions of a Municipal Code

**PSC 576 Adm Issues CJ Men Health 3 cr**

An overview of the relevant federal and state laws, federal regulations, and court rulings that address the issues of criminal justice for preserving the rights of those citizens who suffer from mental illness.

**PSC 580 Public Pol Analysis and Eval 3 cr**

This course is an introduction to policy and program evaluation incorporating various qualitative and quantitative techniques for analyzing.

**Prerequisite:** PSC 520 Minimum Grade of B and PSC 530 Minimum Grade of B

**PSC 581 Public Policy and Aging 3 cr**

This course examines government responses to the growing number of older Americans. Topics include retirements and pensions, health care, housing, social services, intergenerational issues, and policy advocacy of the elderly.

**Prerequisite:** PSC 130 Minimum Grade of C

**Cross-Listed:** PSC 481

**PSC 582 Crim. Just. Policy Evaluation 3 cr**

This course examines the most effective and commonly used forms of policy and program evaluation and applies them to criminal justice system. It explores policy and program evaluation related a number of subfields, including policing, drug policy, and gun control, recidivism, and police use of force.

**Prerequisite:** PSC 520 Minimum Grade of C and PSC 530 Minimum Grade of C

**PSC 583 Social Construction of Policy 3 cr**

This course examines the implications of the U.S. policy process through the lens of social construction theory as applied to the functionality of health care systems.

**PSC 584 Healthcare Around the World 3 cr**

This course examines global connections within healthcare. Objectives include understanding health, its impact on populations, and how policy shapes healthcare. These objectives are studied within a global framework with emphasis on improving health and health equity.

**Cross-Listed:** PSC 484

**PSC 585 Health Policy 3 cr**

This course focuses on two distinct aspects of American Health Policy. First, the policy making process is examined in the context of health care and the major decision making powers (Congress, presidency, bureaucracy, and special interests). Second, existing health care policies are examined with an emphasis on the implications for access, financing, and quality of care. Finally, existing U.S. health policies are compared and contrasted with those of similar and dissimilar political systems.

**PSC 586 Health Administration 3 cr**

Applications of management principles to health care organizations with a focus on governance and leadership, human resources, control systems, strategic planning, and accountability.

**PSC 587 Health Politics & The Elderly 3 cr**

This course focuses on the health policy process and issues impacting the elderly with particular attention given to the politics of legislation, financing mechanisms, and strategies for reform.

**PSC 590 Special Topics - 3 cr**

Study of a significant topic in Public Administration. May be repeated for credit when the content varies.

**PSC 594 Dir St - 1-6 cr**

Under the guidance of a faculty member, student will pursue directed study of approved topics in public administration. For non-thesis students.

**PSC 596 Prof St - Intern Publ Admin 3-6 cr**

Relates the participants' classroom studies to occupational and professional experiences in an approved public agency. Written reports required. May be taken for a total of nine hours. (For further details, see section on Internship.)

**PSC 597 Practicum in Polling 3-6 cr**

Supervised experience in all aspects of the survey research process including but not limited to literature review, research design, questionnaire development, sampling techniques, interviewing, data analysis, and interpretation and presentation of findings. Requires permission of graduate director or department chair.

**PSC 598 Practicum Policy Studies 3-9 cr**

Students will be exposed to a variety of experiences associated with the operation of a fully operational research center, including in-service and management training, consulting, sponsored research, organizational assessments, strategic and program planning, operations, program evaluation, intergovernmental fiscal processes, including research for funding and grant writing. Research assignments will include basic research design, survey and focus groups, curriculum preparation and administration, data manipulation and analysis, and report writing. Only three hours of PSC 598 can be applied toward the requirements for the MPA degree at the University of South Alabama. Requires permission of the professor.

**PSC 599 Thesis 3-6 cr**

Completion and oral defense of a master's thesis based upon original research. May be repeated for up to six hours credit. A minimum of six hours credit is required to meet degree requirements. Prerequisite: Approval of research prospectus including IRB or Animal Use and Care Committee approval if applicable.

## Primary Care Pathway - MD (PCP)

**PCP 101 Primary Care Pathway 4 cr**

This program has been supported by a Health Resources and Services Administration (HRSA) grant developed to enhance medical student's educational experience in preparing them to serve populations in rural and underserved.

**PCP 102 Primary Care Pathway 4 cr****PCP 201 Primary Care Pathway 4 cr**

This program has been supported by a Health Resources and Services Administration (HRSA) grant developed to enhance medical student's educational experience in preparing them to serve populations in rural and underserved.

**PCP 301 Primary Care Pathway 4 cr**

This program has been supported by a Health Resources and Services Administration (HRSA) grant developed to enhance medical student's educational experience in preparing them to serve populations in rural and underserved.

**PCP 311 Primary Care Pathway Clerkship 4 cr**

This program has been supported by a Health Resources and Services Administration (HRSA) grant developed to enhance medical student's educational experience in preparing them to serve populations in rural and underserved.

**PCP 401 Primary Care Pathway 4 cr**

This program has been supported by a Health Resources and Services Administration (HRSA) grant developed to enhance medical student's educational experience in preparing them to serve populations in rural and underserved.

**PCP 410 Basic Science Course PCP 4 cr****PCP 420 Population Health/Practice MGT 4 cr**

This elective will give you the opportunity to explore the basics of practice management and to participate in patient care alongside providers and ancillary care providers to have a better understanding of what outpatient team based care can look like. You will also look at the basics of panel management and have opportunities to participate in community outreach.

**Princ of Found Medicine - MD (PFM)****PFM 120 Princ of Foundation Medicine 7 cr**

Principles of Foundational Medicine introduces the principles of basic and clinical sciences and lays the foundation for medical practice. It provides students with tools to effectively master application-based material in the subsequent systems-based modules. Students will develop the ability to identify key principles of human health and disease in both the internal biologic milieu and the external environment. Basic mechanisms of human biology, psychology and social systems are developed, as all are essential to clinical reasoning, problem solving, patient-centered care and systems-based practice. Throughout this module students will engage in lectures, team-based learning sessions, independent study and clinical experiences. These activities will provide students with opportunities to strengthen communication skills, observe and participate in systems-based practice, and exercise practice-based learning techniques in a variety of settings that require and foster professional behavior and personal integrity.

**Princ of Infection/Immunity-MD (PII)****PII 110 Princ of Infection & Immunity 7 cr**

The Principles of Infection and Immunity module covers the immune system that defends the body against infection. Both of these systems affect all organ systems and are critical for human health. The module will focus on fundamental knowledge regarding the normal development, structure and function of the hematologic and immune systems, how these systems interface with infectious agents and how defects in these systems cause health problems such as cancer, immunodeficiency, allergy, autoimmunity and infection. Thus, the module will equip students to understand the cellular and molecular mechanisms underlying each disorder and will develop their ability to deliver appropriate patient care through proper diagnosis, treatment, management and prevention of these diseases. Throughout the module, students will engage in lectures, small-group learning sessions, independent study and clinical experiences. These activities will provide students with opportunities to strengthen communication skills, observe and participate in systems-based practice and exercise practice-based learning techniques in a variety of settings that require and foster professional behavior and personal integrity.

**Process Technology (IPT)****IPT 113 Intro to Process Technology 3 cr**

Introduction to Process Technology is part of the NAPTA Series for Process Technology. It provides learning material for the first course of a process technology program. The course was developed in partnership with Industry and Education. It covers history of the process industry, green technologies, career as a process technician, working as a team member, basic physics, basic chemistry, safety, health and environmental protection, principles of quality and process equipment. It explores the industry's modern-day processes and legislative influences and includes new critical thinking. This course is the foundation for and supports a consistent curriculum and exit competencies for process technology graduates.

**IPT 141 Process Quality 3 cr**

Process Quality is part of the NAPTA Series for Process Technology. This course is the study of the background and application of quality concepts. Topics include team skills, quality tools, and economics and continuous improvement. Students will define terms associated with quality systems; demonstrate team skills; and apply principles and tools of quality to process systems. The course was developed in partnership with Industry and Education. It covers Total Quality Management (TQM), customer service and personal effectiveness, team skills, variance and operating consistency, continuous improvement and corrective/preventive action, group problem solving, Statistical Process Control (SPC), data collection, analysis and interpretation. This course supports a consistent curriculum and exit competencies for process technology graduates.

**IPT 142 Process Technology I - Equip 4 cr**

Process Technology I - Equipment is part of the NAPTA Series for Process Technology. It focuses on the tools and equipment of the process industry. The course was developed in partnership with Industry and Education and provides a common national standard for the process technology equipment course of a process technology degree program. It covers piping, tubing, hoses & fittings, valves, pumps, compressors, turbines, motors & engines, power transmission & lubrication, heat exchangers, cooling towers, furnaces, boilers, filters, dryers, vessels, towers & columns, reactors, tanks & drums, flares, and process diagrams. This course includes a lab and field trip where students will demonstrate their ability to identify and describe the purpose of process equipment. This course supports a consistent curriculum and exit competencies for process technology graduates.

**IPT 143 Process Technology II, Systems 3 cr**

Systems is one of the eight core courses in the Process Technology Curriculum, sponsored by the North American Process Technology Alliance. It has been created to train students for careers as Process Technicians in the chemical process industry. This course is a critical building block in preparation for Process Technology III ? Operations and Process Troubleshooting. Process Technology II ? Systems introduces students to many process industry related Systems concepts including basic systems, the purpose and function of specific process systems, the methods of controlling process systems and abnormal process conditions. A strong emphasis in distillation basics and operation will be pursued.

**IPT 151 Safety, Health and Environment 3 cr**

Safety, Health and Environment are part of the NAPTA Series for Process Technology. This course covers the development of knowledge and skills to reinforce the attitudes and behaviors required for safe and environmentally sound work habits. Emphasis is placed on safety, health, and environmental issues in the performance of all job tasks and regulatory compliance issues. Students will list components of a typical plant safety and environmental program; describe the role of a process technician in relation to safety, health, and environment; and identify and describe safety, health, and environmental equipment uses. The course was developed in partnership with Industry and Education. It covers types of hazards and their effects, site security, hazard controls, process safety management, audits, investigations and reporting, work permitting systems, personal protective equipment and first aid, fire, rescue and emergency response. This course supports a consistent curriculum and exit competencies for process technology graduates.

**IPT 171 Process Instrumentation 3 cr**

Process Instrumentation is part of the NAPTA Series for Process Technology. This course is the study of instruments and instrument systems used in chemical processing industry, including terminology, primary variables, symbology, control loops, and basic troubleshooting. Students will identify and explain the function of instruments used in the chemical processing industry; explain the relationship of process control elements in a control loop; and define and apply terms and symbols used in instrumentation. The course was developed in partnership with Industry and Education. It covers process variables, elements and instruments, control loops, switches, relays, alarms, instrument air systems, interlocks, symbology, and instrumentation troubleshooting. This course supports a consistent curriculum and exit competencies for process technology graduates.

**IPT 231 Process Technology Skills Lab 3 cr**

This course provides hands on application for equipment and systems start-up, monitoring, troubleshooting, shutdown and maintenance preparation. It focuses on safety and choosing and utilizing the proper Personal Protective Equipment and hand tools to accomplish common tasks. Students will be taught how to locate and apply relevant safety, environmental and work procedures to complete common tasks. Students will learn the importance of effective communication by completing an operator's log, writing work orders, job tasks and updating procedures. This also includes effective verbal communication via radio with other operators, the control room, supervision and maintenance.

**IPT 232 Process Troubleshooting 3 cr**

This course provides instruction in the different types of troubleshooting techniques, procedures, and methods used to solve process problems. Topics include application of data collection and analysis, cause-effect relationships, and reasoning. Students will explain steps in troubleshooting models; demonstrate use of troubleshooting tools; and apply troubleshooting techniques to process problems.

**IPT 244 Process Technology III-Ops 4 cr**

This course provides instruction in the different types of troubleshooting techniques, procedures, and methods used to solve process problems. Topics include application of data collection and analysis, cause-effect relationships, and reasoning. Students will explain steps in troubleshooting models; demonstrate use of troubleshooting tools; and apply troubleshooting techniques to process problems.

## Professional Health Sciences (PRH)

**PRH 310 Intro into Health Care Mgmt 3 cr**

This course provides students with an introduction to Health Care Management. Theoretical concepts and issues will be discussed and examined in order to provide students with a conceptual basis for understanding and analyzing health care systems and organizations. Particular emphasis will be placed on system components, system integration and the roles and responsibilities of management and leadership in health care organizations.

**PRH 320 Legal/Law in Health Care Admin 3 cr**

This course will provide a general overview of the origins of law in the United States with particular emphasis on health laws and regulations affecting pre-hospital providers. Topics include issues relating to malpractice, litigation, consent and refusal of medical treatment, advanced directives, patient confidentiality, and expert witness preparation, among others.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**PRH 340 Disaster Mgt & Event Planning 3 cr**

Considerations of the theoretical and practical foundations necessary to manage incidents involving multiple casualties and multiple agencies as well as the planning and management of other large-scale events. Topics include disaster planning, incident command, WMD, response issues, and scene control, among others.

**PRH 401 Seminar in Health Professions 3 cr**

This course is designed to provide students with an overview of different health professions and their scope of practice and also to provide information about health administration.

**PRH 440 Health Insurance/Managed Care 3 cr**

This course provides an overview of the basic concepts and principles in the health insurance and managed care environments. Particular emphasis will be placed on issues relating to the costs, quality and access to Health Care. Topics include Medicare and Medicaid reimbursement, Managed Care contracting and Quality Management, among others.

**PRH 460 Issues & Trends in Health Care 3 cr**

Explores issues and trends at the federal, state and local levels facing Health Care leaders and organizations. Particular emphasis is on new and proposed programs, policies and practices which affect Health Care providers.

**PRH 475 Health Care Mgt Internship 3 cr**

Structured field experience providing the student to work in a health care administration, management or educational environment; observation of leadership processes within a health care organization; application of leadership theory and techniques.

**Prerequisite:** PRH 310 Minimum Grade of C

## Psychiatry - MD (PCH)

### PCH 311 Psychiatry 4 cr

PSYCHIATRY/NEUROLOGY (8 weeks): This 8 week block includes 4 weeks on Psychiatry and 4 weeks on Neurology. PSYCHIATRY: The student is taught basic signs, symptoms, etiology and management of psychiatric diseases. The clerkship includes exposure to adult inpatient and outpatient services, child and adolescent psychiatry, as well as consultation-liaison at the AltaPoionte facilities. Working with patients? families, where possible, is an integral part of all services. Another integral part of the clerkship is emergency psychiatry, since psychiatric illness is remarkably common in patients who seek care in the emergency room. The final exam is a mini-board from the National Board of Medical Examiners; students are charged a fee to purchase this exam.

### PCH 400 Psychiatry Externship 1-8 cr

To be determined.

### PCH 444 Psychiatry Special Elective 1-4 cr

To be prepared by the student in conjunction with the Course Director and approved by the Vice Dean before course can be added to schedule. This course is designed to offer students and faculty/clinical faculty an opportunity to develop electives which are not offered in the Electives Manual. Such an elective may be made permanent and printed in the next edition of the Elective Manual at the request of the Course Director and with the approval of the Curriculum Committee. At the discretion of the Vice Dean, this elective may count as the required "in-house" elective.

### PCH 450 Acting Intern - Psychiatry 1-4 cr

This elective is designed to provide for further experience and responsibility in clinical psychiatric diagnostic evaluation and psychopharmacologic treatment of patients admitted to Baypointe Hospital as well as on the Mobile Infirmary Psychiatry Consult.

### PCH 460 Psychiatry Ambulatory 1-4 cr

This elective is designed to provide for further experience and responsibility in clinical psychiatric diagnostic evaluation and psychopharmacologic and psychotherapeutic treatment of adult and/or child/adolescent patients with an emphasis on the psychiatric ambulatory setting. Assignments will be arranged when possible to accommodate the academic interests of the individual student.

## Psychiatry - MD (PSYC)

### PSYC 211 Behavioral Science 4 cr

Factual knowledge of human behavior and acceptance of its variations and limitations will help to facilitate the delivery of medical care. Behavioral Science topics include abnormal psychology, normal and aberrant growth and development, human sexuality, medical sociology, learning theory, system theory, psychoanalytic theory, counseling theory, and neurobiology. Multiple broad-based determinants of behavior are presented. The importance of understanding human behavior to the practicing physician is emphasized throughout the course.

### PSYC 311 Psychiatry 3 cr

The student is taught basic signs, symptoms, etiology, and management of psychiatric diseases. The clerkship includes exposure to adult inpatient and outpatient services, child and adolescent facilities, as well as consultation-liaison. The student becomes familiar with other psychiatric facilities also, including Searcy Hospital, Mobile Mental Health Center, and other community agencies providing varying forms of psychosocial services. Working with patients' families, where possible, is an integral part of all services. Another integral part of the clerkship is emergency psychiatry, since psychiatric illness is remarkably common in patients who seek care in the emergency room.

### PSYC 400 Psychiatry Externship 1-4 cr

To be determined.

### PSYC 444 Spec Elec-Psychiatry 1-4 cr

To be prepared by the student in conjunction with the Course Director and approved by the Vice Dean before course can be added to schedule. This course is designed to offer students and faculty/clinical faculty an opportunity to develop electives which are not offered in the Electives Manual. Such an elective may be made permanent and printed in the next edition of the Elective Manual at the request of the Course Director and with the approval of the Curriculum Committee. At the discretion of the Vice Dean, this elective may count as the required "in-house" elective.

## Psychology (PSY) (PSY)

### PSY 120 Introduction to Psychology 3 cr

A survey of the basic theories, concepts, principles, and research findings in the field of Psychology. Core course.

**Cross-Listed:** PSY 121

### PSY 121 Honors Gen Psychology - H 3 cr

This course will provide a survey of the basic theories, concepts, principles, and research findings in the field of Psychology. Along with the broad overview provided by the course, students will participate in a more in-depth examination of selected special topics (e.g. those topics generating controversy in the research community and in our society) as selected by the instructor. By contrast with the PSY 120 Introduction to Psychology course already being taught, the Honors General Psychology course will provide a more thorough coverage of selected topics. Prerequisite: Special permission.

**Cross-Listed:** PSY 120

### PSY 220 Res Design and Analysis I 3 cr

Research methods in psychology with an emphasis on the experimental method.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (EH 102 Minimum Grade of D or EH 105 Minimum Grade of D)

### PSY 221 Research Desgn/Analysis I-Apps 1 cr

Laboratory in research methods in psychology with an emphasis on the experimental method.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 210 Minimum Grade of D) or PSY 121 Minimum Grade of D and (EH 102 Minimum Grade of D or EH 105 Minimum Grade of D)

**Corequisite:** PSY 220

### PSY 250 Life Span Development 3 cr

An overview of human development from conception to death. Special emphasis will be placed on cognitive and social development. Core course.

**PSY 270 Psy of Black Experience 3 cr**

Theories and principles of psychology pertaining to the experience of black Americans. Includes the development of the black psychological perspective, African-American historical developments and philosophy, identity development and the determinants of the black personality, and contemporary issues in the black community.

**PSY 280 Professions & Careers in Psychology 2 cr**

A survey of subfields and professions in psychology. Students will also practice active learning related to obtaining a career with a bachelor's and/or graduate level degree in Psychology.

**Prerequisite:** (PSY 120 Minimum Grade of D)

**PSY 290 Special Topics - 1-3 cr**

Selected topics in psychology. May be repeated for credit when course content varies for a total of 12 credit hours.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 310 Biological Psychology I 3 cr**

An introductory survey of research and theory in neuroscience as it applies to the understanding of behavior. Focus will be on understanding basic mechanisms of neuron function and general coverage of topics such as sensory and motor systems, motivation and emotion, learning and memory, language and thinking, and mental disorders.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 317 Applied Behavior Analysis I 3 cr**

An introduction to the principles of behavior intended as a prerequisite to the specific strategies and procedures practiced by behavior analysts. This course will present the historical and scientific foundations of behavior analysis as applied in educational and other human service settings.

**Prerequisite:** (PSY 120 Minimum Grade of C or PSY 121 Minimum Grade of C or PSY 210 Minimum Grade of C) and (PSY 220 Minimum Grade of C or PSY 222 Minimum Grade of C)

**PSY 320 Res Design-Analysis II-W 3 cr**

Experience in applying methodological and statistical concepts introduced in PSY 220 and ST 210, as well as instruction in additional topics such as research and analysis. The course will emphasize the use of computers in conducting behavioral research (e.g. literature searches, collecting data, analyzing data, writing reports).

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**PSY 321 Research Desgn/Analysis II-App 1 cr**

Laboratory in research methods in psychology with an emphasis on applying methodological and statistical concepts introduced in PSY 220 and PSY 320.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 210 Minimum Grade of D) or PSY 121 Minimum Grade of D and (PSY 220 Minimum Grade of D and PSY 222 Minimum Grade of D) and (EH 102 Minimum Grade of D and EH 105 Minimum Grade of D)

**Corequisite:** PSY 320

**PSY 340 Abnormal Psychology 3 cr**

Nature and development of deviant behavior.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 350 Child and Adolescent Dev 3 cr**

The development and psychosocial aspects of childhood and adolescence.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 394 Directed Study 1-3 cr**

Specific topics and research findings introduced through the reading of appropriate professional and scientific literature. Requires special permission. May be repeated for a total of 8 credit hours.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 395 Psychology Practicum 1-6 cr**

Supervised experience in an area of psychology. May include supervised placement in an applied setting. May be repeated for a total of 12 credit hours.

**Prerequisite:** (PSY 120 Minimum Grade of C or PSY 121 Minimum Grade of C or PSY 210 Minimum Grade of C)

**PSY 412 History-Systems Psy - W 3 cr**

The historical foundations of modern psychology and the development of major theories in psychology.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**PSY 414 Introduction to Clin Psych 3 cr**

This course serves as a practical capstone for Psychology students interested in careers in professional Psychology. Through a series of lectures, readings, exercises, films, and demonstrations, this course will introduce student to the ways that clinical psychologists approach the conceptualization, assessment, diagnosis, and treatment of health problems. The course will focus on the scientific basis for the practice of clinical psychology.

**Prerequisite:** PSY 120 Minimum Grade of D or EH 102 Minimum Grade of D or EH 105 Minimum Grade of D

**PSY 416 Cognition 3 cr**

An overview of psychological research and theory in cognitive psychology. The course will emphasize how people gather, process, represent, and use information to guide thought and action. This course is an approved elective for students seeking gerontology certification.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D)

**PSY 417 Applied Behav Analysis I-Intro 3 cr**

An introduction to the principles of behavior intended as a prerequisite to the specific strategies and procedures practiced by behavior analysts. This course will present the historical and scientific foundations of behavior analysis as applied in educational and other human service settings. Prerequisites: PSY 120 or PSY 121 and PSY 220 or Education Teacher candidacy.

**Prerequisite:** (PSY 120 Minimum Grade of C or PSY 121 Minimum Grade of C or PSY 210 Minimum Grade of C) and (PSY 220 Minimum Grade of C or PSY 222 Minimum Grade of C)

**PSY 418 Applied Behav Analysis II-Meth 3 cr**

Behavioral assessment techniques and operant and respondent methods for deceleration of inappropriate behavior will be covered. Operant methods for accelerating appropriate behaviors, teaching new behaviors, and maintaining behaviors will be covered. Data-based decision making strategies will be used in developing and altering individual programs.

**Prerequisite:** PSY 317 Minimum Grade of C

**PSY 419 App Behav Analysis III-Adv App 3 cr**

Behavioral assessment techniques and experimental designs for the evaluation of behavior change programs will be covered. Data-based decision making strategies for formative program evaluation and modification are also included.

**Prerequisite:** PSY 417 Minimum Grade of C

**PSY 420 Psychology of Learning 3 cr**

Theories, experimental findings, and methods of investigation in learning.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D)

**PSY 425 Mental Health and Law 3 cr**

Selected topics in psychology and criminal Justice. An overview of the relevant federal and state laws, federal regulations and court rulings which address the issues of justice for preserving the rights of individuals with mental illness.

**Prerequisite:** PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D

**PSY 428 Perception 3 cr**

A critical analysis of the main theories and research trends in sensation and perception. This course will include computer simulations and demonstrations, and will also emphasize computer applications for data collection, data analysis, and for reporting results. This course is an approved elective for students seeking gerontology certification.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D) and (PSY 310 Minimum Grade of D or PSY 380 Minimum Grade of D)

**PSY 435 Social Psychology 3 cr**

A survey and analysis of major theoretical and experimental topics of interest in social psychology, such as how we perceive others. attitude, interpersonal attraction, aggression, prejudice and altruism.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 440 Psychology of Personality 3 cr**

A survey and critical analysis of major historical and current theories about personality. The course will also examine research relevant to the different approaches and consider various techniques of personality assessment.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 450 Advanced Data Analysis and Visualization 3 cr**

A methods-focused course covering the exploration, transformation, visualization, and analysis of data in the psychological sciences using widely or freely available software (e.g. Excel, Jamovi, and JASP). The course builds upon the skills taught in PSY 220 (Research Design & Analysis I) and PSY 320 (Research Design & Analysis II).

**Prerequisite:** (PSY 120 Minimum Grade of D) and (PSY 220 Minimum Grade of D) and (PSY 320 Minimum Grade of C)

**PSY 456 Adult Development and Aging- 3 cr**

The development and psychosocial aspects of adulthood and late life. This course is an approved elective for gerontology certification.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of C or PSY 210 Minimum Grade of D)

**Cross-Listed:** PSY 356

**PSY 460 Industrial Psychology 3 cr**

Application of psychological principles and techniques to business, industry, and government.

**Prerequisite:** PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D

**PSY 465 Intro to Measurements-Tests 3 cr**

This course will provide a survey of the methodology of assessment, test design and construction, test administration and scoring, achievement and intelligence testing, personality observations and inventories, and issues in ethics and applications of testing.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or ST 210 Minimum Grade of D)

**PSY 470 Intellectual Disabilities 3 cr**

The study of theories and research in intellectual disabilities and related areas.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 475 Comparative Evolutionary Psy 3 cr**

A critical analysis of the main theories and research trends in comparative and evolutionary psychology. This course is an approved elective for students seeking gerontology certification.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D)

**PSY 480 Health Psychology - W 3 cr**

Current theories, research and applications in health psychology.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**PSY 485 Psychology of Gender 3 cr**

The study of psychological research on gender differences and theories regarding the origins of these differences.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or ST 210 Minimum Grade of D)

**PSY 490 Special Topics 1-3 cr**

Selected topics in psychology. May be repeated for a total of 12 credit hours when course content varies.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 492 Seminar - 1-3 cr**

A survey of basic theories, concepts, principles, and research findings in a particular focal topic in psychology. Students will study topics in depth by reading and presenting research reports, review papers and book chapters, and through active in-class discussion of the reading materials. Requires permission of department chair. May be repeated up to 2 times when content varies for a total of 6 credit hours.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D)

**PSY 494 Directed Studies - 1-3 cr**

Directed study and research. Requires special permission. May be repeated for a total of 8 hours.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D)

**PSY 499 Honors Senior Thesis-H 3-6 cr**

Student conducts an independent research project under the supervision of a faculty sponsor. Recommended for psychology majors planning graduate school. Permission of department chair is required prior to registration. Requires GPA of 3.3 or higher. May be repeated for a total of 6 credit hours.

**Prerequisite:** (PSY 120 Minimum Grade of D or PSY 121 Minimum Grade of D or PSY 210 Minimum Grade of D) and (PSY 220 Minimum Grade of D or PSY 222 Minimum Grade of D)

**PSY 500 Proseminar in Psychology 1 cr**

Research presentations will be given by faculty and advanced graduate students. In addition, discussion of project and thesis requirements and procedures will take place. Required of all students registered for PSY 500, 502, and 503.

**PSY 501 Research Design and Stats I 3 cr**

Theories and principles of research design and elements of modern statistics. Introduction to computer programs for statistical analysis will be included.

**Corequisite:** PSY 500

**PSY 502 Research Design and Stats II 3 cr**

Theories and principles of advanced research design and elements of modern statistics. The use of computer applications such as SPSS to analyze empirical data sets will be covered.

**Prerequisite:** PSY 501 Minimum Grade of B or PSY 521 Minimum Grade of B

**Corequisite:** PSY 500

**PSY 503 Quantitative Methods II 3 cr**

Elements of modern statistics with emphasis on application to psychological research. Multivariate statistical techniques to include multiple regression, multivariate analysis of variance, discriminant, canonical, and factor analysis will be discussed.

**Prerequisite:** (PSY 502 Minimum Grade of B or PSY 522 Minimum Grade of B)

**Corequisite:** PSY 500

**PSY 506 Prof Ethics and Standards 3 cr**

An introduction to professional and ethical issues as they pertain to psychology. Focus is on the development of an ethical and professional awareness in the practice of psychology, including teaching and research.

**PSY 507 History of Psych & Prof Ethics 3 cr**

This course provides instruction through readings, lecture, and case studies in the application of ethics in the professional practice of psychology. In addition, the course focuses on the philosophical foundations, professional identity, and standards of practice found in both clinical psychology and counseling psychology.

**PSY 510 Physiological Psychology 3 cr**

This course provides a foundation in the techniques of advanced psychophysiological methods. The course covers the history of psychophysiology, including the electrical properties of cells, and major organ systems, with particular emphasis on the electroencephalogram (EEG) and neuroimaging techniques. Students are introduced to the principles of psychophysiological recording, common applications of psychophysiology, safety and ethics in psychophysiological research, instrumentation, and research design issues in psychophysiology. Relevant statistical treatment of psychophysiological data will be discussed, including multiple regression, complex ANOVA, scaling of data, and non-parametric alternatives such as bootstrapping.

**PSY 512 Adv History/Systems Psychology 3 cr**

An advanced course in the historical foundations of modern psychology and the development of major theories in psychology.

**PSY 514 Learning 3 cr**

A survey of research and theory in learning.

**PSY 516 Cognitive Psychology 3 cr**

An advanced survey of research and theory in cognitive psychology. Topics include pattern recognition, attention, memory, language processing, decision making, and problem solving. This course is an approved elective for students seeking gerontology certification.

**PSY 520 Personality Res and Theory 3 cr**

A critical analysis and evaluation of major theories and current research trends in personality.

**PSY 522 Soc & Personality Psychology 3 cr**

This course provides a foundation for conducting quantitative research in personality and social psychology. Topics covered will include (a) measurement of personality and individual differences (e.g., narcissism, self-esteem), (b) measurement of cognitive and behavioral outcomes in laboratory and non-laboratory settings (e.g. decision-making, implicit cognitions), and (c) data analytic techniques (e.g. testing for mediation/moderation, structural equation modeling).

**PSY 524 Lifespan Development 3 cr**

Analysis of theories, research methods, and major findings of sensory, perceptual, social, and cognitive changes across the lifespan, from infancy to late life. Research in social and cognitive development, including cognitive disabilities, the underlying mechanisms involved in thinking and learning processes, and age-related cognitive models are central to this course. \*\*This course is an approved elective for students seeking gerontology certification.

**PSY 528 Sensation and Perception 3 cr**

This course provides a multidisciplinary analysis of how the sensory systems analyze physical stimuli to support perception and successful actions. Consideration is given to how the anatomy and physiology of the major sensory systems extract information using low- and high-level mechanisms to create meaningful percepts. Other topics include psychophysics, comparative studies, communication, production and performance, face and object recognition, attention, and event perception.

**PSY 530 Applied Psy & Dx Interviewing 3 cr**

Theories, principles and techniques of interviewing, behavioral observation and classification of psychological disorders.

**PSY 532 Psychopathology 3 cr**

Current research and theoretical aspects of psychopathology in children and adults.

**PSY 534 Introduction to Family Therapy 3 cr**

This course is designed to introduce graduate students to major research-based models of family therapy. It covers the models of therapy that are most widely used by mental health professionals assisting families dealing with relationship difficulties.

**PSY 540 Psychometrics 3 cr**

Theories and methods of test construction and principles of measurement and evaluation in the behavioral sciences.

**PSY 542 Cognitive Assessment 3 cr**

Principals and methods of individual intelligence testing, including the administration of the Wechsler and the Stanford-Binet tests. Practical experience in the administration, interpretation and report writing of a psychological evaluation using intelligence tests.

**Prerequisite:** PSY 530 Minimum Grade of B and (PSY 540 Minimum Grade of B or PSY 571 Minimum Grade of B)

**PSY 544 Personality & Affective Assmt 3 cr**

Theory, development and interpretation of selected personality assessment instruments. Methods and procedures in administering and interpreting personality, aptitude and career interest tests.

**Prerequisite:** (PSY 540 Minimum Grade of B or PSY 571 Minimum Grade of B) and (PSY 542 Minimum Grade of B or PSY 575 Minimum Grade of B)

**PSY 550 Evidenced Based Clin/Coun Prac 3 cr**

Study of the theoretical and empirical foundations of the major systems of psychotherapeutic change.

**PSY 552 Multicultural Issues in Psy 3 cr**

This course will focus on theoretical models, research, techniques, and interventions for working with culturally diverse populations in various settings. Specific issues to be addressed include world views, acculturation and acculturative stress, prejudice and prejudice-reduction techniques, racial/ethnic identity, culture and assessment, and the nature of multicultural competence in Psychology. Issues related to ethnic and racial identity will form the primary focus; however, other types of diversity (e.g., religion, gender, sexual orientation, physically challenged) will also be considered.

**Prerequisite:** (PSY 550 Minimum Grade of B or PSY 589 Minimum Grade of B) and PSY 506 Minimum Grade of B and PSY 530 Minimum Grade of B and (PSY 532 Minimum Grade of B or PSY 561 Minimum Grade of B)

**PSY 554 Cognitive Behavior Therapy 3 cr**

A follow up course to PSY 550, this course will survey theory, research and application of cognitive behavior therapy. Focus will be on treatment strategies and application to a variety of psychological disorders of adults and children.

**Prerequisite:** PSY 530 Minimum Grade of B and (PSY 532 Minimum Grade of B or PSY 561 Minimum Grade of B) and (PSY 550 Minimum Grade of B or PSY 589 Minimum Grade of B)

**PSY 556 Practicum 1-3 cr**

Supervised experience with adult and children clients. Includes case conference and seminars. May include supervised placement in an applied setting. May be repeated up to five times for a total of 18 credit hours.

**Prerequisite:** (PSY 532 Minimum Grade of B or PSY 561 Minimum Grade of B) and (PSY 550 Minimum Grade of B or PSY 589 Minimum Grade of B)

**PSY 558 External Practicum 3-5 cr**

Supervised placement in an applied setting. May be repeated four times for a total of 15 credit hours.

**Prerequisite:** PSY 552 Minimum Grade of B and PSY 554 Minimum Grade of B

**PSY 570 Intel Disable/Autism Spec Dis 3 cr**

A study of theories and research related to Intellectual Disabilities and Autism Spectrum Disorders.

**PSY 572 Child Psychopathology 3 cr**

The description and etiology of deviant behavior patterns in children and adolescents.

**Prerequisite:** (PSY 532 Minimum Grade of B or PSY 561 Minimum Grade of B)

**PSY 575 Comparative Psychology 3 cr**

An in-depth analysis of the proximal and ultimate causes of animal and human behavior examined from the perspectives of comparative and evolutionary psychology, psychobiology and ethology. Relevant research in animal models of biological and cognitive systems, learning and motivation, lifespan development and related biopsychosocial factors will be included. \*\* This course is an approved elective for students seeking gerontology certification.

**PSY 586 Cognitive Neuroscience 3 cr**

This course includes an advanced and integrative study of the experimental study of cognition and neuroscience. Topics include sensation and perception, memory, learning, language, metacognition, intelligence, problem solving, decision making, mental imagery, consciousness, attention, and the development of cognition through the life span. Major theoretical perspectives and current research within the fields of cognition and neuroscience are discussed. This course also provides students with a basic understanding of the neural underpinnings of a variety of cognitive processes.

**PSY 590 Sp Top in Psychology - 1-3 cr**

Selected topics in psychology. May be requested for credit when course content varies for a total of 12 credit hours.

**PSY 594 Dir Individual Study 1-3 cr**

Individual study under the direction of a member of the graduate faculty. May be repeated for up to 9 hours credit.

**PSY 598 Project in Psychology 1-6 cr**

Completion of a research project, program proposal, program evaluation, major literature review or other comparable experience under the direction of a member of the graduate faculty. IRB or Animal Use and Care Committee approval may be required for some projects. May be repeated for up to 6 hours credit. A minimum of 3 hours is required to meet degree requirements.

**PSY 599 Thesis Research 1-6 cr**

Completion and oral defense of a master's thesis based upon original research. May be repeated for up to 9 hours credit. A minimum of 6 hours is required to meet degree requirements. Prerequisite: Approval of research prospectus including IRB or Animal Use and Care Committee approval if applicable.

## Public Health/Epidemiology-MD (PHE)

**PHE 131 Public Health & Epidemiology 2 cr**

This course is designed to acquaint the student with the principles of epidemiology as they relate to and are used in the field of medicine. It consists of a series of lectures and seminars in the areas of preventive medicine, clinical epidemiology, environmental health, biostatistics, and the effects of government on medical practice.

**PHE 231 Public Health and Epidemiology 2 cr**

This course is designed to acquaint the student with the principles of epidemiology as they relate to and are used in the field of medicine, clinical epidemiology, environmental health, vital statistics, and the effects of government on medical practice.

**PHE 400 Public Health Externship 1-4 cr**

To be determined.

## Radiologic Sciences (RAD) (RAD)

**RAD 101 Prin of Radiographic Exposure 4 cr**

A study of the principles involved in image formation including radiographic films, film processing, and exposure factors affecting film quality.

**RAD 104 Patient Care-Ethics in Radiogr 3 cr**

This course is designed to give the student basic knowledge concerning patient care and ethical situations with which the radiographer must be familiar. Class time is allotted for the student to practice certain techniques pertinent to obtaining vital signs, handling of patients, sterile technique, tray set-up, first-aid measures, and general operating room and bedside radiography procedures.

**RAD 107 Clinical Education I 1 cr**

Hospital-based laboratory allowing the student additional clinical experience in RAD 101 and RAD 104.

**RAD 108 Clinical Education II 1 cr**

Hospital-based laboratory allowing the student to apply those positioning techniques within a clinical setting as presented in RAD 131.

**RAD 109 Clinical Education III 4 cr**

Hospital-based laboratory experience allowing the student increased responsibility in those areas covered in RAD 131 as well as bedside radiography.

**RAD 131 Radiography-Osseous System I 4 cr**

This course includes the demonstration and practice in positioning and phantom radiography of the chest, general abdomino-pelvic viscera, and the upper and lower extremities to include shoulder and pelvic girdles. Special fee.

**RAD 201 Radiography-Osseous System II 6 cr**

A continuation of RAD 131 to include the axial skeleton, sternum, sternoclavicular joints, etc., and other topics relating to diagnostic imaging. Special fee.

**RAD 204 Clinical Education IV 4 cr**

Hospital-based laboratory allowing the student to obtain clinical experience in those areas presented in RAD 201 and RAD 215.

**RAD 215 Radiographic Contrast Media 4 cr**

A detailed study of contrast media, preparation and administration, radiographic positions, technique, and anatomy and physiology of the organs are studied.

**RAD 218 Radiologic Physics 4 cr**

A study of fundamentals of magnetism, basic electricity, x-ray machine circuitry, x-ray protection, and radiation physics, to give the student a basic understanding of the principles underlying the production of x-rays and their interaction with matter.

**RAD 265 Radiation Biology 2 cr**

A study of health physics and methods used to reduce exposure to personnel and patients in diagnostic and therapeutic radiology. The biological effects of ionizing radiation are stressed along with applied mathematical principles.

**RAD 300 Clinical Education I 2 cr**

Hospital-based laboratory allowing the student additional clinical experience in RAD 312 and RAD 304.

**RAD 301 Clinical Education II 4 cr**

Hospital-based laboratory allowing the student to obtain clinical experience in those areas presented in RAD 307.

**Prerequisite:** RAD 300 Minimum Grade of C and RAD 304 Minimum Grade of C and RAD 307 Minimum Grade of C and RAD 310 Minimum Grade of C and RAD 312 Minimum Grade of C

**RAD 302 Clinical Ed III 4 cr**

Hospital-based laboratory allowing the student additional clinical experience.

**RAD 304 Patient Care & Ethics 3 cr**

Basic knowledge concerning patient care and ethical situations with which the radiologic technologist must be familiar. Class time is allotted for the student to practice certain techniques pertinent to obtaining vital signs, handling of patients, sterile technique, tray setup, first-aid measures, and general operating room and bedside radiography procedures.

**RAD 305 Clinical Education V 4 cr**

Hospital-based laboratory allowing the student to gain additional clinical experience in RAD 201 and 215.

**RAD 307 Osseous I 4 cr**

This course includes the demonstration and practice in positioning and phantom radiography of the chest, general abdomino-pelvic viscera, and the upper and lower extremities to include shoulder and pelvic girdles.

**RAD 308 Osseous II 4 cr**

Continuation of RAD 307 to include the axial skeleton, sternum, sternoclavicular joints and introductory topics relating to special radiographic procedures.

**RAD 309 Osseous III 3 cr**

Continuation of RAD 308 to include demonstration and practice in positioning and phantom radiography of the cranium, facial bones, optic foramina, TMJs, orbits, overview of mastoids, stereoscopy, tomography, long bone measurements, foreign body localization and fetal imaging.

**RAD 310 Radiation Biology 2 cr**

A study of health physics and methods used to reduce exposure to personnel and patients in diagnostic and therapeutic radiology. The biological effects of ionizing radiation are stressed along with applied mathematical principles.

**RAD 311 Survey of Pathology 4 cr**

A general survey of diseases designed to acquaint the student with certain changes that occur in disease and their application to radiologic technology.

**RAD 312 Princ of Radiographic Exposure 4 cr**

A beginning study of the principles involved in image formation including exposure factors affecting image quality.

**RAD 315 Contrast Media 3 cr**

A detailed study of contrast media, preparation and administration, radiographic positions, technique, and anatomy and physiology of the organs studied.

**Prerequisite:** RAD 300 Minimum Grade of C and RAD 304 Minimum Grade of C and RAD 307 Minimum Grade of C and RAD 310 Minimum Grade of C and RAD 312 Minimum Grade of C

**RAD 318 Radiologic Physics 4 cr**

A study of the fundamentals of magnetism, basic electricity, x-ray machine circuitry, x-ray protection, and radiation physics, to give the student a basic understanding of the principles underlying the production of x-rays and their interaction with matter.

**Prerequisite:** RAD 304 Minimum Grade of C and RAD 307 Minimum Grade of C and RAD 310 Minimum Grade of C and RAD 312 Minimum Grade of C and RAD 300 Minimum Grade of C

**RAD 320 Cross-Sectional Anatomy 2 cr**

A study of cross-sectional anatomy as imaged in MRI and CT.

**RAD 335 Pediatric-Geriatric Rad 1 cr**

A detailed study of specialized equipment, accessories and positioning techniques used in pediatric and geriatric radiography.

**RAD 337 Image Analysis 5 cr**

Critique sessions of radiographic images including quality control procedures.

**RAD 394 Dir Independent St in Rad-W 2 cr**

Directed study in approved areas of medical imaging. Includes a comprehensive Registry Review and requires written assignments and a presentation.

**RAD 401 Vascular Radiography I 5 cr**

Advanced practice in, and in-depth study of, the principles of vascular radiography.

**RAD 402 Vascular Radiography II - W 5 cr**

A continuation of RAD 401.

**RAD 403 Clinical Education IV 4 cr**

Hospital-based laboratory allowing the student to obtain clinical experience in those areas presented in RAD 308 and RAD 310.

**Prerequisite:** RAD 300 Minimum Grade of C and RAD 304 Minimum Grade of C and RAD 307 Minimum Grade of C and RAD 310 Minimum Grade of C and RAD 312 Minimum Grade of C

**RAD 404 Clinical Education V 4 cr**

Hospital-based laboratory allowing the student to obtain clinical experience.

**Prerequisite:** RAD 403 Minimum Grade of C and RAD 411 Minimum Grade of C and RAD 415 Minimum Grade of C

**RAD 405 Clinical Education VI 4 cr**

Hospital-based laboratory allowing the student to obtain clinical experience.

**Prerequisite:** RAD 404 Minimum Grade of C

**RAD 406 Computerized Tomography II - W 5 cr**

A continuation of RAD 405.

**RAD 407 Clinical Education I - PPC 6 cr**

This is a hospital based laboratory allowing the student to gain additional clinical experience in general radiographic procedures. This course is designed for students who have previously completed the Radiologic Sciences program in Ultrasound or Radiation Therapy.

**RAD 408 Clinical Education II - PPC 6 cr**

This is a hospital based laboratory allowing the student to gain additional clinical experience in general radiographic procedures. This course is designed for students who have previously completed the Radiologic Sciences program in Ultrasound or Radiation Therapy. This course is a continuation of RAD 407.

**Prerequisite:** RAD 407 Minimum Grade of C

**RAD 409 Magnetic Resonance Imaging I 5 cr**

An in-depth study of the principles and clinical applications of MRI.

**RAD 410 Magnetic Res Imaging II - W 5 cr**

A continuation of RAD 409.

**RAD 411 Survey of Pathology 4 cr**

A general survey of diseases designed to acquaint the student with certain changes that occur in disease and their application to radiologic sciences.

**Prerequisite:** RAD 300 Minimum Grade of C and RAD 304 Minimum Grade of C and RAD 307 Minimum Grade of C and RAD 310 Minimum Grade of C and RAD 312 Minimum Grade of C

**RAD 413 Mammography I 5 cr**

Advanced practice and in-depth study of breast imaging techniques.

**RAD 414 Mammography II - W 5 cr**

A continuation of RAD 413.

**RAD 415 Diagnostic Imaging 2 cr**

This course includes principles and clinical applications of image intensification, computer applications in radiology, CR, DR, IDDR, PACS, AEC function, magnification radiography, thermography, diaphanography and bone densitometry.

**Prerequisite:** RAD 300 Minimum Grade of C and RAD 304 Minimum Grade of C and RAD 307 Minimum Grade of C and RAD 310 Minimum Grade of C and RAD 312 Minimum Grade of C

**RAD 417 Ultrasound Anatomy & Scanning-W 4 cr**

This course will include lecture/clinical/laboratory demonstration and guidelines for the ultrasound evaluation of the abdomen, retro-peritoneum and superficial structures and also include a writing component.

**Prerequisite:** EH 102 Minimum Grade of C

**RAD 418 Ultras Anat-Scan Tech-OB-GYN 3 cr**

This course is a continuation of RAD 417 and includes clinical/laboratory demonstration and guidelines for obstetric and gynecological ultrasound.

**Prerequisite:** RAD 417 Minimum Grade of C

**RAD 419 Ultras Tech-Superf Struct-Peds 3 cr**

This course is a continuation of RAD 418 and is designed to provide the student with anatomy, pathology and scanning techniques of superficial structures and pediatrics. It includes clinical and laboratory demonstrations. Special fee.

**Prerequisite:** RAD 418 Minimum Grade of C

**RAD 421 Ultras Physics-Instrumentation 3 cr**

A study of the basic physical principles and instrumentation of diagnostic ultrasound.

**RAD 423 Ultrasound Clinical Educ I 6 cr**

Hospital-based laboratory allowing the student to gain clinical experience in ultrasound procedures, with emphasis on abdominal exams.

**RAD 424 Ultrasound Clinical Educ II 6 cr**

Continuation of RAD 423 allowing the student to gain clinical experience in ultrasound procedures, with emphasis on OB/GYN exams.

**RAD 425 Ultrasound Clinical Educ III 6 cr**

A continuation of RAD 424 allowing the student to gain clinical experience in ultrasound procedures, with emphasis on superficial structures, pediatric scans, and ultrasound guided procedures.

**RAD 426 CT Phys Princ and Qual Cont 3 cr**

A study in advanced practice in, and in depth study, of computerized tomography. Topics will include a history of CT, physical principles of CT, quality control and data acquisition, image reconstruction, and image manipulation, display and storage.

**RAD 427 Procedural Guidelines in Ultra 3 cr**

This course will include a review of guidelines for ultrasound exams, ethics in ultrasound and preparation for the ultrasound registry. Assigned student papers and oral presentations addressing ultrasound topics are required.

**RAD 428 Computed Tomography Procedures 3 cr**

Provides a detail student of procedures performed in CT. Topics include advanced patient care, patient education, preparation, contrast administration, radiation dosimetry and imaging protocols of the head, neck, chest, abdomen, pelvis, spine and musculoskeletal systems.

**RAD 429 Adv Sect Imag - CT and MRI Pth 3 cr**

This course will distinguish various types of pathologies imaged in CT and MRI. In addition to imaging characteristics, emphasis will be placed on a general understanding of the description, etiology, epidemiology, signs and symptoms, treatment and prognosis.

**RAD 430 Healthcare Communication 3 cr**

This course will provide knowledge of information technology and applications of IT in the healthcare setting. Topics of discussion will include how to foster interdisciplinary communication, development of action plans for areas that are compliant/non-compliant with organizational objectives, and utilization of electronic or manual systems.

**RAD 432 Healthcare Human Resource Mgmt 3 cr**

This course will enable students to develop an effective recruitment and staffing program, implement a retention program, conduct staff performance evaluations, establish and develop processes to expand employee competence, implement a leadership development program, develop a succession plan and create an employee recognition program.

**RAD 433 Health Care Financial Mgmt 3 cr**

Course provides students with knowledge of both fiscal and asset management health care organization with tools and techniques to include health care accounting and financial statement, making major capital investments, determining cost and using cost information in decision making, and budgeting performance management.

**RAD 435 Health Care Operations Mgt - W 3 cr**

Provide knowledge to use surveys, focus groups, and interviews, use quality improvement methods, develop industry partnerships and develop new opportunities, develop marketing and public relations plans, develop policies and procedures to follow federal, state, and other regulatory guidelines, enforce policies and procedures with monitoring techniques, and develop a quality management program.

**RAD 437 Image Analysis 3 cr**

Student radiographs taken during the clinical periods will be viewed and critiqued within the classroom.

**Prerequisite:** RAD 403 Minimum Grade of C and RAD 411 Minimum Grade of C and RAD 415 Minimum Grade of C

**RAD 440 Radiology Management Preceptor 1 cr**

To achieve the aims of the Radiology Management program, students require experience in a variety of settings, in addition to learning theory content in their management courses. This course will provide a valuable component of student development by providing an opportunity to work with professional radiology managers/supervisors/administrators in the field of Radiology.

**Prerequisite:** RAD 430 Minimum Grade of C and RAD 432 Minimum Grade of C and RAD 433 Minimum Grade of C and RAD 435 Minimum Grade of C

**RAD 441 Clinical Education I 5 cr**

Through structured sequential assignments in clinical education settings, concepts of team practice, patient-centered clinical practice, and professional development are presented. Course designed to provide development, application, analysis, integration, synthesis, and evaluation of concepts and theories in radiation therapy.

**RAD 442 Clinical Education II 6 cr**

A continuation of RAD 441. Through structured sequential assignments in clinical education settings, concepts of team practice, patient-centered clinical practice, and professional development are presented. Course designed to provide development, application, analysis, integration, synthesis, and evaluation of concepts and theories in radiation therapy.

**RAD 443 Clinical Education III 7 cr**

A continuation of RAD 442. Through structured sequential assignments in clinical education settings, concepts of team practice, patient-centered clinical practice, and professional development are presented. Course designed to provide development, application, analysis, integration, synthesis and evaluation of concepts and theories in radiation therapy.

**RAD 444 Clinical Education IV 6 cr**

A continuation of RAD 443.

**RAD 446 Orientation to Oncology - W 3 cr**

Examines Oncology terminology, concepts of diagnosis and treatment, orientation to equipment and procedures and the role of the radiation therapist. Ethical, legal and quality assurance concerns will also be discussed.

**RAD 447 Cardiovascular Interventional for Radiologic Technologists 3 cr**

This course will explore the principles and practices of cardiovascular intervention. It will cover radiography equipment, anatomy interpretation through imaging, and the crucial role of radiographers in heart catheterization departments. This course delivers the foundational knowledge and practical skills essential for a successful career in cardiovascular intervention.

**RAD 448 Radiation Therapy Physics 3 cr**

Processes in radiation production, interactions, detection, and measurement, units, calibration, are presented. Routine and emergency protection procedures for radiation-producing devices and radioactive sources are emphasized. Includes discussions on quality assurance methods, treatment unit calibration, dose monitoring, beam verification, and radiation protection for the patient, health-care worker, and the public.

**RAD 450 Patient Care in Oncology 1 cr**

Fundamentals of oncology patient care with emphasis on physical and psycho-social needs assessment, treatment and disease side-effect management, nutritional care and pain management.

**RAD 452 Prin Pract of Rad Oncology I 3 cr**

A study of techniques used for simulation and treatment delivery. Includes general and site-specific instruction, with attention given to technical details aimed at optimizing the dose delivery planned during simulation and accomplished during treatment. Time will be dedicated to demonstration of techniques.

**RAD 453 Prin Prac of Rad Oncology II 3 cr**

A study of techniques used for simulation and treatment delivery. Includes general and site-specific instruction, with attention given to technical details aimed at optimizing the dose delivery planned during simulation and accomplished during treatment. Time will be dedicated to demonstration of techniques.

**RAD 454 Quality Mgt In Rad Oncology 1 cr**

Components of quality management in Radiation Oncology will be studied, to include quality control and assurance checks for the clinical aspects of patient care, medical records, treatment delivery and localization equipment and treatment planning equipment. The role of various team members in continuous quality improvement will be discussed as well as legal and regulatory implications.

**Prerequisite:** RAD 441 Minimum Grade of C and RAD 448 Minimum Grade of C and RAD 446 Minimum Grade of C and RAD 450 Minimum Grade of C and RAD 452 Minimum Grade of C

**RAD 455 Dosimetry and Tx Planning I 3 cr**

Content designed to examine factors that influence and govern clinical planning treatment. Encompasses isodose characteristics, contouring of relevant structures, dosimetric calculations, compensation, and clinical application of treatment beams. Optimal treatment planning is emphasized.

**RAD 456 Dosimetry and Tx Planning II 2 cr**

A continuation of RAD 455. Content designed to examine factors that influence and govern clinical planning of patient treatment. Encompasses isodose characteristics, contouring of relevant structures, dosimetric calculations, compensation, and clinical application of treatment beams. Optimal treatment planning is emphasized.

**RAD 458 Cancer Mgt in Oncology - W 3 cr**

This course examines special topics in Radiation Oncology and places emphasis on current literature related to various aspects of practice.

**RAD 459 Superficial Structures & Neonatal Scanning 3 cr**

This course is a continuation of RAD 417. It includes clinical laboratory demonstration and guidelines for Superficial Structures & Neonatal Scanning.

**RAD 475 Advanced Modality Clinical A 2 cr**

Advance practice in hospital based laboratory/clinical settings. Clinical rotations will serve as the foundation for acquiring the appropriate clinical skills. The completion of assigned clinical rotations and clinical competencies are essential to filling objectives.

**RAD 476 Advanced Modality Clinical B 2 cr**

Advance practice in an additional hospital based laboratory clinical setting. Clinical rotations will serve as the foundation for acquiring the appropriate clinical skills. The completion of assigned clinical rotations and clinical competencies are essentials to filling objectives.

**RAD 477 Computed Tomography I 2 cr**

Advance practice in, and in-depth study of, computerized tomography

**RAD 478 Computed Tomography II-W 2 cr**

Continuation of RAD 477, with increased emphasis on 3-D imaging, biopsies and advanced CT techniques.

**Prerequisite:** RAD 477 Minimum Grade of C and EH 102 Minimum Grade of C

**Corequisite:** RAD 475

**RAD 479 Computed Tomography III 2 cr**

Advance practice in, and in-depth study of, computerized tomography

**RAD 480 Mammography I - W 2 cr**

Lecture and discussion of breast imaging and includes the history, scope of practice, introduction to MQSA, breast cancer and early detection, epidemiology, patient care, patient education and assessment.

**Prerequisite:** EH 102 Minimum Grade of C

**Corequisite:** RAD 475

**RAD 481 Mammography II 2 cr**

This course is continuation of RAD 480 with increased emphasis on quality assurance, mammographic digital imaging, diagnostic procedures, and 3D breast tomosynthesis.

**RAD 482 Mammography III 2 cr**

This course will include web enhanced lectures, demonstrations and review of RAD 480 and RAD 481 with increased emphasis on quality assurance and advanced mammographic digital imaging.

**RAD 483 Magnetic Resonance Imaging I 2 cr**

An in-depth study of the principles and clinical applications of MRI.

**RAD 484 Magnetic Reson Imaging II - W 2 cr**

This course introduces the basic principles of MR safety and covers the basic concepts of patient management. Educating patients and ancillary staff on magnet safety also is presented. Patient and magnet-related emergencies represent a unique situation to an MR tech.

**Prerequisite:** EH 102 Minimum Grade of C

**Corequisite:** RAD 475

**RAD 485 Magnetic Resonance Imaging III 2 cr**

A continuation of RAD 484 with additional emphasis on instrumentation, abdominal, extremity and joint procedures.

**RAD 486 Vascular Radiography - W 2 cr**

Advanced practice and in-depth study of the principles of vascular radiography with writing component.

**Corequisite:** RAD 475

**RAD 487 Vascular Radiography II 2 cr**

Advanced practice and in-depth study of the principles of vascular radiography, with increased emphasis on digital radiography as applied to vascular procedures.

**RAD 488 Vascular Radiography III 2 cr**

Advanced practice and in-depth study of the principles of vascular radiography, with increased emphasis on vascular procedures.

**RAD 490 Special Topics 1-3 cr**

Selected topics in Radiological Sciences. Students can increase knowledge in specific areas of radiological sciences, and also use this course to gain extra credit hours to complete their baccalaureate degree.

**RAD 491 Prof. Radiological Practice 6 cr**

A bridge course for certified radiographers to transition from Radiographer to BS program.

**RAD 494 Directed Independent Study 2 cr**

A comprehensive registry review to include written assignments and a presentation.

**RAD 496 Radiologic Sci Research I-W 1 cr**

Writing intensive course that prepares students to perform a research project in one of the imaging modalities.

**Prerequisite:** EH 102 Minimum Grade of C

**RAD 497 Rad Science Research II 1 cr**

Continuation of RAD 496. Students will design and perform a research project.

**Prerequisite:** RAD 496 Minimum Grade of C

**RAD 499 Senior Honors Project - H - W 1-3 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project relevant to the field of Radiologic Sciences study that will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty members chaired by the honors mentor. This course is required for Honors recognition and may be repeated for up to 6 credit hours. Prerequisite: Permission of the department chair and completion of an approved project prospectus.

**Prerequisite:** RAD 403 Minimum Grade of C or RAD 423 Minimum Grade of C or RAD 441 Minimum Grade of C or RAD 460 Minimum Grade of C or RAD 464 Minimum Grade of C or RAD 468 Minimum Grade of C or RAD 472 Minimum Grade of C

## Radiology - MD (RADI)

**RADI 099 Introduction to Radiology 3 cr**

Students will spend 3 hours per week rotating in the Department of Radiology for 10 weeks. Instruction in and reinforcement of Radiological Anatomy will be provided. The fundamentals of Radiology such as Methods of Image Formation and Interpretation will be introduced. Basic radiological- pathological correlation will be taught.

**RADI 400 Radiology Externship 1-4 cr**

To be determined.

**RADI 401 Statistical Meth in Clin Med 1-4 cr**

This course offers a survey at an elementary level of classical statistical methods; probability, classification and measurement, sampling, description, estimation, hypothesis testing, analysis of variance, correlation, regression, prediction, and decision. Examples are drawn from the medical literature. The duties and responsibilities of the student(s) will include meeting regularly with the instructor in tutorial sessions and the preparation of a short term paper on a topic in medical statistics that is of mutual interest to the student and the instructor. The paper may consist of one or more refereed evaluations or previously published research reports. The student will also prepare and maintain a notebook on his/her readings and tutorials. The education materials include a large library of textbooks, reports, and papers in statistical methods, as well as a PC computer with a large library of statistical software.

**RADI 402 Radiol Physics and Radia Bio 1-4 cr**

The course offers a survey at an elementary level of the physics and radiation biology of diagnostic and therapeutic radiology. The sources, detection, and measurement of ionizing radiation are reviewed. The interactions of radiation and matter are considered. The pathological effects of radiation are discussed. Dose-response relations and somatic and genetic effects are described and the pharmacological aspects of irradiation are developed. The principles of radiation protection are developed including the modification of the effects of a given dose of radiation by chemical enhancement or suppression. The duties and responsibilities of the student(s) will include meeting regularly with the instructor in tutorial sessions and the preparation of a short term paper on a topic in radiological physics or radiation biology that is of mutual interest to the student and the instructor. The student will also prepare and maintain a notebook of his/her readings and tutorials. The education materials include a large library of textbooks, reports, and papers in radiological physics and radiation biology, as well as 3 PC computers and radiation measuring instruments, etc.

**RADI 420 Basic Radiology 1-4 cr**

Students will be given the opportunity to rotate through all radiology work areas where they can observe procedures and film reading and become acquainted with the operation of the department. Students will attend departmental conferences which deal with various facets of radiology. A self-instructional teaching file on the major organ systems is available for use at any time. Students will choose an interesting case to research during the course of the elective and will present it at the end of the rotation to residents and staff during conference time. Students are to participate on a full-time basis and will be responsible for limited night and weekend on-duty call with the radiology resident.

**RADI 423 Radiology Clerkship 1-4 cr**

Students will be given the opportunity to rotate through at least four sub-specialty and general radiology services where they will become acquainted with technical skills and interpretive practices. Toward the end of each week, the students will participate as residents in the performance and interpretation of procedures under direct supervision of responsible faculty members. They will attend departmental conferences for residents and students. Some flexibility as to the sub-specialty rotation will be coordinated with the student's special interests. Opportunities will be available in the general reading areas as well as sub-specialty areas in Angiography, Computed Tomography, Ultrasound, Nuclear Medicine, and Magnetic Resonance Imaging. Students are to participate on a full-time basis and will be responsible for night and weekend on-duty call with the radiology resident.

**RADI 426 Radiation Oncology 1-4 cr**

This elective will expose the student to the care of oncology patients. The elective offers experience in complete patient work-ups, rounds, and conferences. The student should develop a knowledge of: (1) modes of presentation and natural history of human neoplasms, (2) multidisciplinary anti-tumor therapy (with emphasis on the primary principles of radiation therapy), (3) emotional and nutritional aspects of neoplastic diseases, and (4) newer advances in basic and clinical cancer research. The student will be exposed to patients from a variety of disciplines and should grasp the fundamentals of (1) methods of early detection, (2) recognition of curable cancers, (3) recognition of treatable cancers and palliative care, (4) oncologic emergencies and awareness of the major complications of each, and (5) specific techniques in physical diagnosis in each of these disciplines.

**RADI 427 Pediatric Radiology 1-4 cr**

The rotation includes active participation in all pediatric radiology activities - film interpretation, special procedures and imaging modalities, active participation in the nursery and pediatric conferences, consultations with pediatric surgery, and attendance at the Pediatric Radiology Conference and Grand Rounds. Reviewing the pediatric teaching file and CD-ROM images in the Radiology Department will be encouraged.

**RADI 444 Spec Elec-Radiology 1-4 cr**

To be prepared by the student in conjunction with the Course Director and approved by the Vice Dean before course can be added to schedule. This course is designed to offer students and faculty/clinical faculty an opportunity to develop electives which are not offered in the Elective Manual. Such an elective may be made permanent and printed in the next edition of the Elective Manual at the request of the Course Director and with the approval of the Curriculum Committee. At the discretion of the Vice Dean, this elective may count as the required "in-house" elective.

## Radiology - MD (RAY)

**RAY 311 Radiology 4 cr**

**RAY 400 Radiology Externship 4 cr**

To be determined.

**RAY 401 Statistical Method in Clin Med 4 cr**

The course offers a survey at an elementary level of classical and Bayesian statistical methods; probability, classification and measurement, sampling, description, estimation, hypothesis testing, analysis of variance, meta-analysis, correlation, regression, prediction, and decision. Examples are drawn from the medical literature. The duties and responsibilities of the student will include meeting regularly with the instructor in tutorial sessions and the preparation of a short term paper on a topic in medical statistics that is of mutual interest to the student and the instructor. The paper may consist of one or more refereed evaluations of previously published research reports. The student will also prepare and maintain a notebook on his/her readings and tutorials. The education materials include a large library of textbooks, reports, and papers in statistical methods, as well as a PC computer with a large library of statistical software.

**RAY 402 Rad Physics & Rad Biology 4 cr**

The course offers a survey at an elementary level of the physics and radiation biology of diagnostic and therapeutic radiology. The sources, detection and measurement of ionizing radiation are reviewed. The interactions of radiation and matter are considered. The pathological effects of radiation are discussed. Dose-response relations and somatic and genetic effects are described and the pharmacological aspects of irradiation are developed. The principles of radiation protection are developed including the modification of the effects of a given dose of radiation by chemical enhancement or suppression. The duties and responsibilities of the student(s) will include meeting regularly with the instructor in tutorial sessions and the preparation of a short term paper on a topic in radiological physics or radiation biology that is of mutual interest to the student and the instructor. The student will also prepare and maintain a notebook on his/her readings and tutorials. The education materials include a large library of textbooks, reports, and papers in radiological physics and radiation biology, as well as 3 PC computers and radiation measuring instruments, etc.

**RAY 444 Radiology Special Elective 4 cr**

To be prepared by the student in conjunction with the Course Director and approved by the Vice Dean before course can be added to schedule. This course is designed to offer students and faculty/clinical faculty an opportunity to develop electives which are not offered in the Electives Manual. Such an elective may be made permanent and printed in the next edition of the Elective Manual at the request of the Course Director and with the approval of the Curriculum Committee. At the discretion of the Vice Dean, this elective may count as the required "in-house" elective.

**RAY 460 Radiology Preceptorship 4 cr**

In-depth participation in Interventional Radiology practice designed for students specifically interested in pursuing postgraduate training in an imaging specialty, focusing on minimally invasive image-guided procedures. The goal is for students to work side by side with the radiology faculty members and residents to become well versed in planning, performing and post-procedure patient care as it pertains to interventional radiology procedures

**RAY 465 Applied Clinical Radiology 4 cr**

This course provides the non-radiologist with a practical understating of radiology to be applied in everyday practices.

**RAY 480 Basic Radiology 4 cr**

Students will be given the opportunity to rotate through X-ray, Ultrasound and CT work areas to observe procedures and film interpretations, becoming acquainted with the operation of the department. Students will attend departmental conferences which deal with various facets of radiology. Students will select an interesting case, which illustrates appropriate imaging of the specific disease process. The student will present the case during a radiology conference at the end of the rotation. Students are to participate on a full-time basis.

**RAY 481 Radiology Clerkship 4 cr**

Students will be given the opportunity to rotate through four subspecialty and general radiology services where they will become acquainted with technical skills and interpretive practices of radiology. Toward the end of each week, the students will participate as residents in the performance and interpretation of procedures under direct supervision of responsible faculty members. They will attend departmental conferences for residents and students. Subspecialty rotations will be coordinated with opportunities in Radiography, Computed Tomography, Ultrasound, and Pediatric Radiology.

**RAY 482 Radiation Oncology 1-4 cr**

This elective will expose the student to the care of oncology patients. The elective offers experience in complete patient work-ups, rounds, and conferences. The student should develop a knowledge of: (1) modes of presentation and natural history of human neoplasms, (2) multidisciplinary anti-tumor therapy (with emphasis on the primary principles of radiation therapy), (3) emotional and nutritional aspects of neoplastic diseases, and (4) newer advances in basic and clinical cancer research. The student will be exposed to patients from a variety of disciplines and should grasp the fundamentals of (1) methods of early detection, (2) recognition of curable cancers, (3) recognition of treatable cancers and palliative care, (4) oncologic emergencies and awareness of the major complications of each, and (5) specific techniques in physical diagnosis in each of these disciplines.

**RAY 483 Pediatric Radiology 4 cr**

The rotation includes active participation in all pediatric radiology activities such as film interpretation, special procedures and imaging modalities, active participation in the nursery and pediatric conferences, consultations with pediatric surgery, and attendance at the Pediatric Radiology Conference and Grand Rounds. Reviewing the pediatric teaching file, on-line teaching sites and CD-ROM images in the Radiology Department will be encouraged.

**RAY 484 Radiology Clerkship II 4 cr**

Students will be given the opportunity to shadow one or two attendings in an area of a radiology subspecialty for four weeks to become acquainted with the technical skills and interpretive practices of radiology within that subspecialty. The students will participate as residents in the performance and interpretation of procedures under direct supervision of the responsible faculty members. They will attend departmental conferences for residents and students. Flexibility as to the subspecialty rotation will be coordinated with the student's special interests and prior arrangements made with the supervising faculty. Opportunities will be available in the subspecialty areas of Angiography, Computed Tomography, Ultrasound, Nuclear Medicine and Magnetic Resonance Imaging. Students are to participate on a full-time basis.

## Reading Instruction (RED) (RED)

**RED 110 Effect Read-Lang-Study Skills 3 cr**

A laboratory experience to increase facility in reading, language and study skills.

**RED 330 Found of Read Instruction - W 3 cr**

A course to orient the student to fundamentals in the teaching of reading and provides practice in basic skills.

**RED 331 Teaching Reading 3 cr**

A course focusing on methodology, materials, and techniques for developing systematic instruction and diagnosis appropriate for early childhood and elementary children. This course has a required field experience.

**Prerequisite:** RED 330 Minimum Grade of C and EEC 346 Minimum Grade of C and RED 333 Minimum Grade of C and EEC 332 Minimum Grade of C

**Corequisite:** EEC 335, EEC 336, EEC 337, EEC 345

**RED 333 Literature for Children - W 3 cr**

A course for the selection and use of literature based on the interests, abilities, and needs of children from prekindergarten through the elementary school. Particular emphasis on creative ways of sharing books with children. This course has a required field experience.

**Corequisite:** RED 330

**RED 334 Lit for the Young Child - W 3 cr**

A survey course dealing with methods of writing literary materials with children in preschool through the primary grades. It is designed to assist those who wish to become widely acquainted with books and related materials for today's young children.

**RED 348 Lang & Lit Dev in Early Child 3 cr**

A study of oral language structures and stages of development, early literacy foundations, and developmental sequences of phonological awareness along with teaching practices that support language and literacy development. Includes discussion of cultural and developmental factors that influence acquisition of language and literacy skills.

**RED 352 Literature for Adolescents 3 cr**

Discussion and evaluation of literature for students in grades 7 through 12 with extensive reading, listening, and viewing of materials.

**RED 451 Content Area Literacy - W 3 cr**

Methods and materials in the teaching of reading. Development of effective study and skills at the secondary level is stressed.

**Prerequisite:** SED 340 Minimum Grade of C and SED 341 (may be taken concurrently) Minimum Grade of C

**RED 458 Crit Read in Content Field - W 3 cr**

An examination of non-fiction (and some fiction) which emphasizes critical reading skills. Various types of prose will be considered including that found in textbooks, newspapers and other periodicals, popular fiction, and non-fiction.

**RED 520 Reading Foundations 3 cr**

Introduces students to the fundamentals of the teaching of reading, including concepts of print, phonological awareness, phonics, fluency, vocabulary, and comprehension and how these areas are assessed. This course has a required field experience.

**RED 530 Curr App & Res in Read Instr 3 cr**

An intensive exploration of the current theories, practices, and research in the teaching of reading.

**RED 531 Trends-Practices Tchg Reading 3 cr**

Begins with in-depth study of the nature of reading as a process and its place in the total school program and extends through assessments, methods, materials, and personalized procedures for pupils and teachers.

**Prerequisite:** RED 520 Minimum Grade of C

**RED 533 Diag-Corr Reading Disabilities 3 cr**

First, an intensive study of steps in the diagnosis of reading disabilities; second, a survey of corrective and remedial techniques for eliminating the difficulties; the third, application of diagnostic and instructional techniques to specific type of disabilities.

**Prerequisite:** RED 531 Minimum Grade of B

**RED 534 Remed-Clinic Procd in Reading 3 cr**

A practicum in remediating reading disabilities. Each student receives close supervision in work with actual cases at varying disabilities levels.

**Prerequisite:** RED 533 Minimum Grade of B

**RED 541 Literacy in the Content Area 3 cr**

This course includes the methods and materials for literacy-based instruction in the content areas. The incorporation of literacy-based activities such as reading, writing, and thinking; and the use of strategies to promote student comprehension are emphasized. Prerequisite: Admission to teacher education program.

**RED 544 Wrtg Process Skls Read Writing 3 cr**

Intensive writing applications with an emphasis on the writing process, action research, and the reading and discussion of reading and writing pedagogy and research.

**RED 545 Lit for Children - Adolescents 3 cr**

Provides a comprehensive survey of books written for children and adolescents, and makes appropriate interspersions of periodicals and other media. Through varied class activities, with emphasis on techniques for encouraging literary enjoyment, the student will increase skills in making children's literature an integral part of the school curriculum.

**RED 547 Lit Early Childhood Classroom 3 cr**

Provides a comprehensive survey of books written for children in the pre K-3 classroom, and incorporates periodicals, media and technology appropriate for teaching young children. A variety of class activities intended to motivate and encourage children to become lifelong readers is included.

**RED 548 Literacy Coaching 3 cr**

Includes an in-depth study of coaching techniques, specifically the role of coaching in the school setting. This course includes strategies for encouraging teachers to engage in the coaching process, coaching teachers to meet the literacy needs of their students, as well as providing school-based professional development and maximizing moments with struggling readers.

**Prerequisite:** RED 531 Minimum Grade of B

**RED 557 Practicum in Reading Education 1-9 cr**

Experiences in working in the area of reading instruction and/or diagnosis under the supervision of a reading teacher or supervisor and a college supervisor.

**RED 560 Materials Workshop - 3 cr**

A topical workshop in which participants have experiences in creating, designing, constructing and using instructional materials and activities. This work will emphasize reading and language arts. No more than 6 hours can be applied toward a degree program. Prerequisite: Permission of instructor.

**RED 590 Sp Top - 3-6 cr**

Guided investigation of topics in reading education, such as curriculum revision, course or program design, newly evolved trends in reading education, and implications of research in reading education. No more than 6 hours can be applied toward a degree program.

**RED 594 Dir St - Research 1-3 cr**

Students explore through directed study research problems and issues of special interest or significance in reading education. No more than 3 hours of any departmental 594 courses can be applied toward a degree program. Prerequisite: Permission of department chair.

**RED 595 Internship in Reading Educ 1-9 cr**

The internship is a supervised learning experience in a work setting similar to that in which an educator will eventually be employed. The internship provides students with an opportunity to apply the theories and concepts learned during the graduate program.

**Prerequisite:** 5301 164 and RED 533 Minimum Grade of B and RED 534 Minimum Grade of B

**RED 599 Thesis 1-9 cr**

A student selects a project, study, or investigation which is related to reading education. The project will form the basis for the thesis. A thesis committee will provide direction during the investigation and during the writing of the thesis.

**RED 611 Theor Lang Dev Tchg Reading 3 cr**

Emphasizes theories of language acquisition and development. Includes linguistics, language development of the culturally different child, and application of theory to classroom practices in reading and related areas. Requires special permission.

**RED 612 Socio Influences in Rdg Instr 3 cr**

Focuses upon the history of reading instruction, sociological factors influencing reading, reading in relation to other media of communication, and ways of applying these findings in classroom and clinical practice. Requires special permission.

**RED 613 Admn and Supv the Rdg Program 3 cr**

Analyzes and interprets administrative and supervisory roles and functions as they relate to the total school program, elementary through high school. Stress is upon facilitating and enhancing all aspects of the program. Requires special permission.

**RED 615 Diag - Rem Severe Rdg Disab 3 cr**

Provides laboratory experiences in studying severe cases of reading disabilities and in developing plans and procedures for their remediation. Requires special permission.

**RED 630 Psy Factors in Tchg Reading 3 cr**

Relates pertinent psychological concepts and principles to (1) current definitions of the reading process, (2) methods of teaching, and (3) special procedures for reluctant and disabled readers. The student may apply these concepts and principles in regular or laboratory settings.

**RED 640 Research in Reading 3 cr**

A critical analysis and evaluation of the significant research studies in reading from which reading concepts emerge and from which implications for teaching and further research may be drawn.

**RED 648 Literacy Coaching Teacher/Ldrs 3 cr**

A purpose of this course is to prepare professional educators through teaching, research, and service to become committed to life-long learning and to facilitate the process of building better communities. Students will demonstrate best educational practices and professional dispositions and will learn how to create a positive, motivational learning environment in schools while recognizing, appreciating, and including diverse learners and perspectives. Additionally, students are expected to demonstrate satisfactory skills in curriculum leadership; to engage in action research related to schools; to engage in literacy coaching; to address current family, community, regional, and national issues related to scholastic achievement, and to use tenets of instructional leadership to guide teachers and other professionals toward improving student achievement.

**RED 690 Sp Top - 3 cr**

Guided investigation of topics in reading education such as curriculum revision, course or program design, newly evolved trends in reading education, and implications of research in reading education.

**RED 694 Dir St - Research 1-3 cr**

Students explore through directed study problems and issues of special interest or significance in reading education. No more than 3 hours of any departmental 694 courses can be accepted toward a degree program. Prerequisite: Permission of department chair.

**RED 699 Research Project 1-3 cr**

A supervised research project, study, or investigation in reading. Student will conduct an investigation, and apply concepts and skills learned during the sixth-year program. May be taken more than one semester. Prerequisite: Permission of department chair.

**Prerequisite:** IDE 692 Minimum Grade of B or EDU 692 Minimum Grade of B

## Recreational Therapy (RTH)

**RTH 194 Leisure Crafts 3 cr**

Adapting various crafts media for use in recreational programs. Design and execution of creative crafts with emphasis on use of indigenous materials.

**Cross-Listed:** LS 194

**RTH 292 Outdoor Recreation-Adventure 3 cr**

A classroom introduction to a wide range of outdoor recreation pursuits with an emphasis on safety, minimum impact, and "how to get started" in outdoor activities like backpacking, canoeing, rafting, car camping, hiking, and others.

**Cross-Listed:** LS 292

**RTH 295 Intro to Therapeutic Rec 3 cr**

Introduces students to the field of therapeutic recreation including the history, foundations, and philosophy of the field. In addition, characteristics and leisure needs of numerous special populations will be introduced.

**Cross-Listed:** LS 295

**RTH 298 Practicum in Ther Rec 3 cr**

Supervised practical experience that provides observation, participation, and application of therapeutic recreation and leisure studies concepts. Includes classroom instruction and exploration of career opportunities. Minimum 90-hours of practical experience required.

**Cross-Listed:** LS 298

**RTH 375 Mgmt in Therapeutic Recreation 3 cr**

Management and organization of therapeutic recreation programs including professional and agency standards, staff development, internship and credential requirements, fiscal planning, continuous quality improvement, equipment maintenance, advocacy, and public relations.

**Prerequisite:** RTH 295 Minimum Grade of D or LS 295 Minimum Grade of D

**Cross-Listed:** LS 375

**RTH 395 Therapeutic Rec Process (W) 3 cr**

This course introduces the comprehensive program planning process and the elements of assessment and documentation in a variety of therapeutic recreation service settings. A field work component may be required.

**Prerequisite:** RTH 295 Minimum Grade of D or LS 295 Minimum Grade of D

**Cross-Listed:** LS 395

**RTH 397 Recreational Therapy Interventions with Older Adults 3 cr**

This course is an intergenerational experience combining theory and practice in aging and recreation. Students utilize the therapeutic recreation process (assessment, program planning, implementation and evaluation) with older adults who have special needs, to promote health, wellness, and rehabilitation.

**Cross-Listed:** LS 397

**RTH 465 TR Prog Des & Interventions I 3 cr**

This course provides an examination of Therapeutic Recreation interventions and the role of research and theory in influencing practice. Course topics include: activity analysis, programming techniques, scope of service, intervention descriptions, historical perspectives, current research, and theoretical foundations related to TR intervention. A field work component of 40 hours is required that will allow students to gain experience implementing TR programs.

**Prerequisite:** (RTH 295 Minimum Grade of D and RTH 298 Minimum Grade of C) or (LS 295 Minimum Grade of D and LS 298 Minimum Grade of C)

**Cross-Listed:** LS 465

**RTH 466 TR Prog Des & Interventions II 3 cr**

This course examines modalities and issues in therapeutic recreation practice with the primary emphasis on leisure education, scope of service, nature of populations served, systematic programming, activity analysis and documentation of results. The course also addresses contemporary problems and issues in therapeutic recreation, and acquiring knowledge of medical terminology and therapeutic drugs.

**Prerequisite:** (LS 295 Minimum Grade of D and LS 298 Minimum Grade of C) or (RTH 295 Minimum Grade of D and RTH 298 Minimum Grade of C)

**Cross-Listed:** LS 466

**RTH 467 TR for Phys Disabilities 3 cr**

This course will familiarize the student with the etiology, characteristics, and course of treatment provided to individuals with various physically disabling conditions, and promote awareness of the role of therapeutic recreation in the physical rehabilitation process. A field work component of 40 hours is required.

**Cross-Listed:** LS 467

**RTH 468 Facilitation Techniques in TR 3 cr**

Study of the concepts and intervention techniques used in the application and process aspects of therapeutic recreation. Content includes evidence-based practice, planning and leading interventions, instructional techniques, counseling theory and practice, implementing groups, communication techniques, and facilitation techniques. A practical leaning component is included.

**Cross-Listed:** LS 468

**RTH 469 TR for Psych Impairments 3 cr**

This course will familiarize students with etiology, characteristics, and course of treatment provided to individuals with psychological impairments and developmental disabilities and promote awareness of the role of therapeutic recreation in the habilitation/rehabilitation process. A field work component of 40 hours is required.

**Cross-Listed:** LS 469

**RTH 471 Evaluation & Research in HKS-W 3 cr**

This course offers an overview of the research and evaluation process in health, kinesiology, and sport. The first part of the course will emphasize the scope, meaning, and basic concepts of scientific research including aspects of research design. The second part of the course will focus on the application of the basic skills in a practical context in the environment of health, kinesiology, and sport.

**Cross-Listed:** LS 471

**RTH 479 Leisure and Aging 3 cr**

This course will provide an overview of the changes affecting the psychomotor, cognitive and affective domains of the aged; implications of leisure and retirement; and institutional and community settings that provide leisure services for the older adult.

**Cross-Listed:** LS 479

**RTH 490 Special Topics 1-3 cr**

Selected topics in recreational therapy. Topics will vary according to needs and interests of students. Course may be repeated for credit when content varies.

**Cross-Listed:** LS 490

**RTH 492 Outdoor Ed and Interpretation 3 cr**

Theories, philosophies, and principles of outdoor education with emphasis on the development of interpretive programs.

**Cross-Listed:** LS 492

**RTH 495 Internship in Rec Therapy 3-12 cr**

Supervised experiences in an assigned recreation therapy or related agency. HKS advisor approval required.

**Cross-Listed:** LS 498

**RTH 569 Leisure and Society 3 cr**

An exploration of the economic, religious, political, and socio-cultural factors which influence leisure behavior in modern society.

**Cross-Listed:** LS 569

**RTH 570 Procedures in TR I 3 cr**

Procedures in Therapeutic Recreation I was designed to prepare the graduate student for the more complex areas of present day professional issues and service provision including: an in-depth analysis of historical and philosophical influences, therapy and facilitation techniques, quality management, ethics, standards of practice, clinical supervision, healthcare reimbursement and professional credentialing.

**Cross-Listed:** LS 570

**RTH 571 Procedures In TR II 3 cr**

This course is designed to familiarize the graduate student with the therapeutic recreation process. Content areas will include analyzation of assessment procedures, sources and processes, treatment planning, interdisciplinary procedures, medical record documentation, activity-based interventions, and evaluation of program effectiveness.

**Cross-Listed:** LS 571

**RTH 573 Issues and Trends in TR 3 cr**

An in-depth examination of current issues and trends in recreational therapy with respect to their impact on the profession and society.

**Cross-Listed:** LS 573

**RTH 576 Conceptual Foundations of TR 3 cr**

Designed to introduce the student to the field of therapeutic recreation including philosophy, history, current issues and trends, administration and program development. The course will also provide an overview of various disabling conditions.

**Cross-Listed:** LS 576

**RTH 585 Mgmt in Recreational Therapy 3 cr**

An in-depth examination into the research, foundations, and functions in the delivery of recreational therapy, including current practices in management of fiscal procedures, budgeting, and grants.

**Cross-Listed:** LS 585

**RTH 590 Special Topics 3 cr**

A varying-content course treating various aspects of Leisure Studies. May be repeated for credit when course content varies.

**Cross-Listed:** LS 590

**RTH 592 Outdoor Rec - Adventure Prog 3 cr**

Study and practicum in popular adventure activities (e.g, shooting sports, angling, backpacking, orienteering, rock climbing, canoeing). Emphasis on attitudes, skills, environmental awareness, teaching methodology, and principles of group leadership as they relate to adventuresome activities.

**Cross-Listed:** LS 592

**RTH 595 Internship in Recreational Ther 3-9 cr**

An individually planned practicum experience in an approved recreational therapy setting. Requires a minimum of 150 work hours per 3 hours of credit. HPELS advisor approval required.

**Cross-Listed:** LS 580

**RTH 596 Special Projects 3 cr**

An individually planned experience whereby a student conceptualizes and researches a special problem relevant to the leisure services profession. Students will share their experiences in a weekly seminar (non-thesis option).

**Cross-Listed:** LS 596

## Religion (REL) (REL)

**REL 100 Intro to the Study of Religion 3 cr**

As a general introduction to the academic study of religion, REL 100 examines the function of religion in relation to human beliefs, social practices, and culture in general. The course surveys a broad number of important debates in the history of religious studies, such as the definition of religion, the insider/outsider problem, theories on the origins of religion, the comparison of religions, religion's psychological, sociological, and political functions, and the manner in which human communities authorize systems of behavior.

**REL 200 Old Testament/Hebrew Bible 3 cr**

An introduction or survey of the literature and social world of the Old Testament/Hebrew Bible. As a way of further illuminating these materials, attention will also be given to the history and religion of Israel as well as the other peoples of the ancient Near East. Fulfills the General Education Requirement.

**REL 201 Survey of the New Testament 3 cr**

This course is an introductory survey of the New Testament, including the life and ministry of Jesus Christ, apostolic history, related Greco-Roman history and archeology, principal critical issues, and the unity and diversity of New Testament theology. Fulfills the General Education Requirement.

**REL 242 Western Philosophy: Medieval 3 cr**

A survey of Medieval Western Latin, Jewish, and Islamic philosophers. Identical with PHL 242. Credit cannot be received for both REL 242 and PHL 242.

**Cross-Listed:** PHL 242

**REL 290 Special Topics - 3 cr**

Different themes and issues of significance in religion will be studied as announced.

**REL 310 Classical Mythology 3 cr**

Through the disciplines of English and Philosophy, this course will provide an introduction to myths and to the literature that recounts the myths, legends, and folktales of ancient Greece and Rome. This course will also look at how different writers treat the material and why their treatments vary. Cross-listed with EH 310, PHL 310 and CLA 310. Credit cannot be received for both REL 310 and either EH 310 or PHL 310 or CLA 310.

**Prerequisite:** (A01 27 or S01 610 or USEH P or EH 101 Minimum Grade of C or EH 110 Minimum Grade of D or EH 190 Minimum Grade of D or USA 010 Minimum Grade of S) and (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** CLA 310, EH 310, PHL 310

**REL 331 History of England to 1603 3 cr**

The history of England from the Roman occupation to the Age of Tudors. Identical with HY 331. Credit cannot be received for both REL 331 and HY 331.

**Cross-Listed:** HY 331

**REL 343 Witchcraft and Magic 3 cr**

The history of beliefs and practices concerning witches, magic, and witch-hunting in Medieval and Early Modern Europe. Identical with HY 343. Credit cannot be received for both REL 343 and HY 343.

**Cross-Listed:** HY 343

**REL 347 The Holocaust 3 cr**

The history of the systematic mass murder of Europe's Jews and other groups by Nazi Germany during World War II. Cross-listed with HY 347. Credit cannot be received for both REL 347 and HY 347.

**Cross-Listed:** HY 347

**REL 351 Philosophy of Religion - W 3 cr**

Investigates the nature of religion, including religious experience, religious language, arguments for the existence of God, and the problem of evil. Identical with PHL 351. Credit cannot be received for both REL 351 and PHL 351.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** PHL 351

**REL 352 World Religions 3 cr**

This course is an introduction to the religions of the world. It is divided into three basic units: Indigenous Religions (of Africa, North America, and Oceania); Eastern Religions (Hinduism, Buddhism, Daoism, Confucianism, Jainism) and Western Religions (Judaism, Christianity, Islam). The emphasis is on grasping the core principles of each tradition, seeing the ways in which religion meets basic human needs, and religion as a cultural artifact that borrows, adapts, and changes over time. Course is identical with PHL 352 and SY 352. Credit cannot be received for both REL 352 and PHL 352 or SY 352.

**Cross-Listed:** PHL 352, SY 352

**REL 353 Reformation Europe 1300-1520 3 cr**

The role of religious change in the 16th and 17th centuries. Identical with HY 353. Credit cannot be received for both REL 353 and HY 353.

**Cross-Listed:** HY 353

**REL 354 Philosophies of India 3 cr**

Introduces the major religions and philosophies of India by way of the classical Realist/Antirealist debate in India. Study of the major religious doctrines of theistic and non-dualist Vedanta, Buddhism, and Jainism, and their philosophical articulation in the Nyaya, Advaita Vedanta, Madhyamaka, and other schools. Identical with PHL 354. Credit cannot be received for both REL 354 and PHL 354.

**Cross-Listed:** PHL 354

**REL 355 Chinese Philosophy 3 cr**

Introduces the major classical religious and philosophical systems of China by way of an examination of early Confucianism, Mohism, Yangism, Legalism, Taoism, and Chinese Buddhism. Particular emphasis will be placed upon the role of these schools in the development of Chinese religion, morality, and political organization. Identical PHL 355. Credit cannot be received for both REL 355 and PHL 355.

**Cross-Listed:** PHL 355

**REL 364 Islamic Civilization to 1453 3 cr**

This course will cover the political, economic, social, and cultural history of Islamic Civilization from its beginnings in the Arabian Peninsula in the sixth century to the Ottoman conquest of Constantinople in 1453. Cross-listed with HY 364. Credit cannot be received for both REL 364 and HY 364.

**Cross-Listed:** HY 364

**REL 365 Islamic Civilization 1465 - W 3 cr**

This course will cover specific topics in the history of Islamic civilization. Prerequisite: Junior or Senior status. Cross-listed with REL 365. Credit cannot be received for both HY 365 and REL 365.

**Cross-Listed:** HY 365

**REL 373 Religion in American History 3 cr**

Examines the role of religion in United States history from the colonial era to the present. Identical with HY 373. Credit cannot be received for both REL 373 and HY 373.

**Prerequisite:** (EH 102 Minimum Grade of C or EH 105 Minimum Grade of C)

**Cross-Listed:** HY 373

**REL 390 Special Topics - 3 cr**

Different figures or topics of significance in religion will be studied as announced. May be repeated, when content varies, for a total of six hours.

**REL 420 Sociology of Religions 3 cr**

An analysis of religion as a social institution with emphasis on modern western societies. Topics include the functions of religion for society and individuals, changing patterns of religious belief and practice and the relationship between religion and other social institutions. Identical with SY 420. Credit cannot be received for both REL 420 and SY 420.

**Prerequisite:** SY 109 Minimum Grade of C

**REL 465 Studies of HY of Islamic Civ 3 cr**

This course will cover specific topics in the history of Islamic civilization. May be repeated for credit when content varies. Prerequisite: Junior or Senior status. Cross-listed with HY 465. Credit cannot be received for both REL 465 and HY 465.

**Cross-Listed:** HY 465

**REL 492 Seminar - 3 cr**

An investigation of issues and concepts in religion for advanced undergraduates and graduate students. May be repeated, when content varies, for a total of six hours.

**REL 494 Directed Studies - 1-3 cr**

Directed research in religion under the guidance of a member of the department. Credit according to the magnitude of the individual project. May be repeated, if content varies, for a total of three hours. Prerequisites: Junior or senior standing and approval of directing professor and department chair.

**REL 499 Honors Thesis - H - W 3-6 cr**

Extended research paper prepared under the direction of thesis advisor plus two-person committee selected by advisor in consultation with student. Prerequisites: The student must have developed a proposal for the thesis in consultation with the advisor, and received permission for the work from the committee. In addition, the student must be a senior major or minor, have completed the Common Core, and have at least a 3.3 GPA in the Religion Concentration of the Philosophy major. Credit for this course is only given as an addition to the hours required for the major.

**Prerequisite:** (PHL 120 Minimum Grade of D and PHL 240 Minimum Grade of D and PHL 245 Minimum Grade of D and PHL 321 Minimum Grade of D and PHL 461 Minimum Grade of D) and (PHL 310 Minimum Grade of D or REL 310 or CLA 310 Minimum Grade of D)

**REL 594 Directed Studies 3 cr**

Directed research in philosophy under the guidance of a member of the department. May be repeated, if content varies, for a total of six hours. Prerequisite: Graduate Student in Department conferring a Graduate Degree (hence not open to Philosophy majors in any Concentration in Philosophy.)

**Cross-Listed:** CLA 594, PHL 594

## Renal - MD (RUT)

**RUT 150 Renal 4 cr**

The Renal Module covers the kidneys the urogenital system including ureters, urinary bladder and prostate. The lecture series of the module begins with the normal development and structure of urogenital system, moves into the normal physiology of the kidney, introduces the action of pharmacological agents relevant to kidney function, and concludes with introduction of pathological processes of infectious, oncological, and immune injury. Throughout the module, students are engaged in learning activities that challenge them to explore further the mechanisms of disease, the application of basic principles of organ structure and function to disease states, and approaches to problem-solving in the consideration of ethical and medical issues confronting patients with kidney disease. The students will be schooled in the evaluation of kidney diseases through direct patient evaluation as well as the radiological and laboratory evaluation of kidney and urogenital structure and function. Through both directed and independent learning venues, the students will have the opportunity to foster life-long learning skills, develop effective communications skills, and practice the cooperative skills needed to address the complex modes of effective delivery of medical care expected in the future. In sum, students will be given a foundation of basic medical knowledge reaching from the cellular to the whole organ level and the means to apply mechanism of function and pathophysiology to understanding the care of patients with urogenital disease.

## Renal - MD (URN)

### URN 150 Urinary 5 cr

The Urinary System Module covers the kidneys and the urogenital system including ureters, urinary bladder and prostate. The lecture series of the module begins with the normal development and structure of the urogenital system, moves into the normal physiology of the kidney, introduces the action of pharmacological agents relevant to kidney function, and concludes with introduction of pathological processes of infectious, oncological and immune injury. Throughout the module, students are engaged in learning activities that challenge them to explore further the mechanisms of disease, the application of basic principles of organ structure and function to disease states, and approaches to problem-solving in the consideration of ethical and medical issues confronting patients with kidney disease. The students will be schooled in the evaluation of kidney diseases through direct patient evaluation as well as the radiological and laboratory evaluation of kidney and urogenital structure and function. Through both directed and independent learning venues, the students will have the opportunity to foster lifelong learning skills, develop effective communications skills, and practice the cooperative skills needed to address the complex modes of effective delivery of medical care expected in the future. In sum, students will be given a foundation of basic medical knowledge reaching from the cellular to the whole organ level and the means to apply mechanism of function and pathophysiology to understanding the care of patients with urogenital disease.

## Respiratory - MD (RES)

### RES 140 Respiratory 6 cr

The Respiratory Module will introduce students to the anatomy, physiology, and pathophysiology of the respiratory system with a particular focus on the lung's central role in gas-exchange and fluid balance. Normal and abnormal anatomy from the sinuses, oral/nasopharynx, and upper airways to the lower respiratory tract, including the structures of the chest wall and thoracic cavity, will be presented through the combined use of prosections and radiologic imaging. The mechanics of breathing as well as the impact of diseases of the airway, interstitium, and pulmonary circulation on respiratory function, will be taught using lecture, patient-oriented active learning, clinical skills? labs, and independent learning. Students will be taught the cellular and molecular mechanisms involved in a broad category of lung diseases including obstructive disease, restrictive disease, pulmonary vascular disease, lung cancer, and infections of the upper and lower respiratory tract. How these disease processes interact to alter gas-exchange leading to hypoxemia, hypercarbia, and respiratory failure will be an integral part of this course. Students will also gain experience in the proper diagnosis, treatment, and prevention of these respiratory diseases. The social impact of chronic respiratory disease on patients and their families, particularly for those with advanced disease, will also be highlighted during interactions with actual patients and in active learning sessions within small groups.

### RES 240 Respiratory 6 cr

The Respiratory System Module will introduce students to the anatomy, physiology and pathophysiology of the respiratory system with a particular focus on the lung's central role in gas-exchange and fluid balance. Normal and abnormal anatomy from the sinuses, oral/nasopharynx and upper airways to the lower respiratory tract, including the structures of the chest wall and thoracic cavity, will be presented through the combined use of prosections and radiologic imaging. The mechanics of breathing as well as the impact of diseases of the airway, interstitium and pulmonary circulation on respiratory function will be taught using lecture, patient-oriented small group learning, clinical skills? labs and independent learning. Students will be taught the cellular and molecular mechanisms involved in a broad category of lung diseases including obstructive disease, restrictive disease, pulmonary vascular disease, lung cancer and infections of the upper and lower respiratory tract. How these disease processes interact to alter gas-exchange leading to hypoxemia, hypercarbia and respiratory failure will be an integral part of this course. Students will also gain experience in the proper diagnosis, treatment and prevention of these respiratory diseases. The social impact of chronic respiratory disease on patients and their families, particularly for those with advanced disease, will also be highlighted during interactions with actual patients and in small group learning sessions.

## Secondary Education (SED) (SED)

### SED 340 Fundamentals of Teaching - W 3 cr

Theory and practice of planning for instruction. Conducted as a system for individually guided mastery.

### SED 341 Teaching Skills - W 3 cr

Study and practice of selected instructional skills and classroom management focusing on middle level education and the transition to secondary education. Prerequisites: Junior standing and admission to candidacy.

**Prerequisite:** SED 340 Minimum Grade of C and (RED 351 (may be taken concurrently) Minimum Grade of C or RED 451 (may be taken concurrently) Minimum Grade of C) and (EPY 455 (may be taken concurrently) Minimum Grade of C or EPY 355 (may be taken concurrently) Minimum Grade of C) and (SED 453 (may be taken concurrently) Minimum Grade of C or SED 454 (may be taken concurrently) Minimum Grade of C or SED 456 (may be taken concurrently) Minimum Grade of C or SED 457 (may be taken concurrently) Minimum Grade of C)

### SED 342 Secondary Field Experience 1 cr

Supervised practice in teaching curriculum areas in middle and high school classroom settings during the semester in which block courses are taken.

**Prerequisite:** SED 340 Minimum Grade of C

### SED 350 Intro to Teaching-Middle Sch 3 cr

A study of the concerns of pre-service middle school teachers, including program development, characteristics of the middlescent learners, nature of student-oriented instruction, and facilitation of learning of exceptional youth within the regular learning groups. Prerequisite: Junior standing.

### SED 453 Tch Lang Subj Sec Sch 3 cr

Assists the student in organizing materials and in developing methods of teaching language subjects in secondary schools. Offered in Fall Semester only. Prerequisites: Admission to candidacy, completion of two-thirds of teaching field(s), and SED 340 or SED 555.

**Prerequisite:** SED 340 Minimum Grade of C or SED 555 Minimum Grade of B

**SED 454 Tch Math Secondary Schools 3 cr**

Assists the student in organizing materials and in developing methods of teaching mathematics in secondary schools. Offered in Fall Semester only. Prerequisites: Admission to candidacy, completion of two-thirds of teaching field, and SED 340 or SED 555.

**Prerequisite:** SED 340 Minimum Grade of C or SED 555 Minimum Grade of B

**SED 455 Tch Music in Secondary Sch 3 cr**

Assists the student in organizing materials and in developing methods of teaching music in secondary schools. Offered in Fall Semester only. Prerequisites: Admission to candidacy, completion of two-thirds of teaching field, and SED 340 and 341 or SED 555 and 559.

**Prerequisite:** (SED 340 Minimum Grade of C and SED 341 Minimum Grade of C) or (SED 555 Minimum Grade of B and SED 559 Minimum Grade of B)

**SED 456 Tch Science in Secondary Sch 3 cr**

Assists the student in organizing materials and in developing methods of teaching science in secondary schools. Offered in the Fall Semester only. Prerequisites: Admission to candidacy, completion of two-thirds of teaching field, and SED 340 or SED 555.

**Prerequisite:** SED 340 Minimum Grade of C or SED 555 Minimum Grade of B

**SED 457 Tch Social Studies in Sec Sch 3 cr**

Assists the student in organizing materials and in developing methods of teaching social studies in secondary schools. Offered in Fall Semester only. Prerequisites: Admission to candidacy, completion of two-thirds of teaching field, and SED 340 or SED 555.

**Prerequisite:** SED 340 Minimum Grade of C or SED 555 Minimum Grade of B

**SED 459 Creative Exper in Oral Lang 3 cr**

Background in the theory and function of oral language, and techniques for developing oral and dramatic communicative skills. Emphasis will be on everyday oral language, rather than on formal speech or theater.

**SED 463 Stu Tchg Middle School 9-12 cr**

Observation and supervised teaching in the middle schools with opportunity for study and discussion of the problems and issues encountered. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Prerequisite: Appropriate methods course

**SED 464 Stu Tchg in High School - 9-12 cr**

Observation and supervised teaching in high schools with opportunity for study and discussion of the problems and issues encountered. Students will be placed with person holding a valid teaching certificate in the appropriate field.

**Prerequisite:** SED 340 Minimum Grade of C and SED 341 Minimum Grade of C and (SED 453 Minimum Grade of C or SED 454 Minimum Grade of C or SED 456 Minimum Grade of C or SED 457 Minimum Grade of C)

**SED 465 Internship 3 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the N-12 program. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Prerequisite: Appropriate methods course.

**SED 466 Stu Tchg Lang Arts in the HS 9-12 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the N-12 program. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Prerequisites: Admission to candidacy, SED 340 and SED 341, appropriate methods course(s), completion of three fourths of teaching field(s), and a PRAXIS II score of 151 or higher.

**Prerequisite:** P041 151 and SED 340 Minimum Grade of C and SED 341 Minimum Grade of C and SED 453 Minimum Grade of C

**SED 467 Stu Tchg Soc Studies in the HS 9-12 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the N-12 program. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Prerequisites: Admission to candidacy, SED 340 and SED 341, appropriate methods course(s), completion of three-fourths of teaching field(s), and a PRAXIS II score of 151 or higher.

**Prerequisite:** P081 153 and SED 340 Minimum Grade of C and SED 341 Minimum Grade of C and SED 457 Minimum Grade of C

**SED 468 Student Tchg Science in the HS 9-12 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the N-12 program. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Prerequisites: Admission to candidacy, SED 340 and SED 341, appropriate methods course(s), completion of three-fourths of teaching field(s), and a PRAXIS II score of 146 or higher.

**Prerequisite:** P435 147 and SED 340 Minimum Grade of C and SED 341 Minimum Grade of C and SED 456 Minimum Grade of C

**SED 469 Student Tchg Math in the HS 9-12 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the N-12 program. Students will be placed with a person holding a valid teaching certificate in the appropriate field. Prerequisites: Admission to candidacy, SED 340 and SED 341, appropriate methods course(s), completion of three-fourths of teaching field(s), and a PRAXIS score of 118 or higher.

**Prerequisite:** P061 126 and SED 340 Minimum Grade of C and SED 341 Minimum Grade of C and SED 454 Minimum Grade of C

**SED 470 Stu Tchg N-12 Program 9-12 cr**

Observation and supervised teaching with opportunity for study and discussion of problems and issues encountered in the N-12 program. Students will be placed with a person holding a valid teaching certificate in the appropriate field.

**Prerequisite:** 5113 161

**SED 490 Special Topics 3 cr**

Current topics of special concern to secondary educators. Not more than 6 hours may be earned in Special Topics courses.

**SED 494 Dir St - 1-3 cr**

Directed study. No more than 6 hours can be accepted for a Bachelor's Degree and Class B Certificate. Prerequisites: Permission of department chair.

**SED 499 Senior Honors Project - H 3-6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project, relevant to the field of secondary study, that will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty chaired by the honors mentor. This course is required for Honors recognition and may be repeated for up to 6 credit hours. Prerequisite: Participant in honors program and junior level status.

**SED 529 Grad Field Experience 3 cr**

Supervised practice in teaching curriculum areas in middle and high school classroom settings during the semester in which the corresponding methods course is taken.

**Prerequisite:** (AED 540 (may be taken concurrently) Minimum Grade of C or ELT 530 (may be taken concurrently) Minimum Grade of C or SED 553 (may be taken concurrently) Minimum Grade of C or SED 554 (may be taken concurrently) Minimum Grade of C or SED 556 (may be taken concurrently) Minimum Grade of C or SED 557 (may be taken concurrently) Minimum Grade of C or SED 565 (may be taken concurrently) Minimum Grade of C)

**SED 544 Guiding Lrng in the Sec School 3 cr**

Study of methods and techniques of teaching in the secondary schools. Assists students in organizing materials, developing strategies for teaching their discipline area in secondary school. Includes field experience.

**SED 547 Tchg Basic Writing Skills 3 cr**

Background in theories of the writing process and techniques to help students develop writing skills. The main emphasis will be on teaching the process of writing: evaluation of writing and the issue of non-standard English will also be considered.

**SED 551 The Secondary School Student 3 cr**

Study of the physical, mental, and social development of students at secondary school age levels. The objectives and procedures of American secondary education are related to the development of adolescents in our culture. Included are the level of significance of specific individual differences among students in the various fields, the relationship of student self-concept to learning, students study through use of records, a variety of diagnostic materials, and group study projects.

**SED 552 The High School Curriculum 3 cr**

The study of the purpose of American secondary education and how these are reflected in the school curriculum. Curriculum organization, professional roles in curriculum development, and forces shaping the curriculum today are examined.

**SED 553 Tchg Lang Subj in Sec School 3 cr**

Assists students in organizing materials and developing methods of teaching language subjects in secondary schools. Includes field component.

**Prerequisite:** SED 555 Minimum Grade of B

**SED 554 Tchng Math in Sec Schools 3 cr**

Assists students in organizing materials and developing methods of teaching mathematics in secondary schools. Includes field component.

**Prerequisite:** SED 555 Minimum Grade of B

**SED 555 Curriculum-Tchg in Sec School 3 cr**

This course provides an introduction to effective instructional practices in the secondary classroom. The focus is on planning for instruction and classroom management. This course has both required class meetings and field experiences.

**SED 556 Tchg Science in Sec Schools 3 cr**

Assists students in organizing materials and developing methods of teaching science in secondary schools. Includes field component.

**Prerequisite:** SED 555 Minimum Grade of B

**SED 557 Tchg SS in Secondary Schools 3 cr**

Assists students in organizing materials and developing methods of teaching social studies in secondary schools. Includes field component.

**Prerequisite:** SED 555 Minimum Grade of B

**SED 558 The Middle School Curriculum 3 cr**

A study of the Middle School program in light of the characteristics and educational needs of youth in early adolescence.

**SED 559 Adv Teaching Techniques 3 cr**

Study and practice of selected instructional strategies and classroom management for middle level education and secondary education.

**SED 560 Graduate Research Seminar 3 cr**

Research in problems confronting American secondary education. Selected topics are explored by students which provide the basis for seminar discussions. A seminar paper is presented by each student. This course also includes a field-based practicum. Prerequisite: Permission of the department chair.

**Prerequisite:** IDE 510 Minimum Grade of C

**SED 561 Trends-Prac Tchg Lang Sec 3 cr**

Current trends and practices in curriculum, instruction, selection of materials, and derivation of procedures for guiding learning in reading, listening, writing, and speaking.

**SED 562 Trends-Prac Tchg Soc St 3 cr**

Current trends and practices in organizing and teaching social studies in the secondary school. The selection and use of content, materials, methods, and the development and appraisal of typical units are emphasized.

**SED 563 Trends-Prac Tchg Math Sec 3 cr**

Current curriculum trends in teaching mathematics. Included are the selection of materials and a study of methods appropriate for teaching mathematics in the secondary school.

**SED 564 Trends-Prac Tchg Science 3 cr**

Current curriculum trends in teaching science in the secondary school. Included are the selection of materials and an evaluation of those methods which are appropriate for teaching the biological and physical sciences.

**SED 565 Trends - Prac Tchg Foreign Lan 3 cr**

Current trends and practices in curriculum, instruction, selection of materials, and derivation of procedures for guiding learning in reading, listening, writing, and speaking in Foreign Languages.

**Prerequisite:** SED 555 Minimum Grade of B

**SED 567 Multicultural Exper Sec School 3 cr**

In an increasingly diverse society, teachers must be able to work with students from a variety of backgrounds, some quite different from teachers' own cultural backgrounds. This course responds to the growing need for better training for teachers in how to work with a diverse population, increase academic achievement, and prepare students for a global workplace.

**SED 590 Sp Top - 3 cr**

Current topics of special concern to secondary educators. A different topic will be used each time the course is offered. No more than 6 hours may be applied toward a degree program.

**SED 593 Intern in Sec Educ Forgn Lang 3-6 cr**

The internship is a supervised learning experience in a work setting similar to that in which an educator will eventually be employed. The internship provides the student with an opportunity to apply the theories and concepts learned during the graduate secondary foreign language program. Not more than six hours may be taken. Prerequisite: An acceptable PRAXIS II test score.

**Prerequisite:** EDU 453 Minimum Grade of C and SED 555 Minimum Grade of C and SED 559 Minimum Grade of C and SED 565 Minimum Grade of B or 5174 162 or 5183 163 or 5195 168

**SED 594 Dir St - Research 1-3 cr**

Students explore through directed study problems and issues of special interest or significance in secondary education. No more than 3 hours of any departmental 594 courses can be applied toward degree program. Requires permission of department chair.

**SED 595 Intern in Sec Edu Lang Arts 3,6 cr**

The internship is a supervised learning experience in a work setting similar to that in which an educator will eventually be employed. The internship provides the student with an opportunity to apply the theories and concepts learned during the graduate secondary language arts program. Not more than 6 hours may be taken. Prerequisite: PRAXIS II test score of 151 or higher.

**Prerequisite:** (EDU 453 Minimum Grade of C or SED 553 Minimum Grade of B) and SED 555 Minimum Grade of C and SED 559 Minimum Grade of C and 5038 167

**SED 596 Intern in Sec Edu Soc Studies 3,6 cr**

The internship is a supervised learning experience in a work setting similar to that in which an educator will eventually be employed. The internship provides the student with an opportunity to apply the theories and concepts learned during the graduate secondary social studies program. Not more than six hours may be taken. Prerequisite: PRAXIS II test score of 151 or higher.

**Prerequisite:** (EDU 457 Minimum Grade of C or SED 557 Minimum Grade of B) and SED 555 Minimum Grade of C and SED 559 Minimum Grade of C and (P081 155 or 5081 155)

**SED 597 Intern in Sec Educ Science 3-6 cr**

The internship is a supervised learning experience in a work setting similar to that in which an educator will eventually be employed. The internship provides the student with an opportunity to apply the theories and concepts learned during the graduate secondary science program. Not more than six hours may be taken. Prerequisite: PRAXIS II test score of 146 or higher.

**Prerequisite:** (P435 152 or 5435 152) and (EDU 456 Minimum Grade of C or SED 556 Minimum Grade of B) and SED 555 Minimum Grade of C and SED 559 Minimum Grade of C or 5236 154 or 5246 146 or 5436 141 or 5266 145

**SED 598 Intern in Sec Educ Math 3-6 cr**

The internship is a supervised learning experience in a work setting similar to that in which an educator will eventually be employed. The internship provides the student with an opportunity to apply the theories and concepts learned during the graduate secondary math program. Not more than six hours may be taken. Prerequisite: PRAXIS II test score of 118 or higher.

**Prerequisite:** (EDU 454 Minimum Grade of C or SED 554 Minimum Grade of B) and SED 555 Minimum Grade of C and SED 559 Minimum Grade of C and 5161 160

**SED 599 Thesis 1-9 cr**

A student selects a project, study, or investigation in secondary education related to his area of specialization. The project forms a basis for the thesis. The thesis committee will give guidance during the investigation and during the writing of the thesis.

**SED 699 Research Project 1-3 cr**

The culminating experience which the candidate must synthesize and apply the various program components in a selected instructional setting. The student completes a research project in a public school setting under the guidance of a department faculty committee. May be taken more than one semester. Prerequisite: Permission of the department chair.

**Prerequisite:** IDE 692 Minimum Grade of B or EDU 692 Minimum Grade of B

## Social Work (SW) (SW)

**SW 200 Intro to SocWork-SocWelfare 3 cr**

Introduction to the profession of social work. Topics include historical development, nature of profession, professional associations, practice theory, values and ethics.

**SW 201 Human Behav/Social Environ I 3 cr**

The Person-In-Environment model of human behavior. Course examines individual, family and group behavior in the social context.

**Prerequisite:** (BLY 101 Minimum Grade of C and BLY 101L Minimum Grade of C) or (BLY 121 Minimum Grade of C and BLY 121L Minimum Grade of C) and SY 109 Minimum Grade of C and PSY 120 Minimum Grade of C

**Corequisite:** SW 401

**SW 214 Exploring Social Work Practice 3 cr**

Service learning experience in social work. Thirty hours of agency-based experience is required. Students must attend 2 1/2 hour weekly skills development lecture.

**SW 220 Power, Privilege & Oppression 3 cr**

This course is designed as an introduction to the field of social work with diverse populations. The purpose is to prepare students to work with diverse groups of people locally and globally. This course examines issues related to the creation of race in America, the oppression of people on the basis of their gender, ethnicity, race, culture, sexual orientation, physical or mental ability, age, religion and national origin.

**SW 300 Ethical Decision-Making-W 3 cr**

This course provides a more in-depth analysis of the Social Work Code of Ethics and overviews frameworks for ethical decision-making. The emphasis is on improving students' ability to more readily identify ethical problems and thoughtfully work through these issues through the use of case studies.

**Prerequisite:** EH 101 Minimum Grade of C or EH 102 Minimum Grade of C

**SW 301 Social Welfare Policy 3 cr**

Social Policy in relation to Social Work Practice. Course addresses social policy analysis, social advocacy, diversity and social and economic justice.

**SW 302 Human Behav/Social Environ II 3 cr**

The Person-In-Environment Model of human behavior. Course examines task groups, organizations, and community systems in the social context.

**Prerequisite:** SY 201 Minimum Grade of C

**Corequisite:** SW 402

**SW 310 Community Context 3 cr**

The rural and urban contexts of social work practice. Emphasis of the course is placed on how these contexts affect human behavior and the practice of social work.

**SW 340 Family Violence 3 cr**

Study of the social problems of family violence including domestic violence, intimate partner violence, child abuse, and elder abuse. The role of the social worker, social services, and social policy will be examined.

**SW 350 Child Welfare Services 3 cr**

General survey of the Social Work field of child welfare services with a focus on child protective services.

**SW 360 SW Practice in Mental Health 3 cr**

This course is designed to provide the student with an overview of the mental health system and focuses specifically on issues related to the role of a social worker in a mental health setting.

**SW 380 International SW Practice 3 cr**

This course explores social work as an international profession and the application of social work practice methods with various populations around the world. Students will learn cross-cultural practice methods and apply conceptual frameworks, such as those based on human rights, social development, and sustainable development, to a range of global social problems.

**SW 401 Generalist Practice I 3 cr**

The Generalist Model of social work applied to individuals, families, and groups. Emphasis is placed on diversity, social work values and ethics, and evidence based practice.

**Prerequisite:** SY 109 Minimum Grade of C and PSY 120 Minimum Grade of C and (BLY 101 Minimum Grade of C and BLY 102 Minimum Grade of C) or (BLY 121 Minimum Grade of C and BLY 122 Minimum Grade of C)

**Corequisite:** SW 201

**SW 402 Generalist Practice II 3 cr**

The Generalist Model of social work applied to organizations, communities and task groups. Emphasis is placed on diversity, social work values and ethics and social justice.

**Prerequisite:** SW 401 Minimum Grade of C

**Corequisite:** SW 302

**SW 412 Field Instruction 3-12 cr**

Field Instruction in social work. Four hundred five (405) hours of supervised experience in social work setting. SW 412 can be taken during a single semester or over multiple semesters.

**Prerequisite:** SW 402 Minimum Grade of C and SY 382 Minimum Grade of C

**Corequisite:** SW 414

**SW 414 Senior Seminar - W 3 cr**

This is the capstone senior level course in social work. Class discussion and assignments are designed to facilitate integration between field instruction experience and curriculum content. SW 412 must be taken concurrently.

**Prerequisite:** SW 401 Minimum Grade of C and SW 402 Minimum Grade of C and SY 382 Minimum Grade of C

**Corequisite:** SW 412

**SW 420 Social Work in Health Care 3 cr**

Study of the practice of social work in the health care field. Major social policy issues, service delivery systems, relationships with other health care professionals, and practice issues related to social work will be covered.

**SW 460 Rural Social Services 3 cr**

This elective course in rural social services provides a survey of professional services with rural and small communities. It is open to all majors. Included are topics related to services, social policy, rural culture and behavior, professional values and ethics, diversity, and services.

**SW 490 Special Topics 3 cr**

Advanced topics in Social Work. May be repeated twice for elective content when topic varies.

## Sociology (SY) (SY)

**SY 109 Introductory Sociology 3 cr**

Sociology is the scientific study of social behavior and social phenomena. This course is a survey intended to introduce students to the major concepts, issues, theory, methods and substantive findings of the discipline. Topics may include the impact of social structures on behavior and opportunity, inequalities, socialization, culture, religion, crime and deviance, the family, modernity, and globalization. Core Course.

**SY 112 Social Problems 3 cr**

A study of persistent and recurring social conditions and individual and group behaviors that are contrary to the expressed norms of community members and that community members strive to control through collective action. Core Course.

**SY 200 Sex, Power, & Politics 3 cr**

An analysis of social patterns in sexual identifies, behaviors, and desires, including an introduction to history of sexuality, contemporary theories of sexuality, and the politics of sexuality today.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 212 Field of Social Welfare 3 cr**

A survey of the field of social welfare and of social-work functions. Rise, development, and present organization of social welfare agencies and the social services. Brief introduction to the techniques of the social-work profession.

**SY 220 Marriage and the Family 3 cr**

The organization, function, and present status of the family, primarily in the United States. Problems of mate selection, marital adjustment, and parent-child relations treated on the basis of recent and current social change.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 241 Criminology 3 cr**

The nature and causation of criminal behavior. Evaluation of theories and research.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 242 Corrections 3 cr**

Administration of criminal justice in American society. Federal state and local prison systems; management and treatment of criminals; history of punishment; jail detention, probation and parole; prison activities; rehabilitation.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 290 Special Topics - 3 cr**

Selected topics in sociology. May be taken for a maximum of nine hours credit when the subject matter varies.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 305 Sociology of Sport 3 cr**

Addresses the issues of rise and development of Sport in North America and relates these developments to other societal structures and processes.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D

**SY 312 Social Work Applications 3 cr**

Focus is on the application of social-behavioral science orientations to the amelioration of social problems and public policy issues.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D and SY 212 (may be taken concurrently) Minimum Grade of D

**SY 315 African American Families 3 cr**

The study of family structure, mate selection, marital and other romantic interaction, parenting and kinship among African Americans.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 319 Sociology of Drugs 3 cr**

This course examines social, historical, cultural, and political factors that shape ideas about drugs and views on drug use, drug treatment, and drug policy.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 340 Juvenile Delinquency 3 cr**

A study of the nature, extent, treatment, and prevention of delinquent behavior among youth in the United States and other urban industrial societies.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 350 Evolutionary Sociology 3 cr**

This course considers social behavior and social phenomena as manifestations of the observable properties of the organisms that make up societies (i.e. 'human nature'). The core of the course will involve constructing a brief but sound model of human behavior and then seeing how well that model can help explain a spectrum of behavior and phenomena. In addition, we will consider different religious, cultural, and scientific views on human nature, as well as some of the classic philosophical debates (e.g. nature/nurture) that revolve around questions of human nature.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 352 World Religions 3 cr**

This course is an introduction to the religions of the world. It is divided into three basic units: Indigenous Religions (of Africa, North America, and Oceania); Eastern Religions (Hinduism, Buddhism, Daoism, Confucianism, Jainism) and Western Religions (Judaism, Christianity, Islam). The emphasis is on grasping the core principles of each tradition, seeing the ways in which religion meets basic human needs, and religion as a cultural artifact that borrows, adapts, and changes over time. Course is identical with PHL 352 and REL 352. Credit cannot be received for both SY 352 and PHL 352 or REL 352.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**Cross-Listed:** PHL 352, REL 352

**SY 360 Soc of Work and Occupations 3 cr**

Examines work, occupations and careers in modern societies. Course topics include: the evolution of work, the meaning of work, the demography of work, unions, jobs, occupations, professions, industries, classes, unions, technology and alienation, labor market segmentation, nonstandard and contingent work, work and the family, work and economic inequality, job satisfaction and organizational commitment.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 372 Social Gerontology - W 3 cr**

Sociological aspects of aging in contemporary American society. Within its parameters are related problems of economics, health, and social contacts.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 381 Research Methods 3 cr**

The goal of this course is to provide you with a foundation in social science research methods. The course will cover basic concepts used in social science research, sampling, survey instrument construction, observational and experimental research designs, and qualitative research. In addition to providing you with a foundation in research methods, SY 381 and SY 382 will give you the computing skills needed to create and analyze quantitative data using SPSS and EXCEL.

**Prerequisite:** SY 109 Minimum Grade of D

**SY 382 Research Analysis 3 cr**

This course, along with SY 381, provides a foundation in social research methods and statistics. In this course you will develop a mastery of descriptive and inferential statistics, basic probability theory, and significance testing. The computer lab portion of this course will continue to build upon the research and skills you acquired in SY 381.

**Prerequisite:** SY 109 Minimum Grade of D

**SY 390 Special Topics 1-6 cr**

Special topics courses are classes that are not part of the sociology curriculum, and so may be offered irregularly, or even only once, but for which students receive credit as a junior-level (upper division) elective.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 394 Directed Studies 1-3 cr**

Field or library pursuits through which special interests or needs of the student may be pursued on an individual, supervised, or tutorial basis. No more than six hours may be used in the degree. Arrangements must be made with the instructor prior to registration. Requires permission of Department Chair.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 401 Disasters and Society 3 cr**

The Sociological examination of natural, technological, and human-initiated disasters. The social impacts of disasters will be reviewed through case-studies of major twenty-first century catastrophes and issues of community vulnerability, resiliency and recovery will be addressed.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 406 Sociological Theory 3 cr**

An exploration of the role of theorizing, with introduction and application to major paradigms of social explanation from the 18th Century to today.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**Cross-Listed:** SY 376

**SY 407 Social Research Design 3 cr**

This course provides an introduction to sociological and social science methodology, including epistemology, research ethics, observational and experimental designs, survey and qualitative methods of data collection, comparative and historical research, and program evaluation.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 408 Industrial Sociology 3 cr**

Examines the historical development and contemporary structure of American industry as social choices shaped by contending forces; also explores alternative industrial futures.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D

**SY 409 Social Research Analysis 3 cr**

This course provides instruction in quantitative analysis in sociological and social science research. It provides instruction in basic and inferential statistics including, descriptive statistics, probability, confidence intervals, one and two sample significance tests, Chi Square tests of independence, and an introduction to bivariate linear models. The course also provides computer instruction in the use of SPSS software.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 411 Population - W 3 cr**

An introduction to the study of human populations: population growth and decline; fertility, mortality, and migration; characteristics of populations; population, food and economic development; demographic analysis; population policies.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 412 Applied Sociology - W 3 cr**

A survey of the specialties and techniques of professional sociologists, including the kinds of social problems and how these problems are addressed.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 413 Qualitative Inquiry 3 cr**

This course surveys forms of qualitative inquiry: ethnography and participant observation, focus groups, in-depth interviews, narrative inquiry, case study, historical research, and oral history.

**Prerequisite:** (SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D)

**SY 415 Soc of Mental Health-Illness 3 cr**

A sociological analysis of mental health and illness including social epidemiology, effects of social integration and support, labeling mechanisms, social evolution of treatment systems, and cultural factors in the recognition and diagnosis of disorders.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 418 Adv Family Studies 3 cr**

This course examines interaction patterns in different types of family structure, with emphasis on marital adjustment, parent-child interaction, and sibling interactions.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 420 Sociology of Religion 3 cr**

The study of religion is at or near the core of sociology. This course is an exploration of the sociological dimensions of religion within the classical theoretical traditions of Durkheim, Weber and Marx, augmented with more recent theory and research. We consider the definition, functions and origins of religion, the role of beliefs and rituals in it, the interaction of religion with other aspects of society, and secularization of the future of religion, among other topics.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 421 Social Stratification - W 3 cr**

This course introduces students to the patterns and processes of inequality in its major forms. It includes discussions of social class, sex, race, ethnicity, and policy. Additionally, this course satisfies the University's writing requirement. As such, students will acquire knowledge through writing assignments and will demonstrate mastery of new information in written form.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 425 Urban Sociology - W 3 cr**

The study of urbanization and urban ways of life. Emphasis is given to relationships between urbanization and changes in the social organization of urban areas. Urban problems and planning are analyzed in terms of social change at the structural level.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D

**SY 426 Social and Cultural Change 3 cr**

This course is designed to familiarize students with major theories and processes of social and cultural change, the factors influencing social and cultural change, diffusion of innovations, and adoption of new ideas and practices.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**Cross-Listed:** AN 426

**SY 428 Gender and Society 3 cr**

Description and analysis of gender roles and inequality in contemporary Western societies in cross-cultural and historical context.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 430 Sociology of Culture 3 cr**

Examines the major perspectives in the sociology of culture, with emphasis on the problems of culture in modern and post-modern societies.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 435 Health Disparities Life Span 3 cr**

This course examines differences in health status across the life span. The course will focus heavily on racial/ethnic and socioeconomic disparities in health applying a social determinants' of health framework. Issues that will be considered include how income, education, neighborhood conditions, access to health care, and other community factors shape opportunities to be healthy. The course is cross-listed as SY 435 and GRN 435 and has been approved as an elective for the Undergraduate Certificate in Gerontology and the interdisciplinary minor in Gerontology.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**Cross-Listed:** GRN 435

**SY 440 Deviance and Social Control 3 cr**

The study of societal norms and their violation. Focus on social construction, control, condemnation and accommodation of deviant behavior.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 445 Majority-Minority Relations-W 3 cr**

The study of relationships between 'majorities' and 'minorities' in society. This course will explore the macro- social forces that bring these relationships about and the institutional setting where different group members come into contact with each other. A variety of key concepts and theories surrounding majority and minority relations will be defined and analyzed. Historical and current case studies will be examined to illustrate the development of these relations.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 447 Sociology of Law 3 cr**

Overview of predominant theoretical approaches, classical and contemporary, in legal sociology, and their application. Undergraduates require permission of instructor.

**Prerequisite:** SY 109 Minimum Grade of D

**SY 455 Self and Certainty 3 cr**

This course explores the complex relationship between the individual and the groups they are a part of, with a special emphasis on the challenges of identity and knowledge in modern society. Draws primarily upon the work of classical social psychologists like Mead, Berger & Luckman, Foggman and Simmel, as well as modern extensions of their work.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 458 Crowds Riots Soc Movements - W 3 cr**

A survey of the theoretical and historical foundations of collective behavior, riots, and social movements. A variety of situations and behaviors will be analyzed including social movement participation; growth and organization; strategies, tactics, and consequences for participants and society.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 459 Medicine and Society 3 cr**

The sociological study of medical care, with topics ranging from the micropolitics of doctor-patient communication through macro-level investigation of comparative health care systems.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 460 Social Organization - W 3 cr**

This course provides the student with a comprehensive behavioral science approach to understanding modern social organizational trends.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 467 Environmental Sociology 3 cr**

This course will cover topics such as public awareness and the social construction of environmental issues, especially acid rain, biodiversity, biotechnology and technological disasters.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 472 Sociology of Aging and Family 3 cr**

The class focuses on sociological theories of family and aging and the linkages of families and their aging members with organizations that deliver services, including: government agencies, healthcare organizations, legal services, corporations/businesses, and religious organizations.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 475 Dev of Sociological Theory 3 cr**

The development of theories in sociology, as related to social thought, institutions, and theories of social progress.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 490 Special Topics 1-3 cr**

A sociological examination of advanced topics. This course may be taken for a maximum of 9 hours credit when the subject matter varies.

**Prerequisite:** Upper division status.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 492 Seminar - W - 3 cr**

Selected topics in sociology for students with junior or senior standing. Note: SY 492 is not intended for graduate students.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 494 Directed Studies 1-3 cr**

Designing a study, carrying out the research, and writing the result of a thesis. No more than six hours credit may be applied to major. Prerequisites: Requires upper division status and permission of department chair.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 496 Sociology Internship 3-6 cr**

Provides an opportunity to combine academic principles with practical experience in an agency dealing with human relationships. Specifics of the assignment result from a mutual agreement among student, faculty supervisor and agency. Course may be repeated for a maximum of six hours of credit. The 3-hour internship requires 100 contact hours; the 6-hour internship requires 200 contact hours. Requires permission of Faculty Supervisor and Department Chair.

**Prerequisite:** SY 109 (may be taken concurrently) Minimum Grade of D or SY 112 (may be taken concurrently) Minimum Grade of D

**SY 499 Honors Research Hours-H 1-3 cr**

This course awards hours of course credit within the SY department to University and/or Departmental Honors students who are working with a research mentor in the SY department on a thesis or capstone project of appropriate scope.

**SY 500 Orientation 1-3 cr**

Introduces students to graduate study in sociology by providing information about applicable academic degrees, career opportunities, and professional activities in the discipline.

**SY 501 Disasters and Society 3 cr**

The sociological examination of natural, technological, and human-initiated disasters. The social impacts of disasters will be reviewed through the case-studies of major twenty-first century catastrophes and issues of community vulnerability, resiliency, and recovery will be addressed.

**SY 505 Adv Principles of Sociology 3 cr**

Systematic review and integration of major propositions, concepts, and research data from various fields of sociology. Development of a comprehensive orientation for the description and explanation of social phenomena.

**SY 506 Sociological Theory 3 cr**

An exploration of the role of theorizing, with introduction and application to major paradigms of social explanation from the 18th Century to today.

**SY 507 Social Research Design 3 cr**

Advanced treatment of topics in sociological methodology, including: logic of scientific explanation; experimental, quasi-experimental, survey and qualitative research designs; and research ethics.

**SY 509 Social Research Analysis 3 cr**

This is an applied course in the application of data analysis and statistical methods in social research. The course covers basic regression models with limited and categorical independent variables. It assumes knowledge of basic and inferential statistics. The course includes weekly instruction in data analysis and statistical computer use. This course is usually taught in the Spring semester.

**SY 511 Introduction to Population 3 cr**

An introduction to the study of human populations: population growth and decline, fertility, mortality and migration: characteristics of populations: population, food and economic development: demographic analysis: population policies. Students will be able to substantively analyze in any discussion of past and future population problems and its related factors that affect different societies.

**SY 512 Applied Sociology 3 cr**

A survey of the specialties and techniques of professional sociologists and the conditions under which sociological knowledge is applied to social problems, the kinds of problems addressed, and the degree of effectiveness of applications. A variety of methods will be discussed including social impact analysis, program evaluation, needs assessment, and social indicators. Requires SY 508 and SY 509 or instructor's permission.

**Prerequisite:** SY 508 Minimum Grade of B and SY 509 Minimum Grade of B

**SY 513 Qualitative Inquiry 3 cr**

This course surveys forms of qualitative inquiry: ethnography and participant observation, focus groups, in-depth interviews, narrative inquiry, case study, historical research, and oral history.

**SY 515 Soc of Ment Health and Illness 3 cr**

A sociological analysis of mental health and illness including social epidemiology, effects of social integration and support, labeling mechanisms, social evolution of treatment systems, and cultural factors in the recognition and diagnosis of disorders.

**SY 518 Advanced Family Studies 3 cr**

This course examines interaction patterns in different types of family structure, with emphasis on marital adjustment, parent-child interaction, and sibling interactions.

**SY 520 Sociology of Religion 3 cr**

An analysis of religion as a social institution with emphasis on modern western societies. Topics include the function of religion for societies and individuals, changing patterns of religious belief and practice, and the relationship between religion and other social institutions.

**SY 521 Poverty, Inequal/Social Stat 3 cr**

A sociological approach to the study of class, status, power and poverty with a particular emphasis on American society. Students will present material in the classroom and conduct an advanced research project in the area of social inequality.

**SY 523 Aging in American Society 3 cr**

The role of the elderly in today's society, problems, adaptability, crises, functions. Comparisons with youth and working adults. Survey of social programs and resources in formal and informal support networks.

**SY 528 Gender and Society 3 cr**

Description and analysis of gender roles and inequality in contemporary Western societies in cross-cultural and historical context.

**SY 530 Sociology of Culture 3 cr**

This course will introduce students to the major perspectives in the field of the sociology of culture. Particular attention will be given to each perspective's diagnosis of the problems of culture in modern and postmodern capitalist societies.

**SY 535 Health Disparities Life Span 3 cr**

The main purpose of this seminar is to provide students with an understanding of how social factors contribute to racial/ethnic, socioeconomic and gender disparities in health and health care. We will examine how dyadic relationships such as interpersonal forms of discrimination, marriage, and social ties may contribute to health disparities. We will also examine the ways in which neighborhood and community context, as well as inequalities in socioeconomic status materially shape health and access to health care services. The course is cross-listed as SY 535 and GRN 435/535 and has been approved as an elective for the Undergraduate/Graduate Certificate in Gerontology and the interdisciplinary minor in Gerontology.

**Cross-Listed:** GRN 535

**SY 540 Deviance and Social Control- 3 cr**

Deviance includes acts that violate norms. Social control is the groups' efforts to induce people to conform to these norms. This course includes discussions of what actually is deviance, how things become deviant, and how sociologists explain deviance. Several weeks are devoted to talking about specific forms of deviance, ranging from alcohol and drugs to mental illness. The last part of the course is spent discussing elite deviance.

**SY 547 Sociology of Law 3 cr**

Overview of predominant theoretical approaches, classical and contemporary in legal sociology, and their application in empirical studies engaging legal phenomena.

**SY 550 The Community 3 cr**

An advanced consideration of the concept of community.

**SY 555 Self and Certainty 3 cr**

This course explores the complicated relationship between individuals and the groups they are part of, with a special emphasis on the challenges of identity and knowledge in modern society. Draws primarily upon the work of classical social psychologists like Mead, Berger, Luckmann, Foggman and Simmel as well as modern extensions of their work.

**SY 559 Medicine and Society 3 cr**

The sociological study of medical care, with topics ranging from the micropolitics of doctor-patient communication through macro-level investigation of comparative health care systems. Explores extant research methods and theories of medical sociology to prepare graduate students to do sociological research in health care settings.

**SY 565 Maritime Sociology 3 cr**

Provides a sociological assessment of the relationship between human communities, technology, and marine resources.

**SY 566 Soc Impact Assess Coast Enviro 3 cr**

This course will provide a general introduction to the various frameworks used in social impact analysis.

**SY 567 Environmental Sociology 3 cr**

This course will cover topics such as public awareness and the social construction of environmental issues, especially acid rain, biodiversity, biotechnology, and technological disasters.

**SY 572 Sociology of Aging-Family 3 cr**

The class focuses on sociological theories of family and aging, and the linkages of families and their aging members with organizations that deliver medical and social services, with government bureaucracies, the legal system, corporations and businesses, and religious organizations.

**SY 590 Sp Top - 3 cr**

Selected topics in graduate sociology. Course may be repeated for different topics.

**SY 591 Papers & Presentations Seminar 1-2 cr**

A self-directed studies course, guided by graduate faculty mentors, to develop and enhance the career and scholarly interests, and professional socialization, of advanced master's students through written work and presentation opportunities.

**Prerequisite:** ASSY P

**SY 592 MA Practicum Report Proposal 3 cr**

Based on student work in a local agency (in conjunction with course co-requisite SY 596, Sociology Internship) to generate a practicum report proposal (directed by a member of the sociology graduate faculty) that the student must formally defend.

**Prerequisite:** SY 596 (may be taken concurrently)

**SY 593 Master's Practicum Report 3 cr**

Course in which students prepare and defend a formal report based on work in course pre-requisite SY 596 and SY 592.

**Prerequisite:** SY 596 (may be taken concurrently) Minimum Grade of B and SY 592 Minimum Grade of B

**SY 594 Directed Studies - 1-3 cr**

Field or library projects through which special interests of the student may be pursued on a tutorial basis with a graduate faculty member. Arrangements must be made with the professor prior to registration. Permission of the Department Chair is required.

**SY 595 SY Research Apprenticeship 1-3 cr**

Students pursue research-related interests as directed by, and with prior approval from, a member of the graduate faculty.

**SY 596 Sociology Internship 3-6 cr**

Relates the student's classroom studies to occupational and professional experiences in an approved community agency that culminates with a written report. Requires permission of the Graduate Coordinator and Department Chair as well as proof of insurance. The 3 hour internship requires 100 contact hours; the 6 hour internship requires 200 contact hours.

**SY 597 Sociology Teaching Apprentice 1-3 cr**

The student will work directly with a member of the Sociology faculty to learn pedagogy, innovation in teaching, and course content that will equip the student for future teaching assignments.

**SY 598 Master's Thesis Proposal 3 cr**

Focused on a specialized subject area of research interest in sociology (directed by a member of the sociology graduate faculty) to generate a thesis proposal that the student must formally defend.

**SY 599 Master's Thesis 1-6 cr**

Focused on a specialized subject area of research interest in sociology to generate a master's-level thesis that the student must formally defend. (Pre-requisite: SY 598, Master's Thesis Proposal).

**Prerequisite:** SY 598 Minimum Grade of B

## Special Education (SPE) (SPE)

**SPE 200 Field Exp in SPE Settings 1 cr**

A series of in-field opportunities for students in Special Education. A variety of appropriate placements will be employed depending on each student's interest and needs. May be repeated for credit.

**SPE 201 Field Exp in Sp Ed Setting 1 cr**

A series of in-field opportunities in special education. A variety of appropriate placements will be employed depending on each student's interests and needs. To be taken with SPE 312.

**SPE 202 Field Exp in Sp Ed Setting 1 cr**

A series of in-field opportunities in special education. A variety of appropriate placements will be employed depending on each student's interests and needs. To be taken with SPE 410.

**Corequisite:** SPE 410

**SPE 203 Field Exp in Sp Ed Setting 1 cr**

A series of in-field opportunities in special education. A variety of appropriate placements will be employed depending on each student's interests and needs. To be taken with SPE 410.

**Corequisite:** SPE 410

**SPE 205 Init Field Exp in SPE Setting 1 cr**

An in-field opportunity for early field-based practicum in a variety of placements. To be taken with SPE 400 by Special Education majors.

**SPE 311 Intro to Partnerships in SPE 3 cr**

Emphasis is on the special problems found in the home, community, and school of the exceptional child, the teacher, the family, and community resource agencies. Ways for the teacher to form teamships to work collaboratively with all human resources involved in the child's life are explored and ethical and moral standards examined.

**SPE 312 Intellect and Phys Disabs 3 cr**

A study of the intellectual and physical disability which usually require substantial curriculum adaptations or ecological accommodation. Historical perspectives, etiology, definitions, classification, treatment, social aspects and interdisciplinary team work will be explored.

**Corequisite:** SPE 201

**SPE 313 Lrng and Behavrl Disorders 3 cr**

An examination of the definitions, characteristics, and prevalence of children with learning and/or behavioral disabilities. Emphasis is placed on the causes of problems in motor, perceptual, social, academic, affective, and behavioral development. Students will be introduced to current service delivery models and the programming options for individuals with learning and behavioral disabilities.

**SPE 320 Special Education Law 3 cr**

This course provides an overview of the legislative history within the United States related to persons with various disabilities. Emphasis will be added to the role of the educator in the specific responsibilities and liabilities required to develop appropriate educational programs for students with disabilities. The course will highlight the collaborative nature required for education professionals and parents to facilitate a student's academic and social development.

**SPE 342 Dev-Tchg Ecological Curriculum 3 cr**

An ecological systems view which emphasizes curricular design as a multisystem interaction involving the individual, family, school, occupational setting, and society.

**SPE 362 Behav Mgt of Except Child - W 3 cr**

Presentation of the principles and applications of behavioral modification, data collection procedures, and single-subject research designs as related to exceptional children and youth in special education environments.

**Prerequisite:** SPE 313 Minimum Grade of C and SPE 342 Minimum Grade of C and SPE 454 Minimum Grade of C

**SPE 363 Tch Adpt Curr Spec Nds Lrn 3 cr**

An examination of regular and special education K-12 curricula, materials, and procedures. Specific emphasis will be placed on the selection modification, and adaptation of curricula, materials, and procedures to meet the needs of individuals with learning and behavioral disabilities.

**Prerequisite:** SPE 313 Minimum Grade of C and SPE 342 Minimum Grade of C and SPE 454 Minimum Grade of C

**SPE 373 Teaching Reading to Stu Dis 3 cr**

Introduces the student to the curriculum, teaching the methodologies and instructional activities and materials associated with effective and appropriate developmental and functional reading instruction for students with disabilities.

**Prerequisite:** SPE 313 Minimum Grade of C and SPE 342 Minimum Grade of C and SPE 454 Minimum Grade of C

**SPE 400 Edu for Except Child and Youth 3 cr**

Introduction to the field of exceptional children and youth, involving the study of various areas of exceptionality.

**SPE 410 Formal-Informal Assessment 3 cr**

Assesses developmental levels, academic, and non-academic performance of exceptional individuals through the administration and interpretation of criterion-referenced, formal and informal measures. Evaluation of classroom teaching and special education programs is also emphasized.

**SPE 432 Impact Typ and Atp Dev on Edu 3 cr**

An examination of typical child development and developmental characteristics of infants, toddlers, and young children with disabilities from the prenatal period through age 8. Characteristics of disabling conditions and their impact upon development are also discussed.

**SPE 433 Iss in Edu Young Child W-Dis 3 cr**

This course prepares students to work with infants, toddlers, and young children with disabilities and their families. Topics covered include specific teaching and intervention techniques, special education laws and regulations, and service delivery models.

**SPE 443 Voc Ed-Career Dev Dis Indiv 3 cr**

Issues and practices involved in the vocational preparation and training of students with disabilities, including career awareness, exploration, preparation, and use of vocational resources. Vocationally related programs and services, both within and outside the special education environment are included.

**Prerequisite:** SPE 313 Minimum Grade of C and SPE 342 Minimum Grade of C and SPE 454 Minimum Grade of C

**SPE 444 Senior Seminar - W 3 cr**

Topics based upon students' experiences in internship. Students develop personal growth plans to enhance professional functioning.

**SPE 454 Curric Meth Develop Young 3 cr**

Curriculum and methods of instruction for individuals who function in the lower levels of cognitive, motor, self care, communicative, and/or social behaviors. Emphasis is on physical management, class/individual scheduling, adapted aids and equipment, task analysis, and functional life skills.

**SPE 484 General Education Curriculum 3 cr**

A Curriculum course designed to emphasize general education and special education K-12 curriculum. Students learn content of general education curricula through study of scope and sequence charts and strategies for adapting the curricula for students with exceptionalities, especially in inclusionary settings.

**Prerequisite:** SPE 313 Minimum Grade of C and SPE 342 Minimum Grade of C and SPE 454 Minimum Grade of C

**SPE 489 Pre-Practicum 3 cr**

Supervised experience in the teaching field which allows the teacher's performance to be evaluated qualitatively.

**SPE 490 Sp Top - 3 cr**

Varies in content and deals with issues, trends, and topics of current interest in the field of educating exceptional individuals. May be repeated for credit when course content varies.

**SPE 494 Dir St - 3 cr**

Directed Study. No more than two directed studies may be applied to programs at the undergraduate level or for certification.

**SPE 495 Internship K-6 9 cr**

Observation and supervised K-6 classroom teaching experience providing the opportunity to synthesize all previous instruction. This culminating activity provides opportunity for study and discussion of problems and issues encountered in the practicum situation.

**Prerequisite:** P014 137 and SPE 363 Minimum Grade of C and SPE 410 Minimum Grade of C

**SPE 496 Internship 6-12 9 cr**

Observation and supervised 6-12 classroom teaching experiences providing the opportunity to synthesize all previous instruction. This culminating activity provides opportunity for study and discussion of problems and issues encountered in the practicum situation.

**Prerequisite:** SPE 363 Minimum Grade of C and SPE 410 Minimum Grade of C

**SPE 497 Internship ECSE 9 cr**

Observation and supervised ECSE classroom teaching experiences providing the opportunity to synthesize all previous instruction. This culminating activity provides opportunity for study and discussion of problems and issues encountered in the practicum situation.

**Prerequisite:** P014 137 and SPE 363 Minimum Grade of C and SPE 433 Minimum Grade of C

**SPE 499 Senior Honors Project-H 3-6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project, relevant to the field of study in Special Education, that will lead to a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three faculty chaired by the honors mentor. This course is required for Honors recognition and may be repeated for up to 6 credit hours.

**Prerequisite:** Participate in honors program and junior level status.

**SPE 500 Nat-Needs of Exc Chld and Yth 3 cr**

Introduction to the field of special education involving the study of all exceptionality areas. Developmental and maturational sequences of exceptional children/youth are included.

**SPE 504 Seminar in Spec Educ 3 cr**

Designed to allow students an in-depth exploration of topics of special concern to them related to children with disabilities or high potential.

**SPE 505 Admn and Supv of SPE 3 cr**

Establishing, maintaining, supervising, and evaluating special education programs in school districts and systems. Legislation and litigation, budgeting and finance, trends and issues in special education are included.

**SPE 510 Intro to Lrng Char Tchg in SPE 3 cr**

An examination of the definitions, characteristics, and prevalence of children with learning disabilities, emotional and/or behavioral disabilities, mental retardation and multiple disabilities. Emphasis is placed on the environmental and biological causes of problems in motor, perceptual, social academic, affective, and behavioral development. Students will be introduced to current service delivery models and the programming for individuals with disabilities.

**SPE 511 Curr - Reg Class and Adapt 3 cr**

Examination of all curricula as represented by various state course of study documents. Students will study and develop relevant adaptations of curricula to meet needs of various exceptional children.

**SPE 512 Ecological Curr and Method 3 cr**

From an ecological systems view, methods of individually deriving a functional, life-centered curriculum for students with mild to severe disabilities as well as educational strategies for teaching and training within such a framework.

**SPE 514 Teaming and Collaboration 3 cr**

An intensive study of the nature of teaming and collaborative practices with an emphasis on developing skills to organize and participate in a variety of such situations.

**SPE 515 Data and Behav Mgmt 3 cr**

Behavioral assessment techniques and experimental designs for the evaluation of behavior change programs. Operant and respondent methods for deceleration of inappropriate behavior. Operant methods for accelerating appropriate behaviors, teaching new behaviors and maintaining behaviors. Data-Based decision making strategies for formative program evaluation and modifications.

**SPE 516 Methods Spec Needs Learners 3 cr**

An examination of the methodologies employed in teaching special needs learners. The course covers the theoretical underpinnings and practical application of techniques with media, and materials.

**SPE 517 Com Lang Read Stu Disability 3 cr**

Major topics include the nature of language, language development and language problems in exceptional students; and remedial procedures. Informal and formal language and reading assessment. Relationship of reading to writing, phonetic, sight and combination means of reading instruction.

**SPE 518 Assessment 3 cr**

Advanced assessment of developmental levels, academic and non-academic performance of exceptional individuals through the administration and interpretation of standardized tests, criterion-referenced instruments, and informal measures.

**SPE 521 Children W-High Potential 3 cr**

Study of the intellectual, creative, emotional, and other psychological facets of gifted and talented children. Attention will be paid both to those individuals whose potential is realized and those who are considered underachievers.

**SPE 522 Creative and Prod Thinking 3 cr**

Geared to understanding the creative process, personality, and product of gifted and talented children as well as how to foster creativity and productive thought in the classroom.

**SPE 523 Tchg Children W-High Potential 3 cr**

Various curricular emphases and program approaches employed for gifted, creative, and talented children are studied. Insights are offered into articulating educational efforts.

**SPE 524 Atyp Children W-High Potential 3 cr**

This course is an in-depth study of the unique needs of atypical populations of gifted students. Attention will be directed to the culturally diverse gifted, economically disadvantaged gifted, underachieving gifted, gifted in rural areas, gifted females, highly/profound gifted, gifted handicapped, gifted with ADD/ADHD/SLD, and gifted preschoolers.

**SPE 532 Impact of Typical Atypical Dev 3 cr**

An examination of typical child development and developmental characteristics of infants, toddlers, and young children with disabilities from the prenatal period through age eight. Characteristics of disabling conditions and their impact upon development are also discussed.

**SPE 533 Issue Edu Young Child Disabil 3 cr**

This course prepares students to work with infants, toddlers, and young children with disabilities and their families. Topics covered include specific teaching and intervention techniques, special education laws and regulations, and service delivery models.

**SPE 534 Assessment Devel Young 3 cr**

This course contains information on basic psychometric qualities of screening, evaluations, and assessments, tools for use with infants, toddlers, and young children with disabilities, conducting family assessments, adapting measures for children with disabilities and using screening assessment, and evaluation in individualized programming.

**SPE 535 Collaborating with Families 3 cr**

This course prepares students to work with families of children with special needs. It contains information on understanding families, working with traditional and non-traditional families, and providing family-centered services.

**SPE 588 Advanced Practicum Experience 3 cr**

The purpose of this course is to provide a field experience focusing on evaluation and program improvement in academic and behavioral assessment, program planning, and experiences in implementation of special education programming.

**SPE 589 Pre-Practicum Experience 3,6 cr**

Supervised experience in the teaching field which allows the teacher's performance to be evaluated qualitatively.

**SPE 590 Sp Top - 3 cr**

A course with varying content dealing with issues, trends, and topics of current interest in the field of education exceptional individuals. May be repeated for credit when course content varies. Composition of activity. Total credit cannot exceed 6 hours.

**SPE 591 Multicategory Prac Seminar 3 cr**

Combines field experiences and technology-based simulations and learning experiences with an ongoing seminar to address a wide-range of disabilities and educational implications. Course content will be individualized according to the students educational and professional background.

**SPE 592 Collaborative Pract-Seminar 3 cr**

A seminar which enables students to discuss controversial issues related to the role and function of the collaborative teacher. Students lead and respond to discussion on topics which include teaming, inclusion, and collaboration.

**SPE 593 Classroom Exp Prac - 3 cr**

Supervised experience in the teaching field which allow the teacher's performance to be evaluated qualitatively.

**SPE 594 Dir St - Research 3 cr**

Students explore through directed individual study and research, problems and issue of special interest or significance in Special Education.

**SPE 595 Intern/Prac SPE Coll Tch K-6 3,6 cr**

Supervised experiences in Collaborative Teaching K-6 in the teaching field which allow the teacher's performance to be evaluated qualitatively.

**Prerequisite:** SPE 500 Minimum Grade of B and SPE 514 Minimum Grade of B and SPE 512 Minimum Grade of B and SPE 516 Minimum Grade of B and SPE 515 Minimum Grade of B and SPE 591 Minimum Grade of B and (5003 157 or 5903 157) and (5004 154 or 5904 154) and (5005 158 or 5905 158) and 5205 159 or 190 233

**SPE 596 Intern/Prac SPE Coll Tch 6-12 3,6 cr**

Supervised experiences in Collaborative Teaching 6-12 in the teaching field which allow the teacher's performance to be evaluated qualitatively.

**Prerequisite:** SPE 500 Minimum Grade of B and SPE 514 Minimum Grade of B and SPE 512 Minimum Grade of B and SPE 516 Minimum Grade of B and SPE 515 Minimum Grade of B and SPE 591 Minimum Grade of B

**SPE 597 Intern/Prac SPE ECSE 3 cr**

Supervised experiences in Collaborative Teaching ECSE in the teaching field which allow the teacher's performance to be evaluated qualitatively

**Prerequisite:** P014 137

**SPE 598 Intern/Prac SPE G/T 3 cr**

Supervised experiences in Collaborative Teaching Gifted/Talented in the teaching field which allows the teacher's performance to be evaluated qualitatively.

**SPE 599 Thesis 3 cr**

A student selects a project, study, or investigation in Special Education related to the student's area of specialization. The project forms a basis for the thesis. A thesis committee will give guidance during the investigation and during the writing of the thesis.

**SPE 601 Advanced Eval in SPE 3 cr**

Methods and procedures for developing criterion-referenced instruments and assessment batteries for classroom use in evaluating exceptional children and youth.

**SPE 609 Adv Study of Excep Children 3 cr**

Comparison of the normal development progress and that usually seen in the various exceptionality categories of special education especially cognitive, communication, motor, social and emotional development.

**SPE 641 Seminar Behav Disorders 3 cr**

Advanced study and review of the state of present knowledge in areas relevant to the psycho-pathological disorders of childhood including etiology, assessment, treatment and education.

**SPE 642 Clinical Teaching I 3 cr**

A study of the principles of behavioral theory upon which strategies for change in cognitive and social behavior rest and the evaluative designs used to monitor behavioral change and validate strategies.

**Prerequisite:** SPE 515 Minimum Grade of B

**SPE 643 Clinical Teaching II 3 cr**

A study and review of clinical research relevant to the curriculum requirements in the education and treatment of exceptional children and the identification of research needs in the various areas of exceptionality.

**SPE 651 Seminar in LD 3 cr**

Current trends and issues in the education of learning disabled individuals are discussed, various theoretical approaches and current empirical evidence provide the basis for discussion.

**SPE 671 Seminar in ID Educ 3 cr**

Current trends and issues in the education of individuals with intellectual disabilities. Class and recent professional literature are the basis for developing perspectives.

**SPE 690 Sp Top - 3 cr**

A course with varying content dealing with issues, trends, and topics of current interest in the field of education exceptional individuals. May be repeated for credit when course content varies.

**SPE 694 Dir St - Research 3 cr**

Students explore through directed study problems and issues of special interest or significance in Special Education.

**SPE 699 Research Project 1-3 cr**

The Research Project, as the culminating experience in the Specialist Program, provides an opportunity for the candidate to synthesize and apply the various program components in a selected instructional setting. Suitable agreements are reached with the appropriate public school system by the candidate. MR majors may not take more than 8 hours.

**Prerequisite:** IDE 692 Minimum Grade of B or EDU 692 Minimum Grade of B

## Speech and Hearing Sci (SHS) (SHS)

**SHS 201 Intro to Comm Disorders 3 cr**

Overview of major disorders of human communication and the role of the Audiologist and Speech-Pathologist in assessing and treating them.

**SHS 210 Culturally Responsive Practice 3 cr**

This course presents a practical approach to systemic development of specific professional skills for providing effective, culturally sensitive clinical health services to ethnically and linguistically diverse patients. Building on standard models of multicultural competence that emphasize knowledge, awareness, and skills, students will be introduced to culturally humility, culturally specific approaches to practice, and frameworks for equity and empowerment.

**SHS 291 Intro Communication Disorders 3 cr**

Overview of major disorders of human communication and the role of the audiologist and speech-language pathologist in assessing and treating them.

**SHS 302 Hearing & Speech Science 3 cr**

This course addresses basic principles of hearing and speech science, including the physical properties of sound, sound generation, transmission, and measurement.

**SHS 314 Fundamentals Spch Hrng Science 3 cr**

This course will address the anatomy and physiology of the speech and hearing mechanisms, the physical properties of sound, quantification of sound, sound generation, and sound transmission.

**Prerequisite:** SHS 341 Minimum Grade of C or SPA 341 Minimum Grade of C

**SHS 315 A&P Sp, Lang, Swallow, Hrng 3 cr**

An introduction to the anatomy and physiology of speech, language, swallowing, and hearing mechanism.

**SHS 331 Normal Language Acquisition-W 3 cr**

Acquisition of communicative behavior in normal children during the first decade of life; development of syntax, semantics, pragmatics, cognition; clinical laboratory experience with children.

**Prerequisite:** SHS 341 Minimum Grade of C

**SHS 341 Clinical Phonetics 4 cr**

Transcription techniques for the analysis of speech. Includes a study of the dynamics of speech sound production.

**Prerequisite:** SHS 201 (may be taken concurrently) Minimum Grade of C

**SHS 373 Audiology I 4 cr**

This course is an introduction to the following topics- disorders of hearing, etiologies of auditory and vestibular disorders found in populations of all ages, and evaluation techniques used by audiologists.

**Prerequisite:** SHS 302 Minimum Grade of C

**Cross-Listed:** SHS 473

**SHS 374 Audiology II 3 cr**

This course is a study of the principles of the management of hearing loss in children and adults; relevant legislation; and treatment and education options.

**Prerequisite:** SHS 373 Minimum Grade of C

**SHS 414 Neurobiol Bases Human Comm 3 cr**

Introduction to neuroscience and clinical neurology as they apply to the processes of normal and disordered communication. Topics include neurophysiology, neuroanatomy, and neuropathologies.

**Prerequisite:** SHS 315 Minimum Grade of C and SHS 331 Minimum Grade of C and SHS 341 Minimum Grade of C

**SHS 431 Intro to Language Disorders 3 cr**

A survey of language disorders in preschool and school-age children; assessment and intervention.

**Prerequisite:** SHS 331 Minimum Grade of C

**SHS 441 Intro Articulat-Phonol Disord 3 cr**

Study of dynamics of disordered speech production. Techniques for the analysis and treatment of articulation and phonological disorders.

**Prerequisite:** (SHS 331 Minimum Grade of C or SPA 331 Minimum Grade of C) and (SHS 341 Minimum Grade of C or SPA 341 Minimum Grade of C)

**SHS 452 Intro to Voice and Fluency Dis 3 cr**

A beginning course in the study of normal voice production, a survey of typical voice disorders, and an overview of stuttering and its related disorders. Taught Fall Semester.

**Prerequisite:** SHS 314 Minimum Grade of C and (SHS 331 Minimum Grade of C or SPA 331 Minimum Grade of C)

**SHS 453 Intro to Speech Disorders 3 cr**

An introduction to disorders of articulation, voice, and fluency. Theoretical and etiological foundations will be surveyed as well as philosophical orientations to therapy.

**Prerequisite:** SHS 315 Minimum Grade of C and SHS 341 Minimum Grade of C

**SHS 480 Issues in Clinical Pract - W 3 cr**

Introduction to the clinical setting; organizations, and statutes that govern professional service. Instrumentation, procedures, and approaches to clinical service provision are introduced.

**Prerequisite:** SHS 331 Minimum Grade of C and SHS 341 Minimum Grade of C and SHS 373 Minimum Grade of C

**Cross-Listed:** SHS 481

**SHS 481 Intro to Clinical Practicum-W 4 cr**

Clinical practicum course designed as an introduction to the clinical setting; documentation procedures & guidelines; organizations and statutes that govern professional service; instrumentation, procedures, & approaches to clinical practice. Written documentation, observation of clinical activities (in-person and in-class video), and participation as a clinical aide are also significant course requirements.

**Prerequisite:** SHS 331 Minimum Grade of B and SHS 341 Minimum Grade of B and SHS 373 Minimum Grade of B and SHS 315 Minimum Grade of B and SHS 302 Minimum Grade of B

**Cross-Listed:** SHS 480

**SHS 490 Special Topics - 1-3 cr**

Topics to be determined by student need and interest. Content will vary. A subtitle identifying the topic will be entered on the student's record. May be repeated for a total of 6 hours. Requires permission of the department chair.

**SHS 494 Directed Independent Study 1-3 cr**

Independent study under the direction of a faculty member. Requires permission of the department chair.

**SHS 499 Senior Honors Project - H - W 1-6 cr**

Under the advice and guidance of a faculty mentor, honors students will identify and carry out a research project relevant to the field of Speech Pathology and Audiology. The senior project will be judged and graded by three faculty members chaired by the honors mentor. This course is required for Honors recognition. Permission of the department chair and completion of an approved project prospectus is required.

## Speech-Language Pathology (SLP)

**SLP 510 Intro to Research Design 3 cr**

A general presentation of research procedures. The student will learn to read and evaluate professional literature and develop a research prospectus.

**SLP 521 Advanced Speech Science 3 cr**

The study of physical and acoustic concepts involved in speech production and perception including instrumental measurement and analysis.

**SLP 532 Clinical Linguistics 3 cr**

This course gives the student an overview of the linguistic theories and approaches that are relevant to the field of speech sciences. There will be a particular emphasis on those areas of linguistics that underpin the diagnostic and assessment procedures used in Speech Pathology. The course will focus on development and language use in normal populations and will show how knowledge of the pattern of typically developing language users can be applied to clinical contexts.

**SLP 533 Pediatric Language Disorders 3 cr**

Clinical assessment and management of language problems in infants, toddlers, and preschoolers, including language disorders associated with other developmental disorders and AAC.

**SLP 534 School-Aged Language Disorders 3 cr**

This course covers assessment and intervention approaches for school-age language disorders, children beyond age 5 years. Topics include speech-language services at the discourse level; the relationship between language and literacy; service delivery models including integration; educational laws and policies.

**SLP 541 Pediatric Speech Sound Disorders 3 cr**

Advanced study of disordered speech-sound production including these: development, assessment and intervention of articulation and phonological disorders in children.

**SLP 545 AAC for Indivs w Complex Comm 3 cr**

Introduction to the study and application of augmentative and alternative communication, including light-to-high tech augmentative and alternative communication devices to aid communication for persons with complex communication needs. The course includes device characteristics, program features, and intervention strategies as well as current trends in research for individuals with complex communication.

**SLP 551 Voice and Resonance Disorders 3 cr**

Advanced study of pathology, symptomatology, etiology, and treatment of voice and resonance disorders in children and adults.

**SLP 561 Fluency Disorders 3 cr**

Study of theories, research, and contemporary treatment procedures in the area of fluency disorders.

**SLP 565 Neuromotor Disorders of Commun 3 cr**

Review of neuroanatomy and physiology, nature of neuromuscular pathologies, methods of assessment and rehabilitation of neuromotor disorders of speech production.

**SLP 566 Aphasia & Neuro Lang Disorders 3 cr**

Study of the nature, characteristics, and clinical management of acquired neurogenic language disorders associated with focal lesions to the left or right hemisphere, including aphasia and right hemisphere syndrome.

**SLP 567 Acq Cognitive Comm Disorders 3 cr**

Study of the nature, characteristics, and clinical management of cognitive-communication disorders associated with diffuse brain lesion, including traumatic brain injury and dementia.

**SLP 568 Dysphagia 4 cr**

This course provides an in-depth study of healthy and disordered swallowing function across the lifespan. Specifically, students will learn normal anatomy and physiological processes of the upper aerodigestive tract, how to conduct clinical and instrumental evaluations of swallowing function, and develop individualized, targeted treatment plans for various swallowing impairments.

**SLP 588 Audiology for Speech-Lang Path 3 cr**

This course will address the SLP scope of practice, audiological tests, amplification, report literacy, and special topics. An interprofessional team approach with audiology will address co-management of services in individual with communication disorders.

**SLP 590 Dir Independent Research - 1-3 cr**

Independent research under the direction of a graduate faculty member. May be repeated. Requires permission of the instructor and the Graduate Advisor.

**SLP 592 Seminar in Comm Disorders - 1-10 cr**

This course is designed to provide the opportunity for in-depth study of special interests. Requires permission of the Graduate Advisor.

**SLP 594 Independent Study 1-3 cr**

Independent study under the direction of a graduate faculty member. May be repeated. Requires permission of instructor and Graduate Advisor.

**SLP 596 Clin Pract Speech-Lang Pathol 1-3 cr**

Discussion of instrumentation, procedures, and approaches to assessment and intervention in speech-language pathology.

**Corequisite:** SLP 596L

**SLP 596L Clin Pract Sp-Lang Path Lab 1-3 cr**

Supervised clinical experience in Speech-Language Pathology. May be repeated.

**Corequisite:** SLP 596

**SLP 597 Off-Campus Clinical Practicum in Speech Language Pathology 1-6 cr**

Students will complete a 14-week, part time clinical practicum at an off-campus site.

**Prerequisite:** SLP 596 Minimum Grade of B

**SLP 598 Clinical Externship 1-12 cr**

Supervised clinical experience in a professional service facility.

**SLP 599 Thesis 1-3 cr**

One to three credits per semester with a maximum of three hours credit. Regular standing required. Requires permission of the Graduate Advisor.

## Sports Management (SM) (SM)

**SM 191 Intro to Sport Mgt/Rec Studies 3 cr**

An introduction to the Sport Management and Recreation Studies professions; its history and philosophies. Includes an orientation to community agencies.

**Cross-Listed:** LS 191

**SM 276 Introduction to Sport Mgt 3 cr**

A study of the activities, organizations, and businesses involved in producing, facilitating, and organizing sport, fitness, and recreation related products and services.

**Cross-Listed:** LS 276

**SM 280 Hospitality Services 3 cr**

A study of hotel/motel resort services. Includes an overview of recreation services, food and beverage, guest services, marketing, housekeeping, maintenance, and fiscal concerns.

**Cross-Listed:** LS 280

**SM 286 Sport Governance and Policy 3 cr**

A detailed analysis of power, decision making, oversight and control methods for sport and recreation programs at the community, scholastic, collegiate, professional, and international sport levels. Includes governance and authority of regulatory concerns related to legal, risk/safety, social, political, economic, geographical, and managerial policies, procedures and practices.

**SM 297 Campus Recreation 3 cr**

Planning, organization, and leadership of intramural recreation and community sport activities.

**Cross-Listed:** LS 297

**SM 300 Global Tourism 3 cr**

Examination of the impact of recreational socio-cultural, economic, physical environment and governmental factors on leisure travelers within the global tourism industry.

**Cross-Listed:** LS 300

**SM 384 Sport Marketing 3 cr**

An examination of marketing and media concepts and theories applied to the sport industry. Content areas include basic marketing, target marketing and segmentation, advertising and sponsorships, event marketing and promotions, branding, public relations, social media, consumer behavior research, sponsorship proposals, and sport marketing plans.

**Cross-Listed:** LS 384

**SM 391 Leadership in SMRS 3 cr**

Theories, principles, and philosophies of leadership as applied to sport management and recreation studies. Also includes a study of programming principles and techniques.

**Cross-Listed:** LS 391

**SM 394 Sport and Business Finance 3 cr**

This course provides undergraduate students with an introduction to investment valuation and key financial concepts of sport related entities. Students will develop revenue generating insight and budgeting knowledge of actual situations occurring in the sport and recreation industry. Topical areas covered include capital budgeting, facility financing, corporate sponsorship, salary structures, franchise valuations, and personal business transactions.

**Cross-Listed:** LS 394

**SM 472 Legal Issues in Sports/Rec - W 3 cr**

This course introduces students to the legal liabilities, negligence, contractual agreements, and risk management issues pertaining to the areas of sport, recreation, and physical activity.

**Cross-Listed:** LS 472

**SM 480 Private/Commercial Operations 3 cr**

A survey of private and commercial operations including a study of resort operations.

**Cross-Listed:** LS 480

**SM 481 Tourism & Resort Development 3 cr**

Tourism and recreational travel; nature of resort development and its effect on generating tourist flow to and within regions. Economic importance of both tourism and resort development.

**Cross-Listed:** LS 481

**SM 483 Issues in HKS 3 cr**

A study of major trends, problems, and issues in various areas of health, kinesiology, and sport.

**Cross-Listed:** LS 483

**SM 486 Sport/Rec Facility Plan/Design 3 cr**

This course will familiarize students with the basic methodologies, objectives, and principles applied to the design and strategic planning of sport and recreation service facilities. It includes the examination and implementation of guidelines used to create a facility planning brief.

**Cross-Listed:** LS 486

**SM 490 Special Topics 3 cr**

Selected topics in sport management. Topics will vary according to needs and interests of students. Course may be repeated for credit when content varies.

**SM 495 Internship in Sport Management 3-12 cr**

Supervised experiences in a sport management or related agency work setting. HKS advisor approval required.

**Cross-Listed:** LS 498

**SM 496 Sport and Rec Resource Mgt 3 cr**

A study of event and facility resource management in sport and recreation. Applies the functions of management to the supervision, operation, development, evaluation, and financing of sport and recreation facilities in public and private environments.

**Cross-Listed:** LS 496

**SM 572 Sport Event Law and Risk Mgmt 3 cr**

Analytical understanding of legal issues and risk management trends as they relate to sport event management. Legal systems, human resource management, operations management, and liability of managing sport events and facilities will be emphasized.

**SM 575 Sport Ldshp and Org Behavior 3 cr**

This course explores the essential functions of leadership in the management of sport organizations and sport events. Effective leadership in event operations will be studied, in addition to historical and current perspectives of organizational behavior. Students will gain an advanced understanding of practical leadership applications.

**SM 584 Sport Event Marketing-Media 3 cr**

Study of the unique features of sport event marketing and media. Examines the strategies and activities of organizations to promote and produce sporting events.

**SM 585 Soc-Ethic Issues in Sport Mgmt 3 cr**

A variety of social and ethical issues within the sport industry are presented. A value based approach to sport event decision making is emphasized using real-world examples and the application of ethical theories.

**SM 586 Sport Event and Facility Mgmt 3 cr**

Designed to provide students the opportunity to learn multiple aspects of sports event management and the operations of sports facilities. Emphasis toward how to plan, manage, implement and evaluate sports events at various host site venues.

**SM 587 Sport Business and Finance 3 cr**

This course provides sport managers with the skills to make effective financial management decisions in sport event settings. Students will apply appropriate investment, revenue generating, and budgeting concepts unique to the sport industry.

**SM 591 Travel and Tourism 3 cr**

A survey course designed to provide students with an overview of travel and tourism as an area of study. Discussions will center on tourism at the macro (regional and national) level. Tourist behavior, the social, environmental and economic impact of tourism will be highlighted.

**Cross-Listed:** LS 591

**SM 594 Directed Study and Research 3 cr**

Students explore through directed study and research, problems and issues of special interest or significance in sport management. Not more than three semester hours of SM 594 can be accepted toward a degree program. Program advisor approval required.

**SM 595 Internship in Sport Management 3-6 cr**

A supervised learning experience in a sport management or related agency work setting. Provides the student with an opportunity to apply theories and concepts learned during the graduate program. No more than six semester hours of SM 595 can be accepted toward a degree program. Program advisor approval required.

**SM 599 Thesis 1-6 cr**

Independent research by the student under the sponsorship of the graduate faculty. Approved formal research prospectus and approval by thesis committee chair required.

## Statistics (ST) (ST)

### ST 150 Contemporary Math-Stat Seminar 1 cr

This course gives an overview of modern mathematics and statistics from the point of view of the practitioners. The course is designed for majors in mathematics and statistics at all levels as well as those students who are considering mathematics and statistics as a major or minor area of study. Topics usually included are elements of geometry, algebra, analysis, methods of statistical inference, the role of the computer in the analytical sciences; these topics vary from semester to semester. This course cannot be taken for credit simultaneously with MA 150, but may be repeated in different semesters. NOTE: May be offered for Honors Credit.

**Cross-Listed:** MA 150

### ST 210 Stat Reason and Application 3 cr

An introduction to modern statistics designed to provide the student with a solid foundation in statistical concepts, reasoning and applications. Emphasis given to problem identification, methodology selection and interpretation of results. Analysis of data accomplished by extensive use of statistical computer software, thereby minimizing manual computation. Coverage includes descriptive statistics, probability models, estimation, and hypothesis testing. High School level algebra is recommended. Computer Lab fee. NOTE: ST 210 is intended for students in all disciplines except Engineering and Computer Science. Credit for both ST 210 and ST 315 not allowed. May be offered for Honors Credit.

### ST 305 Applied Stat Health Sciences 3 cr

An introduction to statistical reasoning and data analysis for the health sciences. Coverage includes descriptive statistics, methods of data collection, estimation, hypothesis testing, non-parametric statistics, ANOVA, repeated measures, correlation and other measures of association, modeling data with linear and logistic regression. Critique of selected research articles and case studies incorporating research and evidence-based practice will be adopted to connect statistics to daily work in healthcare field. Statistical computer software (e.g. Minitab) will be extensively used for data analysis. Computer Lab fee. Note: This course is offered only as a fully online course and only for health sciences students.

**Prerequisite:** MA 110 Minimum Grade of C or MA 112 Minimum Grade of C

### ST 310 Stat Research Techniques 3 cr

This course is a continuation of ST 210. Coverage includes analysis of experimental designs such as completely randomized design, randomized block design, and factorial design using analysis of variance (ANOVA), correlation, simple and multiple regression analysis, model building, nonparametric techniques, contingency table analysis, sampling and survey methods. Time permitting topics such as time series analysis and statistical simulations will be covered. Statistical computer software will be extensively used for data analysis. Computer Lab fee. NOTE: Credit for only ONE course from ST 310, ST 315 and ST 320 is allowed.

**Prerequisite:** ST 210 Minimum Grade of C

### ST 315 Applied Probability-Statistics 3 cr

Concepts of probability theory, discrete and continuous probability distributions including gamma, beta, exponential and Weibull, descriptive statistics, sampling, estimation, confidence intervals, testing of hypothesis, ANOVA and multiple comparisons, linear and multiple regression, correlation, nonparametric analysis, contingency table analysis, computer-assisted data analysis using appropriate statistical software. Computer Lab fee.

**Prerequisite:** MA 125 Minimum Grade of C

### ST 320 Applied Stat Analysis 3 cr

Descriptive statistics, probability distributions, sampling, estimation, confidence intervals and hypothesis testing, experimental designs, ANOVA and multiple comparisons, linear and multiple regression, correlation, nonparametric analysis, goodness of fit, contingency table analysis, quality control, acceptance sampling, computer-assisted data analysis using appropriate statistical software. Computer Lab fee. NOTE: ST 315 and ST 320 are intended for students in Engineering, Computer Science, and Mathematics. ST 315 covers additional probability distributions while ST 320 additionally covers concepts of quality control and acceptance sampling. Students in these disciplines should consult with their academic advisor for appropriate choice between ST 315 and ST 320. Computer Lab fee. NOTE: Credit for only ONE course from ST 310, ST 315, and ST 320 is allowed.

**Prerequisite:** MA 125 Minimum Grade of C

### ST 335 Applied Regression Analysis 3 cr

Simple, polynomial and multiple linear regression; residual and lack-of-fit analysis; simple, multiple, partial and multiple-partial correlation analysis; model building algorithms; dummy variables; analysis of covariance; model comparisons; analysis of experimental designs including messy data; nonlinear regression models; computer-assisted data analysis using appropriate statistical software. Computer Lab fee. NOTE: Satisfies the Technology Proficiency Requirement for Math/Stat majors.

**Prerequisite:** ST 210 Minimum Grade of C or ST 315 Minimum Grade of C or ST 320 Minimum Grade of C

### ST 340 Design-Analysis of Experiments 3 cr

Principles, constructions, and analysis of experimental designs to include completely randomized, randomized complete block, Latin square and split plot designs, factorial experiments, designs with nested and/or crossed factors, multifactor experiments with randomization restrictions, transformations, incomplete block designs, multiple comparisons including contrasts, confounding, fractional replication, computer-assisted data analysis. Computer Lab fee.

**Prerequisite:** ST 210 Minimum Grade of C or ST 310 Minimum Grade of C or ST 315 Minimum Grade of C or ST 320 Minimum Grade of C

### ST 345 Sampling-Survey Techniques 3 cr

Sampling concepts and designs for survey investigations; sampling methodologies including applications of simple random, stratified, one-and-two stage cluster, and systematic sampling; sample size determination; ratio and regression estimation; population size estimation; random response modeling; acceptance sampling including applications of single and multiple 2-class attribute sampling plans; computer-assisted data analysis using appropriate statistical software. Computer Lab fee.

**Prerequisite:** ST 210 Minimum Grade of C or ST 310 Minimum Grade of C or ST 315 Minimum Grade of C or ST 320 Minimum Grade of C

### ST 350 Applied Time Series Analysis 3 cr

Fundamental concepts; classical regression models as forecasting models, exponential smoothings, stationary and nonstationary models, additive and multiplicative decompositions, moving average, autoregressive, ARMA and ARIMA processes, estimation in MA, AR, ARMA, and ARIMA processes. Box-Jenkins methodology, computer aided modeling, applications. Computer Lab fee.

**Prerequisite:** ST 210 Minimum Grade of C or ST 315 Minimum Grade of C or ST 320 Minimum Grade of C

**ST 355 Nonparametric Stat Methods 3 cr**

Distribution-free analysis of location and scale measures, nonparametric treatment of fundamental statistical designs, nonparametric comparison procedures, association and contingency table analysis, nonparametric goodness-of fit procedures, and tests for randomness, nonparametric regression and other measures of association, computer intensive statistical methods. Computer Lab fee.

**Prerequisite:** ST 210 Minimum Grade of C or ST 315 Minimum Grade of C or ST 320 Minimum Grade of C

**ST 415 Stat Qual Control Reliability 3 cr**

Probability distributions in quality control, inferences about process quality, control charts for attributes and variables, process capability analysis, economic design of control charts, custom charts, acceptance sampling by attributes and variables, six sigma concepts, reliability concepts, censoring, definitions and properties of survival distributions, methods of estimating and comparing reliability distributions, Kaplan-Meier estimation, burn-in models with a major emphasis on computer-assisted data analysis. Computer Lab fee.

**ST 425 Applied Linear Models 3 cr**

Some results of matrix algebra, multivariate normal distributions, distributions of quadratic forms, general linear models, design models with one factor and two factors including interaction, component-of-variance models, and computing techniques. Computer Lab fee.

**Prerequisite:** MA 237 Minimum Grade of C and ST 335 Minimum Grade of C or ST 340 Minimum Grade of C

**ST 450 Categorical Data Analysis 3 cr**

Analysis of two-way, three-way and higher dimension contingency tables using log-linear models, measures of association for nominal and ordinal tables, multiple-factor models, multiple response models, logistic regression, and weighted least squares. Computer Lab fee.

**ST 460 Multivariate Stat Analysis 3 cr**

Multivariate normal distribution, sampling distribution, hypothesis testing, principal components and introduction to factor analysis, canonical correlation analysis, discriminant and classification analysis, and MANOVA. Computer Lab fee.

**ST 470 Theory of Statistics 3 cr**

A comprehensive introduction to the mathematical foundations of statistics. Sufficient statistics and information. Parameter estimation, maximum likelihood and moment estimation, optimality properties of estimators and confidence intervals. Hypothesis testing, likelihood ratio tests and power functions. Credit for both ST 470 and MA 551 is not allowed.

**Prerequisite:** MA 451 Minimum Grade of C

**ST 475 Stat Computing and Graphics 3 cr**

Introduction to computer-assisted data analysis with statistical computer software, including SAS, R/S-Plus. Coverage includes basics of SAS, common SAS statistical procedures, high-dimensional data visualization, some elements of statistical computing such as numerical computation, semi-numerical computation, symbolic and graphical computation, and special topics selected by instructor. (Credit for ST 475 and ST 575 is not allowed. Computer Lab fee.

**Prerequisite:** ST 210 Minimum Grade of C or ST 315 Minimum Grade of C

**Cross-Listed:** ST 575

**ST 478 Stat Learning Tech in Data Sci 3 cr**

Statistical learning refers to a set of tools for modeling and understanding complex datasets. It is a recently developed area in statistics and blends with parallel developments in computer science and, in particular, machine learning. The purpose of this course is to provide the student with a foundation in modern (non-traditional) statistical learning techniques to deal with small to large complex datasets. Analysis of data is accomplished by extensive use of statistical software thereby minimizing manual computation. Coverage includes introduction to statistical learning, classification or supervised learning methods, resampling methods, linear and non-linear model selection techniques, support vector machines and tree-based methods. Credit for both ST 478 and ST 580 not allowed.

**Prerequisite:** ST 335 (may be taken concurrently) Minimum Grade of C and CSC 121 (may be taken concurrently) Minimum Grade of C

**ST 480 Statistical Practicum - W 1 cr**

Relates to the student's classroom studies with actual statistical problems encountered in practice. Working with the departmental statistical consultant, the student will participate in providing statistical assistance to research faculty in applied fields. Computer Lab fee.

**Prerequisite:** ST 335 Minimum Grade of C and ST 340 Minimum Grade of C )

**ST 490 Special Topics 1-3 cr**

Selected topics in advanced undergraduate applied statistics This course may be repeated for a maximum of six credits.

**ST 494 Directed Studies 1-3 cr**

Directed Study. May be repeated for a maximum of six credits.

Prerequisite: Permission of Department Chair.

**ST 499 Honor Senior Project - H 3-6 cr**

With the guidance and advice of a faculty mentor, Honors Students will identify, and carry out a research project in Statistics. The outcome of the research project will include a formal presentation at the annual Honors Student Colloquium. The senior project will be judged and graded by three members of the faculty, chaired by the faculty mentor.

**ST 525 Appl Stat for Clinical Trials 3 cr**

This course introduces the fundamental concepts of clinical trials and statistical methods in clinical trials with examples. Topics include clinical trial design and development, randomization, blindness, sample size and power calculation, data collection and management, missing data, survival analysis, association and reproducibility, crossover trials, Bayesian adaptive methods, and others. Most of the statistical methods will be implemented using R. Procedures or subroutines from other statistical software packages, such as SAS and SPSS, will also be introduced as needed.

**Prerequisite:** ST 210 Minimum Grade of C or ST 305 Minimum Grade of C or ST 315 Minimum Grade of C or ST 540 Minimum Grade of C

**ST 540 Stat in Research I 3 cr**

A service course for graduate students in disciplines other than mathematics and statistics. A non-calculus exposition in support of application. Coverage includes descriptive statistics, probability and probability distributions, sampling, estimation, tests of significance, analysis of variance, correlation, linear, polynomial, and multiple linear regression including residual and lack of fit analysis, nonparametric procedures, contingency table analysis, and computer-assisted data analysis using appropriate computer software. Computer Lab fee.

**ST 545 Stat in Research II 3 cr**

Continuation of ST 540. Coverage includes regression analysis through matrices, multiple, partial and multiple-partial correlation analysis, model building algorithms, non-linear regression, analysis of covariance, completely randomized, randomized complete block, and factorial experimentation for equal and unequal cell replication, logistic regression, resampling, basic multivariate techniques, and computer-assisted data analysis. Computer Lab fee.

**Prerequisite:** ST 540 Minimum Grade of C

**ST 550 Environmental Statistics 3 cr**

Sampling environmental populations; parametric and nonparametric and estimation; applications of lognormal, Weibull, gamma and beta distributions; locating hot spots; censored data; outlier detection; trend analysis, seasonality; estimation of animal abundance. Computer Lab fee.

**Prerequisite:** ST 210 Minimum Grade of C or ST 315 Minimum Grade of C or ST 540 Minimum Grade of C

**ST 555 Categorical Data 3 cr**

Introduction to categorical response data, probability distributions for categorical data, statistical inference for proportions, contingency tables and measures of association, logistic regression, log-linear models for contingency tables, multi-category response models, models for matched pairs categorical response variables. Credit for both ST 450 and ST 555 is not allowed.

**Prerequisite:** ST 540 Minimum Grade of C or ST 315 Minimum Grade of C or ST 335 Minimum Grade of C

**Cross-Listed:** ST 450

**ST 560 Appl Design & Analysis of Exper 3 cr**

A software aided introduction to the design and analysis of experiments for univariate and multivariate data. The coverage includes designs such as block designs, factorial designs, repeated measurement designs, hierarchical designs, response surface methods, and Taguchi methods along with various ANOVA techniques for univariate data, ANCOVA for the correlated data, and MANOVA for multivariate data. Analysis of data will be accomplished by extensive use of statistical software. Computer lab fee.

**Prerequisite:** ST 540 Minimum Grade of C

**ST 570 Applied Multivariate Stat 3 cr**

This course is designed to broaden and enrich students' knowledge and understanding of statistical methodology related to multivariate techniques. It includes applications of multivariate normal distribution, sampling distribution, hypothesis testing, principal components, MANOVA, and introduction to factor analysis, canonical correlation analysis, discriminant, and classification analysis.

**Prerequisite:** (ST 540 Minimum Grade of C)

**ST 575 Stat Computing and Graphics 3 cr**

Introduction to computer-assisted data analysis with statistical computer software, including SAS, R/S-Plus. Coverage includes basics of SAS, common SAS statistical procedures, high-dimensional data visualization, some elements of statistical computing such as numerical computation, semi-numerical computation, symbolic and graphical computation, and special topics selected by instructor. (Credit for ST 475 and ST 575 is not allowed. Computer Lab fee.

**Prerequisite:** ST 210 Minimum Grade of C or ST 315 Minimum Grade of C

**Cross-Listed:** ST 475

**ST 580 Stat Learning Tech in Data Sc 3 cr**

Statistical learning refers to a set of tools for modeling and understanding complex datasets. It is a recently developed area in statistics and blends with parallel developments in computer science and, in particular, machine learning. The purpose of this course is to provide the student with a foundation in modern (non-traditional) statistical learning techniques to deal with small to large complex datasets. Analysis of data is accomplished by extensive use of statistical software thereby minimizing manual computation. Coverage includes introduction to statistical learning, classification or supervised learning methods, resampling methods, linear and non-linear model selection techniques, support vector machines and tree-based methods.

**Prerequisite:** ST 540 Minimum Grade of C

**ST 585 Nonparametric Modeling 3 cr**

This course is designed to introduce an alternative set of methodologies to existing and non-existing statistical methods with emphasis on distribution-free and robust procedures. The coverage includes distribution-free analysis of location and scale measures. Nonparametric treatment of fundamental statistical designs, nonparametric multiple comparison procedures, association and contingency table analysis, goodness-of-fit procedures. Nonparametric regression and other measures of association and computer intensive methods. Statistical computer software is intended to enhance the facility with applications of various techniques covered in this course.

**Prerequisite:** ST 335 Minimum Grade of C and ST 540 Minimum Grade of C

**ST 590 Sp Topic: 1-3 cr**

Selected topics in advanced applied statistics. This course may be repeated for a maximum of six credits.

## Supply Chain & Logistics (SCL) (SCL)

**SCL 300 Supply Chain Management 3 cr**

This course encompasses the design and management of the supply chain that collectively provides for the exchange of title, physical movement, and storage activities in marketing, including the use of new technologies. This course examines the role of manufacturers and intermediaries in channel strategies including scope, methods, problems, and opportunities of total supply chain coordination.

**Prerequisite:** MKT 320 Minimum Grade of D

**SCL 350 Intro to Business Logistics 3 cr**

An integrative approach highlighting the supply chain component encompassing the flow of goods, services, and information in manufacturing and services organizations, that deliver consistent value to a range of upstream and downstream customers.

**Prerequisite:** (MKT 320 Minimum Grade of D and SCL 300 Minimum Grade of D)

**SCL 351 Strategic Sourcing & Supply Mg 3 cr**

An integrative approach combining both strategic and operational components in planning for and acquiring the necessary inputs and resources for organizational success. Focal points include creating and delivering value through astute purchasing and supply management, across a range of organizations, including services, manufacturing, governmental, and non-profits.

**Prerequisite:** MKT 320 Minimum Grade of D and SCL 300 Minimum Grade of D

**SCL 352 Port Management 3 cr**

A comprehensive overview of global port management practices, including the associated economic, regulatory, financial, commercial, socio-political, and data environments influencing port operations.

**Prerequisite:** MKT 320 Minimum Grade of D and SCL 300 Minimum Grade of D

**SCL 353 Distribution Center Mgt 3 cr**

An integrative perspective of distribution center management and materials handling, encompassing distribution planning and control, warehousing management, replenishment strategies, and the design of storage and handling systems.

**Prerequisite:** MKT 320 Minimum Grade of D and SCL 300 Minimum Grade of D

**SCL 400 Supply Chain Analytics 3 cr**

A comprehensive overview of the analytical tools and techniques necessary to enhance supply chain efficiency and effectiveness to ensure customer satisfaction. Focal points will include data analysis, performance measurement, big data, forecasting, and tactical, sales and operations planning, and network management.

**Prerequisite:** MKT 320 Minimum Grade of D and SCL 300 Minimum Grade of D

**SCL 405 Curr Issues in Sup Chain Mgt 3 cr**

An integrative course highlighting the major managerial challenges in key components of the supply chain, including sourcing, production, and logistics, with special emphasis on supply chain integration, customer value and performance measurement.

**Prerequisite:** (MKT 320 Minimum Grade of D and SCL 300 Minimum Grade of D)

**SCL 490 Special Topics 3 cr**

Designed to provide senior students an opportunity to study selected topics of particular interest. A student may count no more than six hours of Special Topics in the concentration. Prerequisite: Approval of Department Chair.

**Prerequisite:** (MKT 320 Minimum Grade of D)

**SCL 494 Directed Study 3 cr**

Primarily designed to give superior students an opportunity to study selected topics of particular interest. Conferences, a bibliography, and a formal research report are required. Grades are awarded on a satisfactory/unsatisfactory basis. Prerequisites: Junior or senior standing, a cumulative GPA of 2.5 or better, and approval of the department chair following evaluation of a written proposal.

**Prerequisite:** (MKT 320 Minimum Grade of D)

**SCL 496 Sup Chain Logistics Internship 3 cr**

The internship program is designed to give students practical experience in their field of study. Students complete directed projects under the supervision of Department Chair. No more than three hours of internship credit may be counted toward a degree in the Mitchell College of Business. Must have an overall GPA of at least 2.0 and an Internship Agreement signed by Department Chair.

## Surgery - MD (SUR)

**SUR 098 Pediatric Urology 2-3 cr**

The student will attend pediatric urology clinic on Thursday afternoons from 2-4 p.m. During that time they will see patients in conjunction with the attending faculty and participate in discussions regarding patient management and correlations with basic sciences as they relate to this group of patients.

**SUR 311 Surgery 8 cr**

The clinical clerkship in Surgery consists of two four-week rotations. The goals of the clerkship are (1) to develop an understanding of the pathophysiology, evaluation, and management of surgical problems commonly encountered in general practice; (2) to provide exposure to general surgery and the surgical subspecialties; (3) to develop basic technical skills; (4) to foster the interest of students considering a career in surgery. These goals are achieved through lectures, case-based discussions, teaching rounds, intraoperative teaching and supervised patient care.

**SUR 400 Surgery Externship 1-4 cr**

To be determined.

**SUR 444 Spec Elec-Surgery 1-8 cr**

To be prepared by the student in conjunction with the Course Director and approved by the Vice Dean before course can be added to schedule. This course is designed to offer students and faculty/clinical faculty an opportunity to develop electives which are not offered in the Electives Manual. Such an elective may be made permanent and printed in the next edition of the Elective Manual at the request of the Course Director and with the approval of the Curriculum Committee. At the discretion of the Vice Dean, this elective may count as the required "in-house" elective.

**SUR 450 Acting Intern - Gen Surgery 1-4 cr**

The student will be taught to perform a complete ophthalmic assessment, including obtaining pertinent details of history, examining the patient utilizing the appropriate equipment, and formulating a management plan. One-to-one instruction by staff will guide the student learning these skills. Using the American Academy of Ophthalmology's Study Guide, the student will review clinically pertinent ophthalmic anatomy, physiology, pathophysiology, diagnosis, and therapy. Observation of contact lens fitting and representative surgical procedures will be encouraged.

**SUR 451 Acting Intern - Burn Surgery 1-4 cr**

The student will be taught to perform a complete ophthalmic assessment, including obtaining pertinent details of history, examining the patient utilizing the appropriate equipment, and formulating a management plan. One-to-one instruction by the preceptor, Dr. Semple, and associates will guide the student learning these skills. Using the American Academy of Ophthalmology's Study Guide, the student will review clinically pertinent ophthalmic anatomy, physiology, pathophysiology, diagnosis, and therapy. Observation of contact lens fitting and representative surgical procedures are encouraged. The student will accompany the preceptor on hospital rounds and to the O.R.

**SUR 452 Acting Intern - Surg Crit Care 1-4 cr**

The student will be integrated into the multidisciplinary critical care team which will be comprised of resident and attending physicians, nurses, nutritionalist and clinical pharmacologist. Teaching rounds are carried out on a daily basis and constitute the major framework of attending-based education. Small group conferences are also held weekly addressing salient aspects of critical care. Critical Care lectures will be given on a bi-weekly basis.

**SUR 453 Acting Intern - Trauma Surgery 1-4 cr**

Acting internship experience. Call schedule is flexible. Emphasis is placed on resuscitation procedures and ICU care.

**SUR 454 Acting Intern - GI&Surg Oncolo 1-4 cr**

The student will serve as an acting intern on the GI surgical service at the USA Medical Center. He/she will function as an intern under the supervision of the surgical faculty. It is anticipated that the student will evaluate a minimum of 10 new outpatients per week in Dr. Richards' and Rider's half-day clinics, participate in 10 major in-patient GI operations a week, and 10 outpatient operations a week with Drs. Richards, Rider and Contreras.

**SUR 455 Acting Intern - Colorectal Sur 1-4 cr****SUR 456 SUR Oncology:HPB & Melanom Sub 1-4 cr**

The student will function as an intern under the supervision of the surgical faculty. It is anticipated that the student will evaluate a minimum of 4 out-patients per week in clinic and participate in 3 operations a week. Furthermore, students will have the opportunity to actively participate (i.e. present patients) at any and all of the above conferences.

**SUR 458 SUR Oncology Breast&Endocrine 1-4 cr**

The student will serve as an acting intern on the Breast & Endocrine surgical service at the USA Medical Center, Mitchell Cancer Institute, and USA Children's and Women's Hospital. He/she will function as an intern under the supervision of the surgical faculty. It is anticipated that the student will evaluate a minimum of 8 out-patients per week in the clinic with and participate in 5 operations a week.

**SUR 461 Otolaryngology 1-4 cr**

The objective of this elective is to provide a broad and in-depth experience in otolaryngology problems. This will include both clinical lectures, participation in operating room, clinical and ward duties, and outside reading.

**SUR 462 Urology 1-4 cr**

Students will participate in the University's Urologic Clinics as well as the care of the inpatient service. The students also will be exposed to the surgical and endoscopic management of urologic diseases and participate in the operating room in these procedures. The elective is useful for students who wish to explore a possible career in urology, but will also be of interest to students who desire a broader exposure to genito-urinary disease than they have had in their previous work.

**SUR 464 Pediatric Surgery 1-4 cr**

1. Expose the student to general, endoscopic, thoracic and urologic surgical problems in the pediatric age group and the approach to diagnosis, treatment, and follow-up of these problems. 2. (Optional) Develop a basic technical surgical skill set for open and laparoscopic surgery for those students interested in pursuing this opportunity.

**SUR 465 Plastic & Reconstructive Surg 1-4 cr**

The objective of this elective is to provide some basic knowledge of plastic and reconstructive surgery and to provide an overview of the areas covered, i.e., hand, head, and neck cosmetic surgery and trauma as related to plastic surgery.

**SUR 466 Surgical Oncology 1-4 cr**

The student will serve on the surgical oncology service of the Mitchell Cancer Institute-University of South Alabama. He/she will be offered a broad educational experience pertaining to the care of patients requiring surgical management of malignancies. The student will function as an assistant under the direct supervision of the surgical oncology faculty.

**SUR 480 Ophthalmology - Rich 1-4 cr**

The student will be taught to perform a complete ophthalmic assessment, including obtaining pertinent details of history, examining the patient utilizing the appropriate equipment, and formulating a management plan. One-to-one instruction by staff will guide the student learning these skills. Using the American Academy of Ophthalmology Study Guide, the student will review clinically pertinent ophthalmic anatomy, physiology, pathophysiology, diagnosis and therapy. Observation of contact lens fitting and representative surgical procedures will be encouraged.

**SUR 481 Ophthalmology - Semple 1-4 cr**

The student will be exposed to all general and subspecialty ophthalmology services, both clinical and surgical. The student will be taught a complete ophthalmic assessment, both history and physical. The course includes a special emphasis on ophthalmic diseases and conditions as they relate to general medicine and general medical practice. The opportunity for a more detailed and in depth exposure exists if the student has an interest in pursuing ophthalmology as a subspecialty. One-to-one instruction by the preceptor, Dr. Semple and associates will guide the student learning these skills. Observation of representative surgical procedures and ophthalmic testing procedures are encouraged. The student will accompany the preceptor on hospital consult rounds and observe in the O. R.

**SUR 482 Clinical Transplant Surgery 1-4 cr**

Students will participate in the clinical activities of the Section of Transplantation. Students will make rounds with the attending staff on a routine basis to review the problems of the patients in hospital. Students will be expected to work up new evaluations in the outpatient clinic, as well as participate in the post-transplant outpatient follow-up. Lastly, students will participate and observe any procedures related to the transplant patients such as kidney transplantation, ultrasound guided biopsies and other surgical procedures.

**SUR 485 Acting Internship-Gen Surgery 1-4 cr**

The student will serve as an acting intern on one of the general surgery services at USA Medical Center or Knollwood Park Hospital. He/she will function as an intern under the supervision of the surgical faculty.

**SUR 487 Trauma Surgery 1-4 cr**

The objective of this elective is to provide exposure in the management of the trauma victim. The student will develop a working fund of knowledge and experience with prehospital emergency care, resuscitation, evaluation of the trauma victim, and critical care management. This rotation is meant to supplement the basic surgery elective by providing an acting internship that focuses on all aspects of trauma care.

**SUR 488 Otolaryngology 1-4 cr**

The objective of this elective is to provide a broad and in-depth experience in otolaryngology problems. This will include both clinical lectures, participation in operating room, clinical and ward duties, and outside reading.

**SUR 489 Urology 1-4 cr**

Students will participate in the University's Urologic Clinics as well as the care of the inpatient service. The students also will be exposed to the surgical and endoscopic management of urologic diseases and participate in the operating room in these procedures. The elective is useful for students who wish to explore a possible career in urology, but will also be of interest to students who desire a broader exposure to genito-urinary disease than they have had in their previous work.

**SUR 490 Surgery Critical Care 1-4 cr**

The student will be integrated into the multidisciplinary critical care team which will be comprised of resident and attending physicians, nurses, nutritionist, and clinical pharmacologist. Teaching rounds are carried out on a daily basis and constitute the major framework of attending-based education. Small group conferences are also held weekly addressing salient aspects of critical care. Critical care lectures will be given on a bi-weekly basis.

**SUR 493 Pediatric Surgery 1-4 cr**

The student(s) on the Pediatric Service will function as a member of the Service and will be expected to participate in all activities of the Service. History and physicals on assigned patients will be evaluated and critiqued. Students are expected to be active participants in the operating room and participate in the postoperative care of all the patients during their rotation. Students will attend all clinics each week and will be expected to perform initial evaluations of clinic patients to be reviewed by the attending. The residents and staff will attempt to notify the student (per their request) of interesting cases during off hours. The student may prepare an oral presentation on a topic mutually selected by the student and attending for presentation to the service. The attending will provide a list of reference books for the student. Teaching rounds will be conducted at least tri-weekly (usually daily). The students will be supervised at all times by the surgical housestaff or attending surgeon.

**SUR 496 Plastic and Reconstruct Surg 1-4 cr**

The objective of this elective is to provide knowledge of plastic and reconstructive surgery and to provide an overview of the areas covered, i.e., hand, head, and neck cosmetic surgery and trauma as related to plastic surgery.

**SUR 499 Burn Surgery 1-4 cr**

Sub-internship experience in patient care. The objective of this elective is to provide knowledge of burn patient care. All aspects of burn care will be learned. This will involve acute management which will develop in the student through knowledge and experience in intensive care techniques, respiratory management, wound care, nutrition, and physiotherapy. The reconstructive management will also be taught and the student will actively participate under supervision in all areas.

## Systems Engineering (SE) (SE)

**SE 500 Engr Probability & Statistics 3 cr**

Probability and statistical concepts; discrete, continuous, and joint distributions; point and interval estimation; hypothesis testing; regression and correlation analysis; analysis of variance.

**SE 501 Engineering Optimization 3 cr**

Model construction, linear programming, network models, dynamic models, stochastic models, queuing theory, and decision theory.

**Prerequisite:** SE 500 (may be taken concurrently) Minimum Grade of B

**SE 590 Special Topics in SE 3 cr**

Topics of current interest in Systems Engineering. Fee

**SE 592 Directed Study in SE 3 cr**

Directed study, under the guidance of a faculty advisor, of a topic from the field of Systems Engineering not offered in a regularly scheduled course. Requires Instructor's permission.

**SE 594 Projects in SE 3 cr**

An investigation of an original problem in Systems Engineering, under the guidance of a faculty advisor. Approval of the project prospectus by the student's advisory committee and consent of the Director of Engineering Graduate Studies.

**SE 599 Thesis 1-6 cr**

An investigation of an original problem in Systems Engineering under the guidance of the student's major professor. Approval of the dissertation prospectus by the student's Advisory Committee, the Graduate School, and consent of the Director of Engineering Graduate Studies.

**SE 601 Systems Eng Fundamentals 3 cr**

Fundamentals of systems engineering, structure of complex systems, system development process, systems engineering management and documentation, needs analysis, requirements development, engineering design and development, integration and test, change management, process improvement.

**SE 602 Risk and Failure Analysis 3 cr**

Risk Analysis needs, risk analysis methods, performance requirement analysis, trade studies, failure analysis needs, failure analysis tracking, and failure analysis methods. Pre-requisites: Requires a background in calculus-based statistics and permission of instructor.

**SE 603 Integration, Test & Evaluation 3 cr**

Interface control documents, design reviews, requirements management, allocation of test methods to requirements, test plans, test procedures, test execution, and failure tracking and resolution.

**Prerequisite:** SE 601 Minimum Grade of C

**SE 604 Software Systems Engineering 3 cr**

Software development methodologies, software development tools, change management, software concept development, software requirements development and allocation, coding and unit test, program technical interfaces, software engineering management.

**Prerequisite:** SE 601 Minimum Grade of C

**SE 605 Project Engineering 3 cr**

Management of system design, development and risk, work breakdown, structure, systems engineering management plan, design reviews, budget and schedule analyses, negotiation and conflict resolution, contracts, customer interactions, team selection, failure resolution.

**SE 606 Systems Architecture 3 cr**

The systems architecture is that foundational structure of a system, capturing the core capability and structure of the system. This course will cover principles of systems architecting, system architecture drivers, relationship of systems architecture to system requirements, common tools and techniques to include design structure matrices, IDEF0, SysML, and simulation.

**Prerequisite:** SE 601 Minimum Grade of C

**SE 607 Systems Simulation 3 cr**

This course rigorously examines system modeling and simulation methodologies, emphasizing statistical analysis and discrete-event simulation via simulation software.

**SE 608 Reliability Engineering 3 cr**

This course rigorously examines reliability and maintainability methodologies, emphasizing mathematical constructs, design concepts, and data analysis employed to quantify reliability, availability, and maintainability measures for operational readiness, support system design, and system effectiveness.

**SE 609 Engineering Research Methods 3 cr**

This course is a fast tracked course examining quantitative and qualitative methods for conducting meaningful inquiry and research. Topics include research ethics, intent, design, methodologies, techniques, formatting, data management, analysis, publication, and presentation utilizing common statistical approaches.

**SE 610 Systems Thinking 3 cr**

The act of systems thinking is taking a step back from the details considered during engineering design, and looking at the whole picture. This class exposes the student to a conceptual framework to allow them to properly define complex systems and enterprises drawing from synthesizing techniques from systems science, soft systems methodologies, and systems engineering. The class demonstrates the ability to leverage the simultaneity of perspectives, the role of paradox, and the centrality of soft issues in resolving complexity.

**SE 611 Socio-Technical Systems 3 cr**

Socio-Technical systems are those systems which contain and/or are strongly influenced by human, social and institutional elements. Because of those influences, they quickly become dependent on community partnerships, infrastructure constraints, and government-aspects that are not traditionally part of the engineering equation. This course considers the systems engineering approach as it relates to the challenges of socio-technical systems.

**SE 612 Production System Engineering 3 cr**

This course rigorously examines principles, design, models and techniques for operational planning and analysis of production and distribution systems emphasizing quantitative methods.

**SE 613 Decision Analysis 3 cr**

This course will give the engineering student the analysis techniques used to assess single participant multiple criteria and multiple participant multiple criteria decisions. As decisions occur throughout the lifecycle of a system, the variety of engineering decision techniques introduced can be applied to a myriad of decisions.

**SE 614 Sys Lifecycle Cost Analysis 3 cr**

Systems engineering considers the entire lifecycle of a system. Therefore, it makes sense to consider the entire cost of the product or system form cradle to grave. This course presents methods, processes, and tools needed to conduct cost analysis, estimation, and management of complex systems.

**SE 615 Engineering Management 3 cr**

Engineering management is an integral part of any engineered system. Topics to be covered include team project vision, mission, goals, organization, tools, management and leadership, managing technical issues, coordination and control. This course is relevant to any engineering or technical discipline.

**SE 616 Requirements Engineering 3 cr**

Systems requirements are the foundation of all engineered systems. They form the basis for what the customer wants, what the engineer produces, and what the system accomplishes. There must be synergy between those three perspectives. This course addresses the process of identifying systems requirements before the system exists, writing effective and concise requirements, writing testable requirements, and the management of those requirements as the system is engineered.

**SE 621 Digital Twin Foundations 3 cr**

The realm of designing and defining digital twins will belong to the systems engineer of the future. The Unity game engine is a gateway to mastering development of high-caliber digital twins and creating unparalleled virtual prototypes. Students will be prepared to take the Unity Associate Game Developer Certification. Prior programming experience useful, but not required.

**SE 622 Systems Engineering Internship 1-3 cr**

The Systems Engineering Internship provides students with the opportunity to work up in an engineering role. In this course students will learn to apply their knowledge of Systems Engineering to practical engineering problems in the workplace.

**SE 690 Special Topics in SE 3 cr**

Topics of current interest in Systems Engineering.

**SE 692 Directed Studies 3 cr**

Directed study, under the guidance of a faculty advisor, of a topic from the field of Systems Engineering not offered in a regularly scheduled course. Prerequisite: Instructor's permission.

**SE 699 Dissertation 1-6 cr**

An investigation of an original problem in Systems Engineering under the guidance of the student's major professor. Prerequisite: Approval of the dissertation prospectus by the student's Advisory Committee, the Graduate School, and consent of the Director of Engineering Graduate Studies.

## Undergraduate Research (UGR) (UGR)

**UGR 091 Research: 0 cr**

Research project or creative activity for current high school students under the direct mentorship of faculty member.

**UGR 191 Research: 0 cr**

Research project or creative activity for first-year students under the direct mentorship of a faculty member.

**UGR 291 Research: 0 cr****UGR 391 Research: 0 cr**

Research project or creative activity under the direct mentorship of a faculty member for students in the junior year of their academic programs.

**UGR 491 Research: 0 cr**

Research project or creative activity under the direct mentorship of a faculty member for students in the senior year of their academic programs.

# DEPARTMENTS OF INSTRUCTION

Departments of Instruction	Department Codes
Accounting (p. 748)	ACC
Adult Health Nursing (p. 643)	AHN
African American Studies (p. 98)	AFR
Air Force Studies (p. 102)	AS
Art and Art History (p. 105)	ART
Biology (p. 133)	BLY
Biochemistry-Molecular Biology (p. 632)	BCH
Biomedical Sciences (p. 835)	BMD
Business (p. 771)	BUS
Cell Biology - Neuroscience (p. 632)	CBN
Chemical-Biomolecular Engineering (p. 573)	CHE
Chemistry (p. 148)	CH
Civil, Coastal and Environmental Engineering (p. 581)	CE
Clinical and Counseling Psychology (p. 735)	CCP
Communication (p. 156)	CA
Community Mental Health Nursing (p. 643)	CMN
Computer Sciences (p. 916)	CIS
Computing PhD (p. 944)	CIS & CIST
Counseling and Instructional Science (p. 425)	PS
Earth Sciences (p. 169)	ES
Economics, Finance, and Real Estate (p. 755)	ECFN
Electrical-Computer Engineering (p. 592)	EE
Emergency Medical Services (p. 845)	EMS
English (p. 189)	EH
Environmental Toxicology ( <a href="http://bulletin.southalabama.edu/programs-az/graduate/environmental-toxicology/">http://bulletin.southalabama.edu/programs-az/graduate/environmental-toxicology/</a> )	EXT
Forensic Science (p. 207)	FOSC
Gender Studies (p. 208)	GS
General Engineering (p. 571)	EG
Gerontology (p. 212)	GRN
Graduate Interdisciplinary Studies (p. 228)	GIS
Health, Kinesiology, and Sport (p. 446)	HPE
Health Sciences (p. 643)	HSC
History (p. 219)	HY
Honors Disciplinary Studies (p. 744)	HON
Hospitality and Tourism Management (p. 492)	HTM
Information Systems and Technology (p. 949)	CIST
Interdepartmental Studies (p. 632)	IDL
Interdisciplinary Programs (p. 228)	IDS
Integrative Studies (p. 498)	IST
International Studies (p. 233)	IS
Jewish and Holocaust Studies (p. 248)	JHS
Leadership and Teacher Education (p. 509)	LTE
Management (p. 771)	MGT
Marine Sciences (p. 393)	MAS
Marketing and Quantitative Methods (p. 796)	MKT
Maternal Child Nursing (p. 643)	MCN
Mathematics and Statistics (p. 253)	MA
Mechanical Engineering (p. 617)	ME
Microbiology/Immunology (p. 632)	MIC
Military Science (p. 269)	MS
Modern Languages and Literature (p. 272)	MLL
Museum Studies (p. 287)	MUM
Music (p. 292)	MUS
Nursing (p. 643)	NU
Occupational Therapy (p. 858)	OT
Pharmacology (p. 632)	PHA
Philosophy (p. 330)	PHL
Physical Therapy (p. 869)	PT
Physician Assistant Studies (p. 876)	PA
Physics (p. 341)	PH
Physiology (p. 632)	PHS
Political Science and Criminal Justice (p. 350)	PSC
Psychology (p. 365)	PSY
Radiologic Sciences (p. 885)	RAD
Sociology, Anthropology and Social Work (p. 376)	SY
Speech Pathology and Audiology (p. 898)	SPA
Systems Engineering (p. 612)	SE
Theatre and Dance (p. 413)	DRA

# DIRECTORY

- Faculty (p. 1283)
- Deans (p. 1317)

- Board of Trustees (p. 1317)
- Officers of Administration (p. 1317)

## Faculty

Faculty Name	Faculty Department	Faculty Position	Degrees Held
ABEND, ROBERT DAVID (robertabend@southalabama.edu)	Music	Assistant Professor	BME, Eastern Michigan University MM, Western Michigan University DMA, Michigan State University
ABEYNANDA, GAYAN SHANAKA (gsabeynanda@southalabama.edu)	Mathematics and Statistics	Assistant Professor	BS, Univ of Colombo MS, Louisiana State University PHD, Louisiana State University
ADAMS, AMY DAWN (amyadams@southalabama.edu)	Adult Health Nursing	Assistant Professor	BSN, University of South Alabama MSN, University of South Alabama DNP, University of South Alabama
ADAMS, ELIZABETH MEZTISTA (eadams@southalabama.edu)	Speech Pathology and Audiology	Associate Professor	BS, Spring Hill College PHD, University of South Alabama
ADAMS, JAMES RANDOM (adams@southalabama.edu)	Mathematics and Statistics	Instructor	BS, Spring Hill College MS, University of South Alabama
ADAMS, THOMAS JESSEN (thomasadams@southalabama.edu)	Integrative Studies	Associate Professor	BA, Tulane University MA, University of Chicago PHD, University of Chicago
AFFUSO, ERMANNO (eaffuso@southalabama.edu)	Econ, Finance, and Real Estate	Professor	MS, Polytechnic University of Bari PHD, Auburn University
AHLICH, ERICA MARIE (eahlich@southalabama.edu)	Psychology	Assistant Professor	BA, Albion College MA, University of South Florida PHD, University of South Florida
AL-MEHDI, ABU BAKR (mehdi@southalabama.edu)	Pharmacology	Professor	BS, Univ de Salamanca MD, Univ de Salamanca MD, Crimean St Medical University PHD, Crimean St Medical University
ALBINS, MARK ALLEN (markalbins@southalabama.edu)	Marine Sciences	Research Assistant Professor	BA, University of Hawaii At Hilo PHD, Oregon State University
ALBRIGHT, JORDAN ASHLEY (jalbright@southalabama.edu)	Psychology	Assistant Professor	BS, Northwest Missouri State U MS, Southern Illinois U-Edwardsvi PHD, Virginia Polytechnic Inst and
ALEMU, JAHSON BERHANE (jalemu@southalabama.edu)	Marine Sciences	Research Assistant Professor	BS, Univ of the West Indies MS, Bangor University PHD, Univ of the West Indies
ALEXEYEV, MIKHAIL F (malexeye@southalabama.edu)	Physiology & Cell Biology - MD	Professor	BS, Ukraine National Univ PHD, National Agri Univ Ukraine
ALLDAY, RICHARD ALLAN (allday@southalabama.edu)	Leadership/Teacher Education	Professor	BA, Auburn University MED, Auburn University PHD, Auburn University
ALLEN, ALINE BOTSIS (abotsis@southalabama.edu)	Health, Kinesiology and Sport	Instructor	BS, University of South Alabama MS, University of South Alabama
ALLEN, ALINE BOTSIS (abotsis@southalabama.edu)	Undeclared	Instructor	BS, University of South Alabama MS, University of South Alabama
ALLISON, DAVID T. (dallison@southalabama.edu)	Earth Sciences	Associate Professor	BS, University of Alabama PHD, Florida State University
ALLRED, SARAH ELIZABETH (sarahallred@southalabama.edu)	Mathematics and Statistics	Assistant Professor	BS, Auburn University MS, Louisiana State University PHD, Louisiana State University

AMARE, NICOLE ERVIN (namare@southalabama.edu)	English	Professor	BA, University of Wisconsin-Madison MA, Kansas State University MA, University of Alabama PHD, University of Alabama
ANDEL, TODD R. (tandel@southalabama.edu)	Computer Sciences	Professor	BS, University of Central Florida MS, Air Force Inst of Technology PHD, Florida State University
ANDERSON, JENNIFER ANN (janderson@southalabama.edu)	Adult Health Nursing	Assistant Professor	BSN, University of South Alabama MSN, Spring Hill College DNP, University of South Alabama
ANDREWS, TARA CHILDERS (andrews@southalabama.edu)	Physical Therapy	Assistant Professor	BS, Auburn University DPT, University of South Alabama
ARMSTEAD, THOMAS (armstead@southalabama.edu)	Air Force Studies	Assistant Professor	BA, Univ of Arizona Global Campus
ARRAS, JENNIFER O'FARRILL (jarras@southalabama.edu)	English	Instructor	BA, Spring Hill College MA, University of NC- Chapel Hill
ATUTEY, OLIVIA A. (oatutey@southalabama.edu)	Mathematics and Statistics	Assistant Professor	BS, University of Ghana MS, Youngstown State University PHD, Bowling Green St U-Main Campus
AUDIA, JONATHON (jaudia@southalabama.edu)	Microbiology-Immunology	Professor	BS, McMaster University MS, McMaster University PHD, University of South Alabama
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# SEARCH COURSES

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